### **Township of Antrim**

### **Borough of Greencastle**

**Greencastle-Antrim School District Comprehensive Plan** 



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**Greencastle-Antrim School District Comprehensive Plan** 

# Adopted 2012 Prepared for:

#### **Greencastle Borough Council and Mayor**

Robert E. Eberly, Mayor Charles R. Eckstine, Council President Harry R. Foley, Council Vice-President Wade G. Burkholder James R. Farley Craig D. Myers Matthew D. Smith Frank L. Webster, Jr.

#### Antrim Township Supervisors

Fred Young, III, Chairman Richard Baer, Vice-Chairman John Alleman James Byers M. Pat Heraty

#### **Greencastle-Antrim School District Board of School Directors**

Eric Holtzman, President Brian J. Hissong, Vice-President Tracy L. Baer Melinda E. Cordell Joel R. Fridgen Kenneth D. Haines Michael R. Shindle Mike Still Dr. G. William Thorne





### RESOLUTION NO. 239

#### A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF ANTRIM ADOPTING NEW JOINT COMPREHENSIVE PLAN AND REPEALING THE EXISTING PLAN

WHEREAS, the Pennsylvania Municipalities Planning Code, Act of 1968, P.L. 805, No. 247 as reenacted and amended permits local governments to perform municipal comprehensive planning, and;

WHEREAS, The Board of Supervisors of the Township of Antrim, Franklin County, Pennsylvania currently has a joint comprehensive plan with the Borough of Greencastle that was adopted on June 1, 1992, and;

WHEREAS, The Board of Supervisors of the Township of Antrim, Franklin County, Pennsylvania, hereinafter referred to as Board of Supervisors, recognized that the Township needed repeal its current comprehensive plan and adopt a new plan to control growth and protect its rural character, and;

WHEREAS, The Board of Supervisors voted to authorize the formation of the Township of Antrim, Borough of Greencastle, and the Greencastle-Antrim School District Comprehensive Plan, hereinafter referred to as the Comprehensive Plan, and;

WHEREAS, The Board of Supervisors along with Greencastle Borough and the Greencastle-Antrim School District created the Steering Committee to oversee the preparation of the Comprehensive Plan, and;

WHEREAS, The municipalities involved contracted with Rettew Associates Inc. to prepare the Comprehensive plan with guidance from the Steering Committee, and;

WHEREAS, the Comprehensive Plan was reviewed by the Franklin County Planning Commission, and;

WHEREAS, the Comprehensive Plan was reviewed by the Antrim Township Planning Commission, and;

WHEREAS, a joint public hearing of the participating municipalities elected officials pursuant to public notice thereof, was conducted regarding the Comprehensive Plan on February, 7, 2012, and;

NOW THEREFORE BE IT RESOLVED by the Board of Supervisors that the current joint comprehensive plan with the Borough of Greencastle as amended is repealed in its entirety and the new Comprehensive Plan, a copy of which is labeled Exhibit A and attached hereto is hereby adopted, together with the maps, charts, text, and other matters intended to form the whole of the plan and such action shall be recorded in the adopted plan.

### ADOPTED THE 19th day of February, 2012.

Attest:

Jøyce/Nowell, Secretary

TOWNSHIP OF ANTRIM, FRANKLIN COUNTY, PENNSYLVANIA BOARD OF SUPERVISORS

othe III. Chairman am

### **RESOLUTION 2012-03**

#### A RESOLUTION OF THE BOROUGH OF GREENCASTLE ADOPTING A COMPREHENSIVE PLAN FOR THE TOWNSHIP OF ANTRIM, BOROUGH OF GREENCASTLE, AND THE GREENCASTLE-ANTRIM SCHOOL DISTRICT

**WHEREAS,** the Pennsylvania Municipalities Planning Code, Act of 1968, P. L. 805, No. 247 as reenacted and amended permits local governments to perform municipal comprehensive planning, and;

WHEREAS, The Borough Council of Greencastle, Franklin County (Borough Council) recognized that the borough needed a comprehensive plan to control growth and protect its heritage, and;

WHEREAS, The Borough Council voted to authorize the formation of the Township of Antrim, Borough of Greencastle, and the Greencastle-Antrim School District Comprehensive Plan (the Comprehensive Plan) and Steering Committee along with Antrim Township and the Greencastle-Antrim School District to oversee the preparation of the Comprehensive Plan, and;

**WHEREAS,** The municipalities involved contracted with RETTEW Associates Inc. to prepare the Comprehensive Plan with guidance from the Steering Committee, and;

**WHEREAS,** the Comprehensive Plan was reviewed by the Franklin County Planning Commission on December 20, 2011, and;

**WHEREAS,** a joint public hearing of participating municipalities', elected officials pursuant to public notice thereof, was conducted regarding the Comprehensive Plan on February 7, 2012;

**NOW THEREFORE BE IT RESOLVED** by the Borough Council that the Comprehensive Plan is hereby adopted, together with the maps, charts, text, and other matters intended to form the whole of the plan and such action shall be recorded in the adopted plan.

ENACTED AND ORDAINED THIS 5th DAY OF MARCH, 2012.

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Kenneth W. Womack, Borough Secretary

Charles R. Eckstine, Council President

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### Chapter 1 - Introduction to the Comprehensive Plan

Greencastle Borough and Antrim Township are located in southern Franklin County, bordering the Maryland line. Antrim Township was formed from part of Lancaster County in 1741, and originally included most of the land in present day Franklin County. Greencastle Borough was formed by an act of the Pennsylvania Assembly and incorporated on March 25, 1805. The region played a significant role in Civil War history as southern troops passed through Greencastle on Carlisle Street, headed for Gettysburg. Union soldiers also camped in the region, and the first fallen Union soldier killed on Union soil was Corporal William H. Rihl, killed just northwest of Greencastle Borough in Antrim Township. The region's rich Civil War history and strategic location along major transportation routes and in proximity to Gettysburg, present it with many opportunities to become a heritage tourism destination.

Interstate 81 (I-81), a heavily traveled arterial, traverses Antrim Township from the north to the south. U.S. 11 runs parallel to I-81 and traverses the western part of Greencastle Borough. S.R. 16 is the main east-west route in the region and connects I-81 to U.S. 11 via Baltimore Street in Greencastle. These major transportation corridors result in increased connectivity on a regional scale, but have also resulted in increased truck traffic, congestion, and safety concerns in local areas.

Many parts of Antrim Township are still rural and agricultural in nature, while Greencastle Borough represents an established community that serves as the anchor for the region. The Greencastle-Antrim School District serves as the tie that connects the two municipalities and joins the two communities together as one. In many ways, the Greencastle-Antrim community functions as one community. Neighbors maintain close relationships with one another and many residents associate themselves with the region, rather than with the township or borough. Community events, such as Old Home Week further help to unite the community.

There is little vacant land available in Greencastle Borough, and therefore, most of the development that is occurring in the borough is in the form of redevelopment and infill. Antrim Township, however, has seen a great deal of residential development in recent years, as a result of growth pressures from Maryland. Because the Greencastle-Antrim region is dynamic, the two municipalities realize that they must be proactive in planning for the future and accommodate necessary growth in a strategic fashion, in order to provide for the region's residents and maintain the township's rural character and agricultural base, while reinvesting in Greencastle and the downtown area. The region realizes it must also allow for business development to strengthen the tax base so that it is able to provide necessary infrastructure and services to its residents and businesses. Above all, Antrim Township, Greencastle Borough, and the Greencastle-Antrim School District, through the development of this comprehensive plan, strive to:

#### Preserve Our Local Heritage and History; Serve Our Citizens and Community; and Plan for Our Future Generations

#### Planning as a Concept

The comprehensive plan is not a solution for all the problems and concerns of the community, nor is it a finished product only to be reviewed and updated every decade or so. Rather, it is an on-going process and a schedule which municipal governments may use as a roadmap to guide them through future decisions. It should be noted that when changes and conditions evolve within the area, the comprehensive plan should be modified to address these changes and recognize demands.

The plan, in effect, charts the course for municipal growth and change by:

- Expressing the aims and ambitions of area residents and businesses;
- Being responsive to change;
- Providing a framework necessary for continual review and revision;
- Delineating the municipal forms and character they seek to achieve.

In part, the comprehensive plan is a factual report that examines how the past has led to the present; it is a report that can be used to chart the municipality's future, as well as a report of the plans and actions necessary to achieve its objectives for the future. Often,

much of the value in a community's comprehensive plan is found in the decisions that are made in the process of preparing the plan and the actions that are taken to implement the plan.

#### Legislative Authority

Pennsylvania local governments receive legislative authority from the Pennsylvania Municipalities Planning Code, Act 247, as amended, to manage and plan for development within their respective municipal boundaries. This legislation sets forth general guidelines, as well as specific administrative and procedural requirements, that municipalities must adhere to in developing and implementing municipal or multi-municipal comprehensive plans. The Pennsylvania Municipalities Planning Code states that the multi-municipal comprehensive plans the following:

- A statement of objectives of the municipality concerning its future development;
- A plan for land use;
- A plan to meet the housing needs of present residents and of those individuals and families anticipated to reside in the municipality;
- A plan for the movement of people and goods;
- A plan for community facilities and utilities;
- A statement of the interrelationships among the various plan components;
- A discussion of short- and long-range plan implementation strategies;
- Either a statement indicating that the existing and proposed development of the municipality is compatible with the existing and proposed development and plans in contiguous portions of neighboring municipalities, or a statement indicating measures which have been taken to provide buffers or other transitional devices between disparate uses, and a statement indicating that the existing and proposed development of the municipalities is generally consistent with the objectives and plans of the county comprehensive plans; and
- A plan for the reliable supply of water.

#### Legal Base for the Plan

The right of a municipality to exercise its authority in legislating regulations governing the use of the land has been upheld by the state and federal courts. The courts grant that a municipality has the right to manage its own development and growth activities within certain legal constraints. The primary method, upheld by the United States, to protect and provide for the best interest of citizens of a municipality is through the adoption of a zoning ordinance. However, this method of safeguarding the public welfare is not sufficient by itself. It must be supplemented by the adoption of certain other mutually supportive codes and ordinances; in particular, a subdivision and land development ordinance, building and housing codes, etc.

In order to provide for the management of land uses as prescribed in the zoning ordinance, the courts acknowledge the need for a municipality to properly evaluate the use of all land within its political jurisdiction and give consideration to land uses in areas adjacent to its borders. To ensure that zoning districts are not arbitrarily determined, the courts require evidence that the various land use districts established in the community are related to an overall land use plan for the entire municipality.

Through the adoption of the Municipalities Planning Code, the Commonwealth of Pennsylvania has granted local governments the authority to enact a zoning ordinance to implement the comprehensive plan. Therefore, a properly adopted "comprehensive plan" for land use and development is clearly needed to provide the proper foundation for its implementation through zoning and other related land management ordinances.

#### Vision, Goals, and Objectives

The purpose of this plan is to develop a set of broad policies and supporting strategies that will guide Greencastle Borough and Antrim Township over the next ten years to allow them to achieve the goals of the region. Successful planning initiatives begin with a solid plan to engage the public and local municipal officials. Failure to engage the public and keep them engaged will result in a plan that does not represent a common vision and therefore, has a greater potential to fail. Several community outreach initiatives were conducted as a part of this plan including a public meeting for residents, a public meeting for business owners, and a separate student

outreach program that was conducted with eleventh and twelfth grade students at Greencastle-Antrim High School. All of the public outreach initiatives are detailed in Appendix II.

#### **Vision Statement**

An important by-product of the public outreach initiative and steering committee meeting discussions is the development of a vision statement. The vision statement must be based on an accurate understanding of current conditions and must reflect the varied perspectives within the region. The vision statement should be built through careful dialogue and thought, and should be supported by implementable plans that when executed, result in the fortification and maintenance of all aspects of the vision for the region. In this sense, a vision statement is the framework around which goals and objectives are developed. Without a strong vision guiding the region, there will be no follow through. The vision statement for the Greencastle-Antrim region was developed around the results of the public participation process and through input from steering committee members. The vision statement is the mental image generated by residents and leaders of the region that describes the way it should appear and function in the future.

The Greencastle-Antrim area is a tight knit community that really functions as one cohesive entity rather than two separate municipalities. The Greencastle-Antrim School District is the tie that binds and the district maintains a strong presence in the community for education and enhancing community pride. Greencastle Borough serves as the anchor for the region, and downtown Greencastle is thriving with business activity. Residents of Greencastle and Antrim travel to the borough to purchase daily staples and to visit retail shop and dine. Several new restaurants and cafes have opened in the downtown, and high school students and their parents frequent the businesses often after school or after home football games and other events. An active business association is in place and the borough is about to begin its streetscape project that involves Baltimore and Carlisle Streets. Tayamentasachta continues to be a vital community resource and the newest exhibit features information on enhanced protection for the nearby Muddy Run Watershed. Antrim Township Community Park serves as a destination for residents in the township and the borough. Residential growth in the township has slowed slightly, but the growth that has occurred has been coordinated with the designated water and sewer service area. Much of the northern part of the township continues to be used for agriculture, and the township has encouraged agri-tourism in certain areas, in conjunction with heritage tourism. Although the business park has attracted some high-tech industries that offer internships for Greencastle-Antrim High School Students, the heritage tourism market is perhaps the largest economic development of recent years. Greencastle has implemented a system of wayfinding signage and plaques that mark historical sites of significance. Visitors typically stay overnight in Greencastle, frequent the shops and cafes, participate in the walking tour and check out the different exhibits at the Allison Antrim Museum before continuing on their trail through Antrim Township and on to Gettysburg. Recent transportation improvements have made automobile, bicycle, and pedestrian travel in the region safer and easier. The Greencastle-Antrim area remains an excellent place to live and to raise children. The high tech industries that have gone in at the new business park have given many of the youth of the region a reason to come back to the area after they have finished college to settle down and start a family. As the community prepares for its 38th triennial Old Home Week, community pride and sentiment could not be stronger.

#### **Overriding Goals**

A goal identifies what the region tends to accomplish in a broad sense, without identifying specific objectives or actions. In each plan element, the goal for that element has been expanded upon to include a series of objectives to meet the goal. The goals are oriented to achieving the vision for the region. One goal cannot be implemented and the others discarded; they must all complement each other in order to achieve the vision for the Greencastle-Antrim region.

- Community Character Goal
  - Protect, enhance, and promote those characteristics of the Greencastle-Antrim region that make it a distinctive place, including the high quality educational system, Downtown Greencastle, ties to the Civil War, and Old Home Week.

Land Use Goal

Preserve and enhance the diversified mix of rural and natural environments coupled with built-up and developed areas within the region. Recognize the role of Greencastle Borough as an attractive destination that provides a mix of niche neighborhood

businesses in close proximity to housing, such as coffee shops, bakeries, gift shops, and high quality restaurants, and Antrim Township as a hub for large scale commercial and industrial development projects in areas of the township that are designated for such development. Rural undeveloped and agricultural areas of the region are a non-renewable resource and shall be retained for agricultural uses, groundwater infiltration, wildlife habitat, and protection of natural resources and sensitive environmental features.

#### Natural and Historic Resources Goal

Sustain and enhance the region's natural and scenic resources and important agricultural lands for the benefit of current and future generations by accommodating planned growth in designated growth areas. Identify and protect the region's historic resources, and nurture and develop the region's rich history associated with the Civil War.

#### Transportation Goal

Ensure a safe and adequate multi-modal transportation network throughout the region, serving both existing and anticipated transportation needs, and retain both functional attributes and scenic qualities of roadways as new development and improvements occur within designated growth areas.

#### Housing Goal

Continue to provide for a wide range of housing types at various densities and affordability levels that will meet the future housing needs of the region. New development in Antrim Township shall implement conservation practices to retain open space and maintain the rural feel of the township. Encourage infill and redevelopment in Greencastle Borough and other developed areas of the region, and recognize the important role that Greencastle Borough and other designated growth areas in the region play in meeting housing needs for all individuals at all income levels.

#### Parks, Recreation, and Open Space

Provide a coordinated and comprehensive system of parks, recreation, and open space services and areas that will meet the active and passive recreational needs of all residents in the region and enhance the community design, identity, and vitality. This should be achieved by requiring recreation land dedication and open space, through conservation practices, for all major subdivisions and land development plans in the township, or the requirement of fees in lieu of land dedication. Enhance and maintain existing facilities as an amenity to the region. Encourage volunteerism for youth and adult related programs and athletics.

#### Community Facilities Goal

Ensure community services are adequate to meet the demands of existing and future residents and businesses of the region, and to guide future development within well defined growth areas that are adequately served by necessary community services, such as public water, public sewer, fire and police protection, and recreational opportunities and programs.

#### Planning and Coordination Goal

Achieve a high level of intergovernmental cooperation and public-private cooperation between the Greencastle-Antrim School District, local business owners, municipal and county offices, and residents of the region.

#### Economic Development Goal

Achieve and promote a healthy and complimentary business partnership between Downtown Greencastle and the commercial areas of Antrim Township to ensure positive economic growth for the region and Franklin County, and identify strategies to nurture the rural/agricultural economy that will encourage private preservation of the region's agricultural resources.

#### Downtown Greencastle Goal

Maintain and enhance the downtown area of Greencastle Borough so that it serves as an attractive and functional central business district that contains a mix of residential, commercial, and civic uses, and supports the surrounding Greencastle-Antrim community.

### 2005 Base Realignment and Closure (BRAC) Commission Report – State of Maryland Impact Analysis: 2006-2020

The 2005 BRAC Commission Report became law on November 9, 2005 and its recommendations are to be executed no later than September 2011. As a result of the Commission's recommendations, Maryland is gaining an estimated 45,000 high technology and high paying federal and private sector jobs. The report identifies two areas gaining the most jobs – Fort Mead is estimated to gain 5,800 jobs on the base, and the Aberdeen Proving Ground is estimated to gain up to 9,000 jobs on the base. This job growth does not include non-BRAC on-base job growth which is expected to be around 7,000 jobs at Fort Mead. The report anticipates that most job relocations will not occur until 2009/2010 at which time sufficient facilities will be constructed to accommodate the growth. The report further states that the Baltimore-Washington DC metropolitan areas will experience the greatest growth pressures.

Pennsylvania's southern tier counties, which include Franklin County, have all experienced growth from people moving out of Maryland in search of lower cost land, housing, services, and taxes while maintaining their higher paying jobs. Interstate commuting is not uncommon especially in the Greencastle-Antrim region given that Interstate 81 bisects the region and is a direct route to the City of Hagerstown and other major transportation facilities. The Greencastle-Antrim region is anticipating additional growth pressures as these jobs come on-line and opportunities present themselves for home ownership. This plan is the first step to ensure that the region proactively plans for this anticipated growth by establishing sound policies that protect the rural and agricultural areas of the region, and support job creation and infrastructure improvements.

#### **Expected Outcomes**

The ultimate outcome of this planning effort is a policy document to guide future growth to areas of the township that can support it while encouraging revitalization in the borough. The plan has been designed to encourage protection of historic and cultural features, prime farmland, and groundwater resources, while allowing the region to serve its citizens and community. The plan consists of a set of implementation actions to be undertaken to carry out the policies and achieve the objectives of this plan.

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### Chapter 2 - Future Land Use and Natural and Historic Resources Plan

The future land use plan for the Greencastle-Antrim region formally establishes the desired land uses and general development patterns for the municipalities in the region. The future land use plan has been formulated from a variety of resources including the Franklin County Comprehensive Plan, previous municipal comprehensive plans, municipal zoning regulations, and the various profile chapters in this comprehensive plan with particular emphasis given to the existing land use development patterns, existing and proposed water and sewer service areas, and any existing environmental or other constraints that prohibit development. The location and adequacy of the transportation system and the projected future populations of the area were also considered in developing the future land use plan for the region. Ultimately it is the intent of this plan to develop a set of mutually consistent land classifications that can be easily implemented and administered by both municipalities or through a joint zoning administration contract.

Public input from members of the community was sought throughout the development of this plan. General themes that were expressed at the community public meeting, business public meeting, and outreach to students in the Greencastle-Antrim School District were integrated into the future land use plan for the region, as well as the other planning elements, where appropriate.

#### **Maintaining Consistency**

The Pennsylvania Municipalities Planning Code, Act 247 of 1968 as amended, requires municipal comprehensive plans to be generally consistent with the county comprehensive plan. The general future land use patterns that were presented in the Franklin County Comprehensive Plan were used as a guideline for consistency in the development of the future land use plan for the region.

#### **Community Policies and Recommendations**

An inherit value of the future land use plan is its potential for motivating property owners, developers, and decision makers towards achieving the highest and best use of the land.

Chapter 1 establishes and articulates overriding goals for the future of the region. Policy statements and objectives have been established to enhance the region's physical, social, and environmental components. This chapter establishes final growth and preservation strategies, which include tools that may enhance the effectiveness of the implementation of the comprehensive plan. These policies and strategies form the conceptual framework for delineating appropriate growth and limited growth areas, design guidelines, and development expectations.

#### Goal: Land use

Preserve and enhance the diversified mix of rural and natural environments coupled with built-up and developed areas in the region. Recognize the role of Greencastle Borough as an attractive destination providing a mix of niche neighborhood businesses in close proximity to housing serving specialty items such as coffee shops, bakeries, gift shops, and high quality restaurants, and Antrim Township as a hub for large scale commercial and industrial development projects in areas of the township that are designated for such development. Rural undeveloped and agricultural areas of the region are a non-renewable resource and shall be retained for agricultural uses, groundwater infiltration, wildlife habitat, and protection of natural resources and sensitive environmental features.

#### Antrim Township Objectives

- Encourage a future land use pattern that provides a contiguous pattern of farmland on agriculturally productive soils.
- Align new development with new, existing or planned water and sewer service areas.
- Encourage conservation practices in Antrim Township as a way to preserve open space.
- Allow for on-farm businesses that support the viability and sustainability of the farming industry and which do not detract from the integrity of the farm as the primary use on the property.
- Encourage land use regulations that protect sensitive natural features such as the Muddy Run watershed, which is a high quality watershed.
- Differentiate between land that is to be used for agriculture and land that is to be used for low density residential purposes.

- Encourage future development to be located in areas of the township where road infrastructure can adequately support future development.
- Encourage compatibility between uses while allowing for uses that may be incompatible with residential uses to be located in designated areas and with certain conditions.
- Encourage village style development and a mix of uses in the village areas of State Line and Shady Grove, where this type of development is appropriate.
- Work closely with Franklin County and other southern tier counties to monitor the impact of the 2005 BRAC Commission Report.
- Work with Greencastle Borough to develop an agreement so that industrial development for the region can be located in appropriate places in the township rather than in the borough where this use is no longer appropriate.

#### Greencastle Borough Objectives

- Strengthen Downtown Greencastle by emphasizing its historical and unique character.
- Work with Antrim Township to allow industrial uses that serve the region to be located in the township where these uses are more appropriate. This includes all industrial type uses including freight, bus, and trucking terminals.
- Encourage new housing and infill housing to preserve the character of the existing neighborhoods in the borough through the development of regulations to ensure that new or infill development is designed in a way that is consistent with existing development in terms of architectural style, setbacks, and building height and scale.
- Encourage neighborhood commercial development at a pedestrian oriented scale that is compatible with the existing land use patterns in the borough.
- Discourage automobile-oriented uses, such as drive through banks and eateries.
- Encourage safe connections between the school campus and other destinations in the borough including downtown, other community facilities such as the library or parks, and neighborhoods.
- Encourage well defined neighborhoods in the borough.

#### Antrim Township Future Land Use Classifications

The following land use classifications have been developed for Antrim Township as part of the future land use plan for the region. Each of these classifications will be further discussed in this chapter; however they generally follow the township's existing zoning regulations with a few modifications. Currently there are thirteen zoning districts which are restrictive for economic development. Economic development is needed in order to support a healthy tax base. By aligning the zoning districts with the future land use categories outlined below (therefore reducing the number of zoning districts to six), the Township can gain the flexibility required to attract and promote commercial and industrial growth. The natural features conservation overlay represents areas where additional protection efforts are needed, and considers the value of the existing unique natural features.

- Agricultural (A)
- Low Density Residential (R1)
- Medium Density Residential (R2)
- Community Commercial (CC)
- Highway Commercial (HC)
- Industrial (I)

#### **Greencastle Borough Future Land Use Classifications**

The following land use classifications have been developed for Greencastle Borough as part of the future land use plan for the region. The plan recognizes the importance of the borough as an anchor community for the region, and encourages its revitalization. Downtown Greencastle is further analyzed and discussed in Chapter 7, but the future land use plan recognizes the regional relationship that the borough has with Antrim Township.

- Low Density Residential (R1)
- Medium Density Residential (R2)
- Residential Mobile Home (RM)
- Community Commercial (CC)
- Highway Commercial (HC)
- Light Industrial (LI)

#### **Proposed Land Use Classifications**

The future land use for Antrim Township is shown on Map 2-1, and the conservation overlays comprise those areas where environmental constraints are present, as shown on Map 6-12. Map 2-2 shows the relationship between the designated future land uses in Antrim Township and the sewer service area. Map 2-3 depicts the future land use plan for Greencastle Borough.

#### Agricultural

This land classification is comprised of those areas where agricultural activity is predominant and generally where highly productive soils are present. The purpose of the agricultural classification is to continue to promote agricultural activity, while allowing for some residential and other non-agricultural activities. Non-agricultural developments in this district should be aware of the agricultural nature of this district and expect by-products of farming including odor, manure, chemical sprays, and slow-moving agricultural equipment using local roads. Types of uses in this land classification include agricultural and agriculturally related operations, forest and wildlife preserves, feed and grain mills, veterinary office/animal hospitals, extractive industries such as quarrying and timbering, landfills, and on-farm occupations. Single-family detached dwellings and individual mobile homes are permitted; however, they should not detract from the purpose of the land classification, which is to promote agricultural activity. Conservation practices shall be applied to all development.

#### Suggested Design Standards

This land classification generally includes the following design standards in the table below:

Design Standards	Antrim Township – Agricultural
Density	1 unit per 2 acres
Lot Area (Minimum)	87,120 square feet
Lot Width (Minimum)	■ 150 feet
Lot Depth (Minimum)	<b>200 Feet</b>
Building Height	<ul> <li>Principal: 35 feet maximum</li> <li>Accessory: 20 feet maximum</li> </ul>
Lot Coverage	Principal and Accessory: Buildings shall not occupy more than 30% of the lot area
Setback (Minimum)	<ul> <li>Front Yard: 35 feet</li> <li>Side Yard: 12 feet</li> <li>Rear Yard: 30 feet</li> </ul>

#### Special Notes

Due to the built environment of the borough, the agricultural land classification is not proposed in Greencastle Borough.

#### Low Density Residential

The low density residential land classification is comprised of those areas where lower density residential units, such as single-family detached and semi-detached residential dwellings are prevalent. Other uses that are found in this district include churches and other

places of worship and accessory uses and buildings. This classification would also allow for limited agricultural activities, such as crop farming and animal husbandry, except for concentrated animal operations, in Antrim Township. Conservation practices shall be applied to all developments in the township. In Greencastle Borough this land classification is generally consistent with existing development in the borough.

#### Suggested Design Standards

This land classification generally includes the following design standards in the table below:

Design Standards	Antrim Township – Low Density Residential	Greencastle Borough – Low Density Residential
Density	1-3 units per acre	4-5 units per acre
Lot Areas (Minimum)	15,000 – 43,560 square feet depending on availability of public water and sewer	<ul> <li>9,000 square feet for single-family, detached dwelling</li> <li>5,000 square feet for single-family, semidetached</li> </ul>
Lot Widths (Minimum)	100-125 feet	<ul> <li>70 feet for single family, detached dwelling</li> <li>40 feet for single-family, semidetached dwelling</li> </ul>
Lot Depths (Minimum)	100-165 feet	100 feet
Building Height	<ul> <li>Principal: 35 feet maximum</li> <li>Accessory: 20 feet maximum</li> </ul>	<ul> <li>Principal: 35 feet maximum</li> <li>Accessory: 20 feet maximum</li> </ul>
Lot Coverage	Principal and Accessory: Buildings shall not occupy more than 30% of the lot area	<ul> <li>Principal: No more than 35% of lot area</li> <li>Accessory: No more than 240 square feet</li> </ul>
Setbacks (Minimum)	<ul> <li>Front Yard: 30 feet</li> <li>Side Yard: 12 feet</li> <li>Rear Yard: 30 feet</li> </ul>	<ul> <li>Front Yard: 25 feet</li> <li>Side Yard: 10 feet</li> <li>Rear Yard: 25 feet</li> </ul>

#### **Medium Density Residential**

The medium density residential land classification is comprised of those areas where a variety of moderately intensive residential dwelling types, including single and multi-unit housing, are predominant and well established. Typically, these residential dwellings are of the following: single-family detached; single-family semi-detached; apartments; and townhouses. In addition, this classification may also contain non-residential uses such as churches and other places of worship and accessory buildings. Conservation practices shall be applied to all development.

#### Suggested Design Criteria

This land classification generally includes the following design standards in the table below:

Design Standard	Antrim Township – Medium Density Residential	Greencastle Borough – Medium Density Residential
Density	<ul> <li>8-17 units/acre multi-family dwelling, including apartments and townhouses</li> <li>4-7 units/acre for single-family, detached dwelling and single-family semi-detached</li> </ul>	4-5 units/acre
Lot Areas (Minimum)	<ul> <li>6,000 to 30,000 square feet for single-family, detached dwelling and single-family semi-detached</li> <li>3,500 - 5,000 square feet acre multi-family dwelling, including apartments and townhouses</li> </ul>	<ul> <li>9,000 square feet for single-family, detached dwelling</li> <li>4,000 square feet for single-family, semidetached</li> </ul>

Design Standard	Antrim Township – Medium Density Residential	Greencastle Borough – Medium Density Residential
Lot Widths (Minimum)	30 – 75 feet	<ul> <li>70 feet for single family, detached dwelling</li> <li>30 feet for single-family, semidetached dwelling</li> </ul>
Lot Depths (Minimum)	■ 100 feet	100 feet
Building Height	<ul> <li>Principal: 35 feet maximum</li> <li>Accessory: 20 feet maximum</li> </ul>	<ul> <li>Principal: 35 feet maximum</li> <li>Accessory: 20 feet maximum</li> </ul>
Lot Coverage	<ul> <li>Principal: No more than 40% of lot area</li> <li>Accessory: No more than 240 square feet</li> </ul>	<ul> <li>Principal: No more than 40% of lot area</li> <li>Accessory: No more than 240 square feet</li> </ul>
Setbacks (Minimum)	<ul> <li>Front Yard: 15-25 feet</li> <li>Side Yard: 7-10 feet</li> <li>Rear Yard: 20-25 feet</li> </ul>	<ul> <li>Front Yard: 15-25 feet</li> <li>Side Yard: 7-10 feet</li> <li>Rear Yard: 20-25 feet</li> </ul>

#### **Downtown Greencastle**

The downtown area of Greencastle is unique, and therefore, warrants a separate, special land description. The downtown area is meant to accommodate a mix of residential and commercial uses, with many units containing first floor commercial or retail establishments, and upper floor residential uses. The functionality and sustainability of Downtown Greencastle is further discussed in Chapter 7.

#### **Community Commercial**

The community commercial land classification is comprised of elements from the medium density residential land use classification and allows for a mix of light commercial uses. All uses associated with medium density residential land use classification are included in this district, as well as retail businesses, service-oriented businesses, personal businesses, professional services, professional offices, and multiple use buildings. This land classification includes downtown Greencastle, the villages of State Line and Shady Grove and as such, gives the township flexibility to develop a village zoning district developed around traditional neighborhood development guidelines. Conservation practices shall apply to all development.

#### Suggested Design Criteria

This land classification generally includes the following design standards in the table below:

Design Standards	Antrim Township – Community Commercial	Greencastle Borough – Community Commercial
Density	As permitted in the Medium Density Residential for residential uses. No minimum for Commercial uses.	• -
Lot Areas (Minimum)	10,000 square feet for commercial uses or as permitted in the Medium Density Residential for residential uses.	N -
Lot Widths (Minimum)	75 feet for commercial uses or as permitted in the Medium Density Residential for residential uses	N -
Lot Depths (Minimum)	100 feet for commercial uses or as permitted in the Medium Density Residential for residential uses.	s .

Design Standards	Antrim Township – Community Commercial	Greencastle Borough – Community Commercial
Building Height	<ul> <li>Principal: 40 feet maximum for commercial uses or as permitted in the Medium Density Residential for residential uses.</li> <li>Accessory: 20 feet maximum</li> </ul>	40 feet maximum
Lot Coverage	Principal and Accessory: Buildings shall not occupy more than 75% of the lot area	s .
Setbacks (Minimum)	<ul> <li>Front Yard: 30 feet for commercial uses or as permitted in the Medium Density Residential for residential uses.</li> <li>Side Yard: 10 feet for commercial uses or as permitted in the Medium Density Residential for residential uses.</li> <li>Rear Yard: 15 feet for commercial uses or as permitted in the Medium Density Residential for residential uses</li> </ul>	<ul> <li>Front Yard: -</li> <li>Side Yard: -</li> <li>Rear Yard: -</li> </ul>

#### **Highway Commercial**

The highway commercial land classification is comprised of more intensive commercial uses than those found within the community commercial classification. Uses that are found within the highway commercial classification include drive-in establishments, shopping centers, hotels and motels, automotive sales and service, retail businesses and services, professional uses, healthcare facilities, light manufacturing, multiple use buildings, warehousing, and miniwarehousing. Adult-oriented businesses are permitted as a conditional use.

#### Suggested Design Criteria

This land classification generally includes the following design standards in the table below:

Design Standards	Antrim Township – Highway Commercial	Greencastle Borough – Highway Commercial
Lot Areas (Minimum)	10,000 square feet	10,000 square feet
Lot Widths (Minimum)	<b>80</b> feet	s0 feet
Lot Depths (Minimum)	125 feet	125 feet
Building Height	<ul> <li>Principal: 50 feet maximum</li> <li>Accessory: 20 feet maximum</li> </ul>	s 40 feet
Lot Coverage	Principal and Accessory: Buildings shall not occupy more than 75% of the lot area	s .
Setbacks (Minimum)	<ul> <li>Front Yard: 35-50 feet</li> <li>Side Yard: 7-15 feet</li> <li>Rear Yard: 15-30feet</li> </ul>	<ul> <li>Front Yard: 35 feet</li> <li>Side Yard: 15 feet</li> <li>Rear Yard: 15 feet</li> </ul>

#### Special Notes

Setbacks will be determined based on the proposed use.

#### **Light Industrial**

The light industrial classification is comprised of lighter industrial uses than those that are found in the industrial classification. Generally, the uses include miniwarehousing, light manufacturing, scientific research facilities, non-alcoholic beverage bottling plants, and wholesale business facilities.

#### Suggested Design Criteria

This land classification generally includes the following design standards in the table below:

Design Standards	Greencastle Borough – Light Industrial
Lot Area (Minimum)	20,000 square feet
Lot Width (Minimum)	■ 100 feet
Lot Depth (Minimum)	■ 150 feet
Building Height	Principal: 40 feet maximum
Lot Coverage	<ul> <li>Principal: No more than 40% of lot area</li> <li>Accessory: No more than 240 square feet</li> </ul>
Setbacks (Minimum)	<ul> <li>Front Yard: 30 feet</li> <li>Side Yard: 20 feet</li> <li>Rear Yard: 30 feet</li> </ul>

#### Special Notes

- The light industrial land classification replaces the industrial classification in Greencastle Borough.
- Light industrial uses in the township are split between Highway Commercial and Industrial.

#### Industrial

The industrial land use classification comprises those areas where industrial activity is predominant or proposed. The classification's uses include the following: manufacturing, freight and truck terminals, book publishing facilities, distribution plants, accessory uses and buildings, and research and development facilities.

#### Suggested Design Criteria

This land classification generally includes the following design standards in the table below:

Design Standards	Antrim Township – Industrial
Density	1 unit per 1 acres
Lot Area (Minimum)	40,000 square feet
Lot Width (Minimum)	100 feet
Lot Depth (Minimum)	200 feet
Building Height	<ul> <li>Principal: 50 feet maximum</li> <li>Accessory: 20 feet maximum</li> </ul>

Design Standards	Antrim Township – Industrial	
Lot Coverage	Principal and Accessory: Buildings shall not occupy more than 75% of the lot area	
Setbacks (Minimum)	<ul> <li>Front Yard: 35-50 feet</li> <li>Side Yard: 15- 50 feet</li> <li>Rear Yard: 15-50 feet</li> </ul>	

#### Special Notes

- There is no area for industrial uses proposed in Greencastle Borough. It is recommended that the borough change its existing Industrial Zoning District to light industrial.
- Setbacks shall be determined based on the proposed use.

Tables 6-1 and 6-2 provide the total acres for each land classification and percent of the municipality's total acres.

#### Table 6-1: Antrim Township

Land Use Classification	Acres	% of Total Acres
Agricultural (A)	31,370	69.87%
Low Density Residential (R1)	4,960	11.05%
Medium-Density Residential (R2)	1,200	2.67%
Community Commercial (CC)	1,820	4.05%
Highway Commercial (HC)	3,380	7.53%
Industrial (I)	2,170	4.83%

#### Table 6-2: Greencastle Borough

Land Use Classification	Acres	% of Total Acres
Low Density Residential (R1)	425	41.90%
Medium Density Residential (R2)	272	26.84%
Residential Mobile Home (RM)	14	1.33%
Community Commercial (CC)	82	8.11%
Highway Commercial (HC)	125	12.31%
Light Industrial (LI)	86	8.50%

### **Natural Resources Protection Plan**

Natural features and open space are recognized throughout the plan as being important to the region's environmental health, diversity, character, and overall quality of life. The agricultural land classification accounts for the majority of open space and rural type development in the township; however, floodplains, steep slopes, wetlands, and surface water are located throughout the township and demand recognition as sensitive natural resources. Antrim Township and Greencastle Borough recognize the interrelationship between their natural resources and the health, safety, and general welfare of the community. These natural resources play a major role in the quality of life in the community. They must be protected, maintained and preserved for future generations.

#### **Goal: Natural and Historic Resources**

Sustain and enhance the region's natural and scenic resources and important agricultural lands for the benefit of current and future generations by accommodating planned growth in designated growth areas. Identify and protect the region's historic resources, and nurture and develop the region's rich history associated with the Civil War.

#### Antrim Township and Greencastle Borough Objectives

- Encourage a future land use pattern that provides a contiguous pattern of farmland on agriculturally productive soils.
- Encourage conservation practices in Antrim Township as a way to preserve open space.
- Allow for on-farm businesses that support the viability and sustainability of the farming industry and which do not detract from the integrity of the farm as the primary use on the property.
- Encourage land use regulations that protect sensitive natural features and primary areas for conservation, such as the Muddy Run watershed, which is a high quality watershed.
- Work with farmers to implement Best Management Practices (BMPs) through various sources of information, including municipal newsletters and websites, and through participation in programs such as the Conservation Reserve Enhancement Program (CREP).
- Encourage water conservation and proper water supply management.
- Ensure that municipal ordinances and regulations adequately support the protection, preservation, and enhancement of natural resources.
- Promote and manage the health of Muddy Run and streams in the Greencastle-Antrim area by limiting nutrient pollution, farm runoff, and development in areas prone to erosion and by improving the operation and maintenance of on-lot disposal systems.
- Encourage environmental education initiatives, such as the programs at Tayamentasachta that raise awareness of the natural resources that are assets to the region and promote conservation.
- Establish a network of greenways and open space to protect important ecological resources, preserve sensitive wildlife habitats, and provide for passive recreational opportunities.
- Encourage the identification, documentation, and preservation of historic resources in the Greencastle-Antrim area, and educate residents and visitors of the region's rich heritage.
- Continue to support new ways to meet the Chesapeake Bay Strategy without requiring expensive upgrades to the sewage treatment plants.
- Utilize local historians and preservation groups in promoting the Civil War history of the region to appeal to heritage tourists and serve as an economic development tool for the region.

#### **Natural Features Conservation Overlay**

In order to adequately reflect the importance of natural resources in the region, the conservation overlay was developed to indicate that the lands in this classification have unique natural features that mandate attention and require more stringent regulations. Overlay districts are often applied to municipal ordinances that regulate land use and development as a way to protect environmental features, and impose additional regulations or restrictions on the development and use of the land. As this classification is integrated into the future land use plan for the region, it can be applied as an overlay district in the municipal zoning ordinances to ensure conservation and protection of these unique areas. This plan recommends the conservation overlay in the future land use plan be developed as an overlay district in the municipal ordinances to ensure protection of the area's natural resources.

The conservation overlay was developed as an overlay through a compilation of the area's most unique and sensitive environmental features. Environmental constraints in the region are shown on Map 6-13 and are discussed in the natural resources profile. They represent special areas in the region that are considered sensitive because of steep slopes, floodplains, or proximity to streams or wetland areas. Each of these sensitive features is described below.

#### Slope Protection

- The comprehensive plan recognizes steep slopes and hillsides as unique areas which are fragile and susceptible to erosion, landslides, mudslides, degradation of their natural vegetation and increased flooding. Conventional development practices increase these threats. By protecting this asset the region intends to:
  - Guide development away from steep areas.
  - Minimize grading and other site preparation in steep areas.
  - Provide a safe means for ingress and egress while minimizing scaring from hillside construction.
  - Preserve the natural conditions in steep areas.
  - Prevent flooding and the deteriorating effects of erosion to streams and drainage areas.
- It is recommended that areas of prohibitive slopes, those slopes 25% and greater, be subject to regulations that will control the intensity of development that can occur on these sensitive areas. Areas of prohibitive slope are included in the conservation overlay. It is also recommended that regulations be imposed in areas of cautionary slopes, those slopes 15% to 25%. Although cautionary slopes are not included in the conservation overlay, their locations can be seen in Map 6-13, Environmental Constraints.

#### Stream Protection

- The comprehensive plan identifies and recognizes streams and the natural areas around them as important hydrological assets that support sensitive ecological habitats. It is the intent of this plan to preserve natural and man-made waterways. By protecting this asset, both municipalities intend to:
  - Protect wildlife
  - Reduce exposure to high water and flood hazards
  - Preserve existing vegetation along waterways
  - Minimize the negative effects on waterways from agriculture and development related erosion
  - Minimize scenic degradation
  - Protect water quality by reducing stormwater runoff

#### Wetland Protection

- The comprehensive plan recognizes wetland areas as indispensable and fragile hydrological natural resources that provide:
  - Habitat for fish, wildlife, and vegetation
  - Water-quality maintenance and pollution control
  - Flood control
  - Erosion control
  - Open space
  - Scientific study opportunities
  - Recreational opportunities
- Damaging or destroying wetlands threatens public safety and general welfare. Wetlands are to be protected from negative impacts of development and other activities because of their importance. It is the intent of this plan to:
  - Require planning to avoid and minimize damage to wetlands whenever prudent or feasible.
  - Require that activities not dependent upon wetlands be located on other sites.
  - Allow wetland losses only where all practical or legal measures have been applied to reduce these losses that are unavoidable and in the public interest.
  - Create wetlands as a storm water management technique.

#### Surface Water Protection

- The comprehensive plan identifies and recognizes streams, lakes and ponds and the natural areas around them as important hydrological and environmental assets. It is the intent of this plan to preserve these natural and man-made assets. By protecting this asset, both municipalities intend to:
  - Protect wildlife
  - Preserve existing vegetation along lakes or ponds
  - Minimize the negative effects on lakes or ponds from agriculture and development related erosion
  - Minimize scenic degradation
  - Protect the integrity of ponds and lakes as functioning wetland areas

#### Floodplain Protection

Preserving floodplain areas from development is crucial in minimizing potential damages to property and the risk of injury caused by flooding. Allowing floodplain areas to remain in their natural state will also minimize any major changes to the balance of the hydrologic system and allow for groundwater recharge. Areas identified as being in the 100-year floodplain have been included in the conservation overlay.

#### Muddy Run Watershed Protection Area

Muddy Run has been listed as a high-quality cold-water fishery, with wild trout reproduction. Therefore, it is important that this plan recognize the important contribution that this watershed has in the local and regional community. The primary reservoir that supplies Greencastle Borough is located in the southern extreme of this watershed. The watershed primarily consists of land classified as agricultural, low and medium density residential, highway commercial, community commercial, and industrial in Antrim Township. It also includes the northern portion of Greencastle Borough which consists of land classified as low and medium density residential, highway commercial, and light industrial. The extent of the watershed is shown on Map 6-9.

#### EPA Smart Growth Techniques

- The Environmental Protection Agency has identified the following smart growth techniques that can be utilized to ensure the water quality of Muddy Run is not adversely impacted from development.
  - Regional Planning For water quality, regional cooperation and planning is crucial for aligning smart growth water quality protection regulations. This includes minimizing imperviousness at the watershed level, identifying and preserving critical ecological areas and contiguous open space, and making maximum use of existing infrastructure and previously developed sites.
  - Tree and Canopy Programs A well maintained tree canopy can provide erosion control and reduce stormwater runoff. Strategically planting trees along streams and creeks can reduce water temperature and improve wildlife habitat. Tree canopies intercept rainwater, which provides for the gradual release of rainwater into streams, helping to reduce flooding, filter toxins, and extend water availability in dry months.
  - Parking Reduction and Landscaping Parking lots are one of the more visible aspects of imperviousness within the built landscape and managing stormwater through better parking lot design is becoming more and more common place. Techniques to reduce imperviousness associated with parking lots include reducing parking requirements which mandate a certain amount of parking and encouraging shared parking between uses. Parking lots should be developed with infiltration strips and landscaping to help control stormwater runoff.
  - Conservation Practices The township has taken a proactive approach to ensure that all subdivisions in the
    agricultural, low density, medium density, and community commercial land use classifications preserve open space and
    natural resources.
  - Agricultural Conservation Since the majority of the Muddy Run watershed consists of land classified as agricultural, the township should encourage farmers, through educational initiatives, to implement best management practices (BMP's), including but not limited to buffering and fencing of streams, creeks, and drainageways that flow into Muddy Run, encourage the use of no till farming to reduce the amount of erosion occurring from cultivated farm fields, and proper management of chemical and natural fertilizers and insecticides.
- These are just a handful of techniques that can be implemented by the township to protect the water quality of the Muddy Run Watershed.

#### Other Environmental and Land Use Considerations

The following items have not been included in the conservation overlay for this plan but should be considered as additional areas of protection.

#### Potable Water Protection

Developing a potable water protection overlay would protect potable water and improve the quality of potable water resources in the region. Permitted uses within this land classification would include undeveloped land, cabins, and very low density residential development. Certain tools that mitigate the impacts associated with development, such as riparian buffers, will be required to act as primary filters.

#### Utility Corridor Protection

A utility corridor protection overlay is designed to show and maintain existing utility rights-of-way so that property owners are aware of these rights and where they occur.

### **Historic Resources Preservation Plan**

Historical resources in the region are discussed in the natural and historic resources profile. In the area there are several properties that are listed on the National Register and several identified historic structures not listed on the register. Historical resources can be considered a portal to the past to be enjoyed and studied by current and future residents of the area.

This plan addresses the need for maintaining those historic resources through measures such as preparing a historical resources inventory and map, working with the Pennsylvania Historical and Museum Commission, working with local and county historical societies, and preparing a historic preservation ordinance. The next step for historical preservation in the region is to add a resident participation and education component to the preservation efforts. This component may include activities such as a community historical day or the presentation of yearly awards to residents for historic preservation activities. By educating and involving citizens and local government leaders in historic preservation initiatives, a greater appreciation for the area's historic resources is fostered. Showcasing historical assets and encouraging preservation initiatives will help to create a better understanding of the history of the community, thus adding to the residents' and visitors' sense of place and encouraging an increased quality of life.

#### Identification of Historic Resources

A community's history is contained in its historic resources. These resources may take many forms, including architecturally and historically significant buildings, sites, structures, objects, and districts. A comprehensive historic preservation program begins with the identification and evaluation of historic resources. Once these resources are identified and evaluated, programs can be developed for their preservation and enhancement. One tool for identifying the historical features in the region is the National Register of Historic Places, which is managed by the National Park Service. Placement of a building or structure on the National Register increases awareness of its level of importance as a historic place, but does not protect the structure.

#### Legal Foundation for Historic Preservation

Many historic preservation techniques and programs are available to facilitate historic resource protection. Most techniques and programs evolved out of federal or state laws. An understanding of the legal foundation for historic preservation is helpful to determine what techniques and programs a Historic Resources Protection Plan should include.

#### Federal Level

The National Historic Preservation Act of 1966 (NHPA) earmarked the beginning of federal historic preservation policy. The NHPA was intended to stop the severe loss of historic resources in large cities and boroughs due to urban renewal. The legislation was intended to create a comprehensive framework for preserving historic resources through a system of reviews, regulations and incentives. The NHPA encouraged cooperation among federal, state and local governments to address historic resources protection. In Pennsylvania,

the Bureau for Historic Preservation (BHP), an agency of the Pennsylvania Historical and Museum Commission (PHMC), is the state agency responsible for overseeing this coordination.

The NHPA formalized the National Register of Historic Places, in which a number of resources are either listed or eligible for listing. The NHPA also instituted the review process, discussed below, for any project that receives federal funds. The act also authorizes the Certified Local Government Program, which enables municipalities to participate directly in federal preservation programs and to access through the state, certain funds earmarked for historic preservation activities.

#### Section 106 Review Process

The Section 106 review process requires that any project using federal funds, which includes most PennDOT projects, be reviewed for its impact on historic resources either listed in, or determined to be eligible for, the National Register of Historic Places. Section 106 does not directly prohibit alteration or destruction of these resources, but it does require a thorough investigation of other alternatives and the consideration of mitigation measures.

#### State Level

The NHPA authorizes the appointment of a State Historic Preservation Office to administer provisions of the act at the state level. In Pennsylvania, the agency assigned to this responsibility is the Pennsylvania Historical and Museum Commission (PHMC). This entity is responsible for making initial determinations of eligibility for the National Register, managing state historic archives and administering a wide variety of historic preservation programs.

The Pennsylvania History Code pertains to conservation, preservation, protection, and management of historical and museum resources and identifies PHMC as the agency responsible for conducting these activities. It outlines Pennsylvania's legal framework for historic preservation and mandates cooperation among other state entities in identifying and protecting historic and archaeological resources.

Pennsylvania law recognizes the following regulatory techniques that can be employed by a municipality to protect and preserve their historic resources:

- Enactment of a Historic District Ordinance
- Conservation Overlay Districts
- Traditional Neighborhood Developments
- Official Maps
- Historic Preservation Zoning

Pennsylvania legislation provides the legal foundation for municipalities to adopt historic preservation ordinances through Act 167 and Act 247. The Historic District Act of 1961, Act 167 authorizes municipalities to create local historic districts and protect the historical and architectural character of the district through regulating new construction, building reconstruction, alteration, restoration, demolition, or razing of buildings within a certified local historic district. Local districts established under this act must be certified by PHMC. This act also requires the appointment of a Historical Architectural Review Board (HARB).

The Pennsylvania Municipalities Planning Code (MPC), Act 247 which authorizes the use of municipal land use controls such as use regulations and area and bulk regulations, to protect historic resources. The MPC specifically regulates places having unique historical, architectural, or patriotic interest or value through the creation of a specific zoning classification.

#### MPC Requirements

The Pennsylvania MPC requires the comprehensive plan to include a plan for the protection of Natural and Historic Resources to the extent not preempted by federal or state law. The Natural and Historic Preservation Plan shall be consistent with and may not exceed those requirements imposed under the following:

- Clean Streams Law
- Surface Mining Conservation and Reclamation Act
- The Bituminous Mine Subsidence and Land Conservation Act
- The Coal Refuse Disposal Control Act
- Oil and Gas Act

- Non-coal Surface Mining Conservation and Reclamation Act
- Agricultural Security Act
- An Act Protecting Agricultural Operations from Nuisance Suits and Ordinances Under Certain Circumstances
- Nutrient Management Act

#### **County and Local Levels**

The county planning commission can support and provide necessary technical guidance to municipalities that have an interest in adopting an historic preservation ordinance. The county planning commission can also assist with integrating historic resources in the county with other tourism initiatives.

At the local level, municipalities can adopt single purpose historic preservation ordinances and establish architectural and historic review boards. Generally, historic preservation regulations are part of a zoning ordinance, but some municipalities choose to adopt stand-alone ordinances instead.

### **Tool Box for Implementation**

As comprehensive plans are developed, planning consultants, municipal committees and the public should be cognizant of the full range of planning tools available to them. It has been demonstrated that many municipal comprehensive planning efforts fail to take advantage of these tools during the implementation phase of the plan. It is hoped that by providing this toolbox, implementation of comprehensive planning will be more effective.

#### Development Incentives

Bonus densities may be offered to developers who set aside open space within their developments, or who provide housing targeted at first time homebuyers and/or those of moderate income. This type of incentive can also be used to encourage developers to provide additional investment in public improvements and recreational facilities.

#### Urban Growth Boundaries

These boundaries are provided for on the future land use map as areas where the municipality wants to target growth. The boundary, once established, must be properly zoned to encourage the type of growth targeted. Usually these boundaries are tied to the availability of local utilities such as sewer and water, and the availability of adequate transportation systems.

#### Conservation by Design

This tool is designed to allow residences to be grouped on a portion of a development site to preserve the remainder of the site as open space. For example, on a theoretical four acre parcel, instead of developing four homes on four one acre lots, cluster development would encourage the development of four homes on half-acre lots, leaving the remaining two (2) acres of the parcel as permanent open space. Cluster developments tend to reduce the amount of infrastructure needed to develop a site, providing a positive cost offset for developers. There is a debate about whether or not "clustering" should be mandatory or voluntary within municipal ordinances. Mandatory clustering may be subject to a "takings" argument, and is less often used than voluntary clustering.

#### Agricultural Zoning

Rural municipalities will often create a specified Agricultural Zone within their ordinances. Uses within these zones are limited to agriculture, horticulture and related uses. Sometimes small, farm related businesses are permitted within these zones. Other zoning techniques that can be considered include permitting on-farm occupations, agri-businesses, and rural businesses in the Agricultural Zone. Agricultural tourism and the preservation of historic barns are also techniques that can be implemented to preserve the agricultural heritage of Antrim Township.

#### Agricultural Security Areas (ASA)

These areas can be designated to help protect blocks of agricultural land. Initiated by homeowners, an agreement is reached to keep the specified land in agricultural use. The size of the ASA must be at least 250 acres, but it need not be comprised of contiguous parcels. Noncontiguous farm parcels must be at least 10 acres in size.

#### Agricultural Conservation Easements

Using this tool, a municipality or other government entity purchases easements on land currently used for agriculture. Usually the entity pays the difference between the values of the land if it is used for agricultural purposes and if used for its highest and best use. The conservation easement is recorded at the appropriate county recorder of deeds office.

#### Traditional Neighborhood Development

Traditional neighborhood development seeks a return to the mixed-use communities of the 50s and 60s. The main idea is to re-create the small town/village environment. In order to do this, residential, professional, light commercial/retail, and recreational opportunities are all located within the easy walking distance. Pedestrian facilities such as sidewalks and trails are vital to such communities in order to encourage residents to utilize their cars less when accomplishing daily tasks. On street parking and narrow streets are utilized as traffic calming measures and to limit "cut-through" traffic.

#### Specific Plans

A municipality is entitled to adopt a specific plan for any non-residentially zoned area of the municipality. The plan is particularly useful when applied to areas of the municipality which are targeted for industrial or commercial development or redevelopment. Old industrial or commercial sites, or areas which are ideally suited to such development due to the proximity of adequate transportation, sewer, water and other infrastructure, may benefit from such a plan. The benefit of implementing a specific plan is that the attractiveness of the site to developers is increased by eliminating the need to go through preliminary planning procedures. Developers are able to proceed directly to final plans.

#### Transfer of Development Rights

This tool works best if the development rights are transferred to existing urban/developed areas and do not contribute to sprawl. A successful TDR program requires the designation of both "sending" and "receiving" areas. Areas that are generally limited in development, such as agriculturally zoned areas, are assigned development rights at a certain rate. These areas are the sending areas. Other areas, where higher density development may not strain infrastructure or natural resources are designated as receiving areas. Developers in the receiving areas can purchase the development rights of landowners in the sending areas and thereby develop receiving area land at a higher density.

#### Official Map

In order to facilitate the planning, acquisition and implementation of community facilities, an official map may be developed. The Official Map is a useful but underutilized planning tool. Its purpose is to identify public and private lands for which the public has a current or future need. It can be used to legally establish the location of existing and proposed streets, waterways, parks, bikeways, pedestrian paths, floodplains, stormwater management areas, public facilities, intersections needing improvement, and historic sites. Any or all of these features may be shown on the official map. The land that is shown on the map is not a "taking" from the landowner. The municipality must at all times be prepared to compensate the owner for the fair value of the land. The reservation on the map merely gives the municipality the first opportunity to purchase the identified property. The property owner must notify the municipality in writing of intentions to develop or subdivide the property. From the date that the municipality receives the notice it has one year to purchase the property, obtain easements, or seek condemnation. The properties and routes on the map need not be surveyed to reserve them. Until 1988 a metes and bounds survey was required, but the current standard is that the methods used to identify the property sufficiently describe the location of the plan components.

#### Transportation Impact Fees

Traditional standards in Pennsylvania do not allow for a municipality to assess fees for "offsite" transportation improvements that serve a development or the municipality in general. The exception to this general standard is if the municipality adopts an Impact Fee Ordinance following the procedures outlined in Section V of the Municipalities Planning Code. The procedure

utilized for establishment of the ordinance includes the establishment of an impact fee advisory committee, completion of a roadway sufficiency analysis, completion of a set of governing land use assumptions, development of a transportation capital improvements plan, and adoption of an impact fee ordinance.

#### Park and Open Space Dedication

Municipalities may include provisions in their ordinances requiring that developers set aside a certain portion of land for parks and open space, or in the alternative, pay a fee in lieu of land dedication. Municipalities may also provide for park and open space on an official map, reserving the opportunity to purchase identified lands for development into community open space.

#### Greenway Planning

Rivers and streams can be a significant asset to a municipality in terms of maintaining open space, biological/ecological diversity and in terms of attracting tourism and development. The areas along these rivers and streams are often ideally suited for providing bikeways, pedestrian trails, etc. that serve not only an environmental benefit by protecting the waterway, but add to the community by making it more livable. To that extent, a greenway plan, which preserves and enhances these corridors, can be a significant planning tool.

#### Overlay Districts

Specific areas of a municipality may be targeted for, or appropriate for, a particular type of development. These areas may benefit from the provision of an overlay district. A zoning overlay provides regulations in addition to or superseding those of the underlying district. The intent of these provisions is most often to encourage a particular type of development, or to encourage redevelopment of the subject area. Looking at it another way, the overlay is intended to recognize the unique characteristics of a specific area, and pay special attention to what is required in that area to facilitate development.

#### Historic Preservation Zoning

Acts 67 and 68 which amended the municipalities planning code have provided specifically for historic and cultural resources preservation to be included among the purpose(s) of zoning. This legislative addition to the MPC may provide municipalities with the authority needed to zone locally for historic preservation, including the ability to require architectural review in areas designated by the township or borough as historic. It remains to be seen whether or not the courts will uphold this approach.

#### Historic District Establishment

The Pennsylvania Historic District Act authorizes municipalities to protect historic areas through the enactment of Historic District ordinances. Governing bodies are empowered to identify historic areas and to establish a board of historical and architectural review. A prerequisite for this approach is that the Pennsylvania Historical and Museum Commission is responsible for certifying to the historical significance of any area so protected.

#### Conditional Use/Special Exception Zoning

These techniques can be used to ensure that uses that are not considered to be appropriate to a zoning district as uses permitted by right, but that may be appropriate under certain circumstances and conditions, may be brought before the governing body or zoning hearing board of the municipality for review and comment. Conditional uses and special exceptions add flexibility to a zoning ordinance by providing for innovative design, while ensuring that the overall intent of the district in which it is being allowed is protected. Examples of some uses that are often subject to conditional use proceedings include transportation related uses, and adult entertainment uses.

#### Cooperative/Multi-Municipal Planning

There is starting to be a realization among municipalities that planning cannot stop at the municipal border. It makes no sense for one municipality to zone land high density residential, for example, if the adjoining municipality zones adjacent land as heavy industrial. It makes no sense for one municipality to zone an area for low traffic volume uses due to the inadequacy of the transportation system, if the adjoining municipality zones its land for high volume uses utilizing the same traffic system. Entities at the county level and above are emphasizing the benefits of cooperative planning, and providing incentives in terms of giving funding priorities to projects benefiting more than one municipality. It is imperative that municipalities recognize the importance of at least making an effort to plan cooperatively.

#### Property Maintenance/Building Code Evaluation

One significant method of providing for future growth, without encouraging future sprawl, is to protect the assets already available to a municipality. By ensuring that property maintenance codes are enforced, the attractiveness of existing residential, commercial and industrial areas is maintained. Good property maintenance practices help to keep housing prices stable, encourage in-fill development in existing neighborhoods, and promote a sense of pride and community.

#### Best Management Practices (BMPs)

Traditional Pennsylvania stormwater management has focused on the control of quantity increases in flows postdevelopment. By implementing within their ordinances some or all of the available Best Management Practices (BMPs), however, municipalities can begin to address stormwater quality issues. BMP's may include the establishment of riparian buffers, the use of infiltration trenches, wet ponds, wetland establishment, use of grassed swales to remove pollutants, pervious pavements, and others. One of the most important requirements of establishing effective BMPs is that the individual(s) responsible for operation and maintenance must be firmly and legally established.

#### Capital Improvements Plan

A municipality may develop a schedule of all planned capital expenditures for a particular period (5 to 10 years). The plan should include estimated costs for each project, proposed sources of funding, and the priority of the project within the plan. Such a schedule helps to ensure that yearly budgeting and spending priorities are coordinated with the comprehensive plan of the municipality.

#### Streetscaping

In many areas of a municipality, the opportunity for including good planning in design has long passed, as the areas are already considerably developed. It is in these areas that consideration must be given to retrofitting the area with amenities that improve its appearance and functionality. Some of the tools that can be used to streetscape already developed areas include traffic management improvements such as textured pedestrian crossings, landscaping, installation of street trees, installation of sidewalks and bike paths, and the relocation of utilities below ground. It is usually imperative that the municipality enlist the support of the business owners along the street/area to be streetscaped. Often those property owners may be asked to contribute a small portion of right of way, or give up a few parking spaces, in order to provide property on which to conduct the streetscaping efforts. The property owners must be made to understand the benefits to their business of improving the appearance of the area as a whole. Funding is available for many of the improvements included in a streetscaping plan, including planting trees and incorporating bikeways and pedestrian paths.

#### Designated Growth Areas/Urban Growth Boundaries/Village Growth Boundaries

This tool delineates a specified growth area within a municipality into which development at higher densities is encouraged, and the infrastructure, to include roads, water and sewer, are available or planned to support such development. They should include all relevant uses, industrial, commercial, residential, etc.

### **Statement of Municipal Interrelationships and Consistency**

The Pennsylvania Municipalities Planning Code, Act 247 of 1968 as amended, requires municipal comprehensive plans to be generally consistent with the county comprehensive plan. The general future land use patterns that were presented in the Franklin County Comprehensive Plan were used as a guideline for consistency in the development of the future land use plan for the Greencastle-Antrim area.

This plan was developed at the regional level, which results in it showing a greater amount of detail than the county future land use plan. In general, the future land uses described in this plan are consistent with the Franklin County Comprehensive Plan.

This plan provides areas for future growth in the region. These areas are located in and are considered to be optimal locations for different types of growth. These areas are not represented on the county plan, but they do not conflict with uses in the surrounding municipalities.

Lawful activities such as extraction of minerals may impact water supply sources and such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities. Additionally, in implementing the recommendations of this plan, zoning regulations and any subsequent policy actions shall be consistent with, and may not exceed, those requirements imposed under the following Acts:

- The Clean Streams Law
- Surface Mining Conservation and Reclamation Act
- The Bituminous Mine Subsidence and Land Conservation Act
- Coal Refuse Disposal Control Act
- Oil and Gas Act
- Non-coal Surface Mining Conservation and Reclamation Act
- Agricultural Area Security Law
- An Act protecting agricultural operations from nuisance suits and ordinances under certain circumstances
- Nutrient Management Act.

#### **Planning Consistency**

The Pennsylvania Municipalities Planning Code, Act 247 of 1968 as amended, requires municipal comprehensive plans to be generally consistent with the county comprehensive plan.

#### Guilford Township

Guilford Township has not adopted a comprehensive plan, but adopted a zoning ordinance in 1997.

#### Hamilton Township

To date, Hamilton Township has not adopted a comprehensive plan and has not adopted a zoning ordinance.

#### Montgomery Township

- Montgomery Township is located to the west of Antrim Township where the two municipalities share a common boundary. The current land uses along the boundary primarily consist of agriculture; however, the Mountain View Reclamation Center is located along this boundary, also. Much of the common boundary consists of the Conococheague Creek. The township, along with Peters Township, adopted a joint comprehensive plan in 1972.
- The future land uses identified along the boundary consist of agriculture/low density and streamside protection. The agriculture/low density future land use recommends that land should be devoted to agriculture, open space, and single-family dwellings on lots large enough to support on-lot water and sewer facilities and to minimize the impact on agricultural activities. The streamside preservation land use classification seeks to protect those areas along watercourses which are periodically prone to flooding while also encouraging the protection of open space.

#### Peters Township

Peters Township, along with Montgomery Township, adopted a joint comprehensive plan in 1972. Future land use in Antrim Township along the shared border is depicted as agricultural. In Peters Township, the area around SR 16 is designated as a future growth area and the area to the north along the border with Antrim Township is shown as agriculture/low density.

#### Quincy Township

Quincy Township has not adopted a comprehensive plan, but has adopted a zoning ordinance.

#### Saint Thomas Township

Saint Thomas Township adopted a comprehensive plan in 1992. Future land uses in Antrim Township along the shared municipal boundary are agricultural. In St. Thomas Township, the future land use is depicted as commercial industrial to the west and agricultural preservation to the east along the boundary. Antrim Township should work with St. Thomas Township to ensure mitigate any inconsistencies between the proposed agricultural and commercial industrial areas.

#### Washington Township

Washington Township adopted a joint comprehensive plan with Waynesboro Borough in 2009 and amended the plan in 2011 to reflect several changes to their zoning. Both this comprehensive plan and the Washington Township – Waynesboro Borough Joint Comprehensive Plan identify an agricultural future land use classification along the entire shared municipal boundary.

#### Methods to Address Land Use Conflicts

Every attempt has been made through the development of this plan to eliminate land use inconsistencies and conflicts between dissimilar uses within and adjoining the region that may occur with future development.

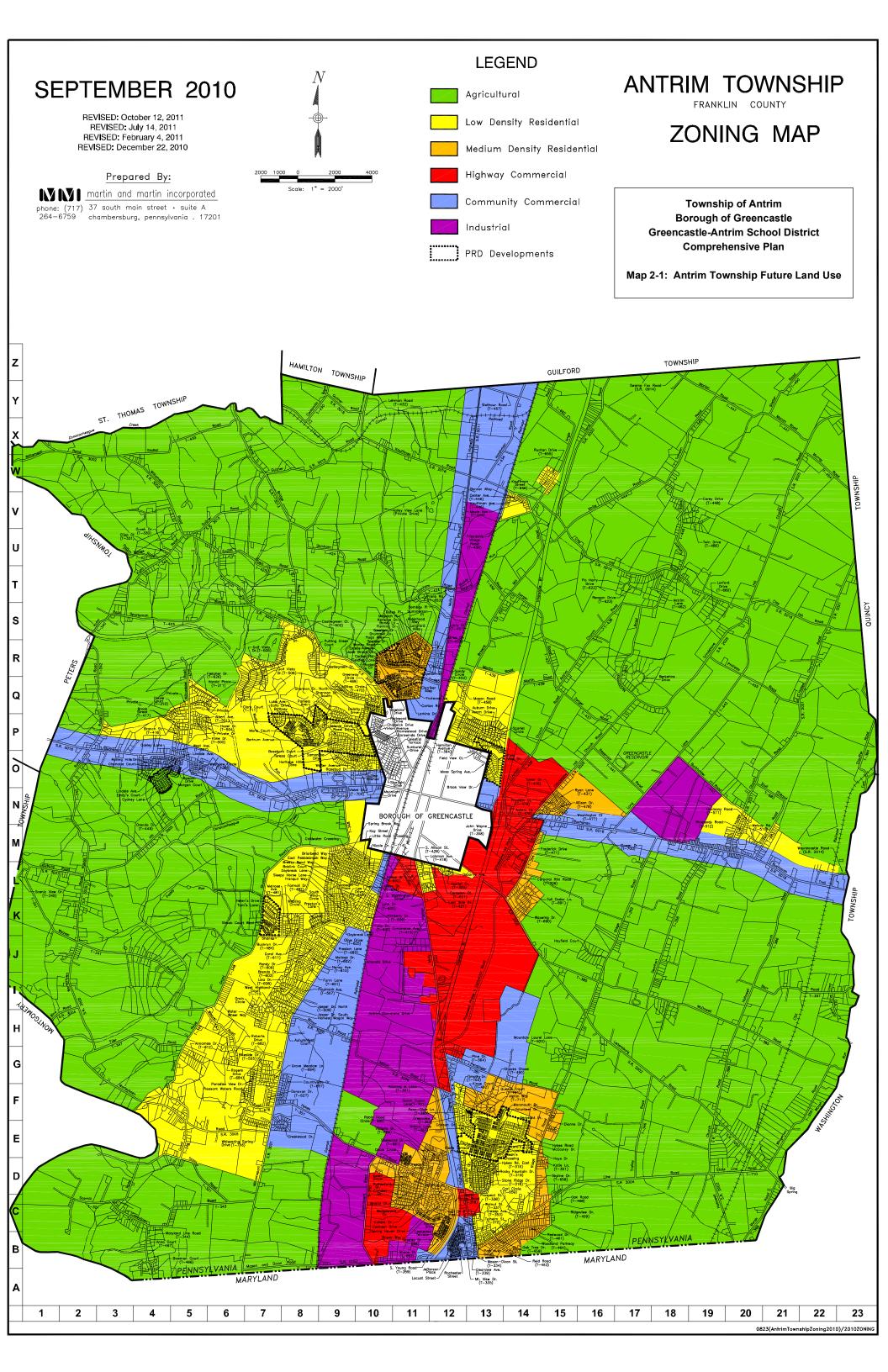
- It is recommended the following strategies be implemented by the municipalities to eliminate or lessen the impact of dissimilar uses:
  - Update subdivision and land development and zoning ordinances to require a buffer area to separate dissimilar uses.
  - Establish landscaping requirements that utilize new and existing vegetation to reduce the visibility between uses.
  - Establish setback requirements that prevent building, parking and storage areas from being constructed close to property lines.
  - Buildings should be designed around the environment to limit unnecessary disturbance. Roof mounted systems, such as HVAC units, should be screened from view.
  - Natural areas and connectors between the natural areas should be retained to create wildlife corridors throughout the development that do not interfere with traffic patterns.

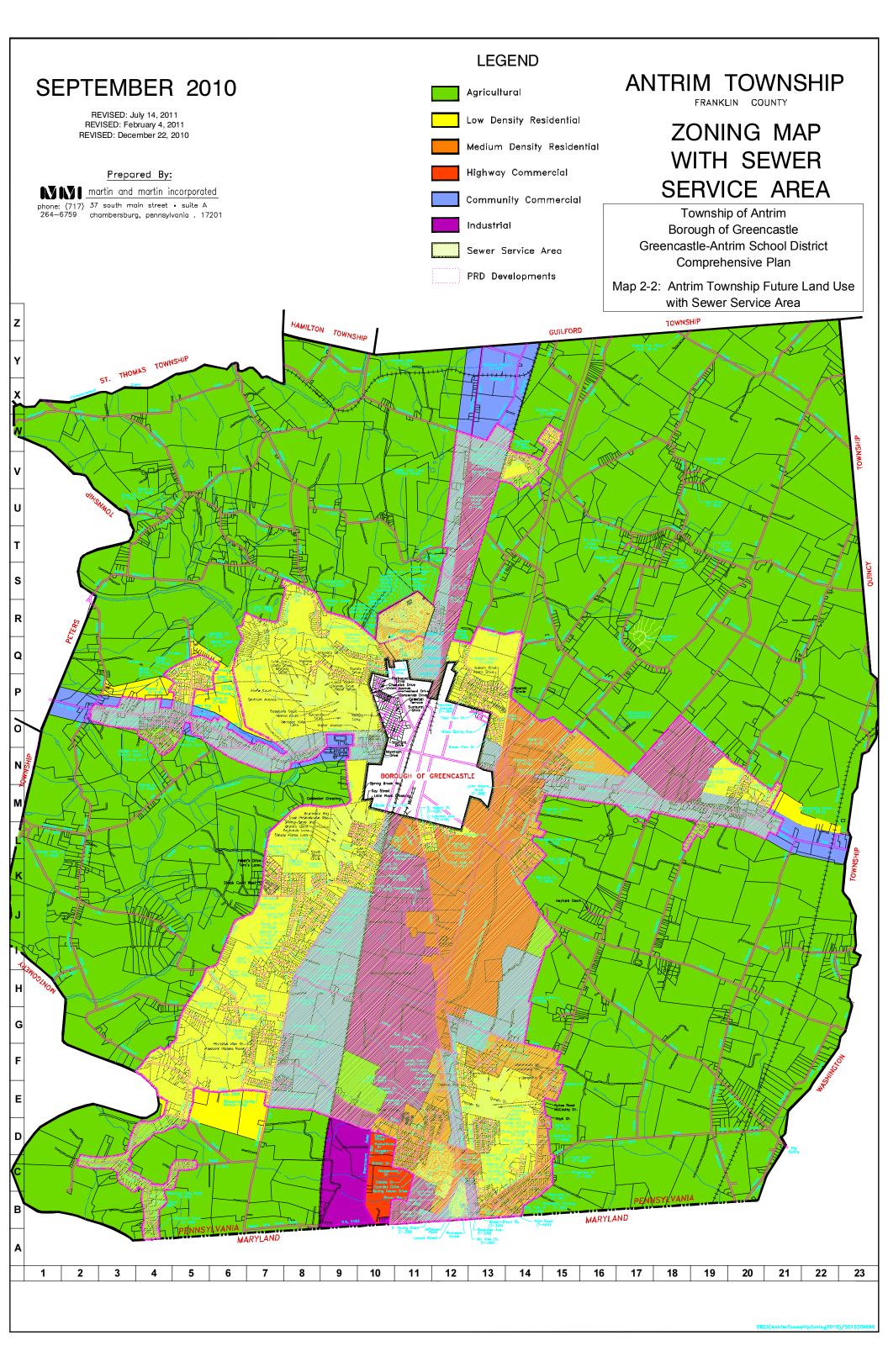
#### **Statement of Plan Interrelationships**

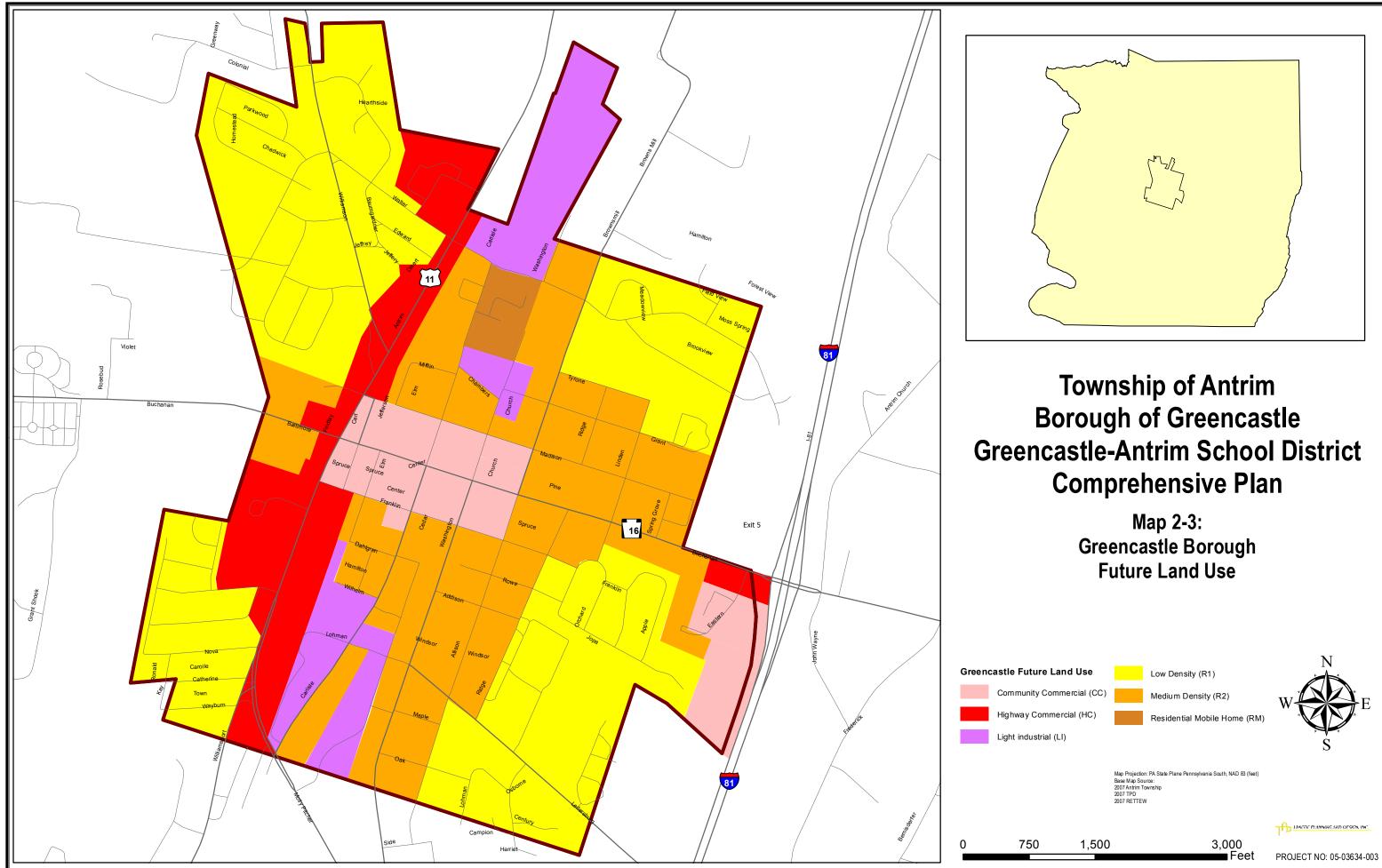
Section 301.4.1 of the Pennsylvania Municipalities Planning Code requires a statement of plan interrelationships among the various plan components. This statement ensures that the plan elements are integrated and do not conflict with each other. This section provides a brief explanation of the consistent interrelationships that exist between the various plan elements. These relationships are expanded upon in the various plan components.

- Throughout the development of each of the plan components, the Franklin County Comprehensive Plan and other relevant studies at the county or regional level were utilized to maintain consistency between the recommendations presented in those plans and studies, and the recommendations presented in this plan. This plan considers these county-level recommendations and analyzes their application and relevance to the local level of this plan.
- The transportation plan includes several recommendations that will augment the future land use, natural resources, community facilities, and housing plans. Recommendations include addressing those issues that are located in proximity to areas that are currently developed or are designated as a future opportunity site, designating them as priorities. Encouraging such improvements will support the future land use plan and will enable designated locations to be safely accessed for existing and new housing units. The development of a greenway system will help to preserve natural features in the area, increase passive recreation opportunities, and provide a non-motorized connectivity network in the region.
- The future land use plan applies conservation practices that consists of sensitive environmental features and notes that additional restrictions on the use of the land may apply in these areas.
- The future land use plan supports agricultural preservation and the compatibility of agricultural style residential development. The plan also notes the importance of educating prospective residents of the effects associated with living in an agricultural community.
- The community facilities plan works towards improving the quality of life for current and future residents in the region.

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## **Chapter 3 - Future Transportation Plan**

The transportation system provides access and mobility to and throughout a region and is used by residents, workers, and those passing through.

The Pennsylvania Municipalities Planning Code, Act 247 of 1968 as amended, requires municipal comprehensive plans to include "a plan for movement of people and goods, which may include expressways, highways, local street systems, parking facilities, pedestrian and bikeway systems, public transit routes, terminals, airfields, port facilities, railroad facilities and other similar facilities or uses."

The transportation plan for the Greencastle-Antrim region formally establishes the transportation system to provide for the movement of people and goods within the region, including future upgrades to the system to accommodate future growth. The transportation plan ties in with the future land use plan, since the location, type, and density of land use drive the need for movement of people and goods.

The following elements of the future transportation plan are included in this chapter:

- Goal: Transportation
- Land Use Context
- Key Transportation Corridors
- Transportation System Improvements
- Access Management
- Regional Transportation Issues

At the state-wide level, PennDOT published the *Smart Transportation Guidebook* in March 2008 in conjunction with the New Jersey Department of Transportation and the Delaware Valley Regional Planning Commission (DVRPC).

### Goal: Transportation

Ensure a safe and adequate multi-modal transportation network throughout the region, serving both existing and anticipated transportation needs, and retain both functional attributes and scenic qualities of roadways as new development and improvements occur within designated growth areas.

### Land Use Context

For the purpose of developing the transportation plan, the land use classifications identified in the future land use plan have been consolidated into six land use contexts, as defined in the *Smart Transportation Guidebook*. The context classifications are described in order from least to most developed.

#### Land Use Context Classifications

- Rural
  - Consists of a few houses and structures dotting a farm or forest landscape.
  - Predominately natural wetlands, woodlands, or agricultural uses
  - Small markets, gas stations, diners, farm supplies, convenience grocers, etc. are often seen at the intersections of arterial or collector roads.
- Suburban Neighborhood
  - Predominately low-density residential communities arranged along a curvilinear internal street system
  - Can include community facilities such as schools, churches, recreational facilities, and some stores and offices
- Suburban Corridor
  - Characterized by big box stores, commercial strip centers, restaurants, auto dealerships, office parks, and gas stations.
  - Sometimes interspersed with natural areas and clusters of homes
  - Buildings usually set back from the roadway behind surface parking.

- Suburban Center
  - Often a mixed-use, cohesive collection of land uses that may include residential, office, retail, and restaurant uses
  - Commercial uses serve surrounding neighborhoods
  - Typically designed to be accessible by car, and may include large parking areas
  - Town/Village Neighborhood
    - Predominately residential neighborhoods, sometimes mixed with retail, restaurants, and offices.
    - Small retail establishments sometimes occupy principal corners.
    - Block sizes are regular and often small in comparison to suburban neighborhood blocks.
    - Streets typically have sidewalks.
- Town/Village Center
  - A mixed-use, high density area with buildings adjacent to the sidewalk, typically two to four stories tall with commercial operations on the ground floor and offices or residences above.
  - Parallel parking typically along both sides of the street.
  - Important public buildings, such as the town hall or library, are provided special prominence.

### **Proposed Functional Classification System**

The proposed functional classification system is based on the *Smart Transportation Handbook*. Each of the functional classifications can be found in the various land use contexts. The following roadway types are defined:

#### Functional Classification System

**Regional Arterial** 

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- Roadways typically considered "principal arterials" in the PennDOT classification system
- Serves average trip length of 15-35 miles
- Community Arterial
  - Roadways typically considered "minor arterials" in the PennDOT classification system and includes some road segments classified as principal arterials
  - Serves average trip length of 7-25 miles
- Community Collector
  - Roadway segments typically classified as "major collectors" in the PennDOT classification system
  - Serves average trip length of 5-10 miles
- Neighborhood Collector
  - Roadway segments typically classified as "minor collectors" in the PennDOT classification system
  - Serves average trip length of less than 7 miles
- Local Road/Street
  - All other roadways which are not classified
  - Serves average trip length of less than 5 miles

### **Key Transportation Corridors**

#### PA Route 16, west of Greencastle Borough

- Existing land use context: Rural
- Future land use context: Suburban Center, surrounded by Suburban Neighborhood. Some segments will remain rural.
- Existing functional classification: Minor Arterial
- Future functional classification: Community Arterial
- Recommended design criteria:
  - Lane width: 11' to 12'
  - Paved shoulder width: 8' to 10' in areas which remain rural with no parking or bike lanes
  - Parking lane: 8' parallel within the suburban center areas
  - Bike lane: 5' to 6'
  - Median: 11' to 14' for left turns
  - Travel lanes: 1 in each direction with turning lanes provided at key intersections

- Clear sidewalk width: 6'
- Sidewalk buffer: 4' to 6'
- Desired operating speed: 35 mph in the community commercial areas; 35-55 mph in areas which remain rural

#### Baltimore Street (PA Route 16), within Greencastle Borough

- Existing land use context: Town/Village Center within the center of the Borough, Town/Village Neighborhood on the outer edges of the Borough
- Future land use context: Preserve the existing historical character of the Town/Village Center and the Town/Village Neighborhood.
- Existing functional classification: Minor Arterial
- Future functional classification: Community Arterial
- Recommended design criteria:
  - Lane width: 11' to 12' (14' curbed outside lane if no parking or bike lane)
  - Paved shoulder width: 4' to 6' if uncurbed and no shoulder or bike lane
  - Parking lane: 7' to 8' parallel
  - Bike lane: 5' to 6'
  - Median: 11' to 14' for left turns where right-of-way permits
  - Travel lanes: 1 in each direction with turning lanes provided at key intersections where right-of-way is available
  - Clear sidewalk width: 6' to 10'
  - Sidewalk buffer: 4' to 6'
  - Desired operating speed: 25-30 mph

#### PA Route 16, east of Greencastle Borough

- Existing land use context: Primarily rural with a Suburban Center in the Shady Grove Area.
- Future land use context: Suburban Center, surrounded by Suburban Neighborhood. Some segments will remain rural.
- Existing functional classification: Minor Arterial
- Future functional classification: Community Arterial
- Recommended design criteria:
  - Lane width: 11' to 12'
  - Paved shoulder width: 8' to 10' in areas which remain rural with no parking or bike lanes
  - Parking lane: 8' parallel within the suburban center areas
  - Bike lane: 5' to 6'
  - Median: 11' to 14' for left turns
  - Travel lanes: 1 in each direction with turning lanes provided at key intersections
  - Clear sidewalk width: 6'
  - Sidewalk buffer: 4' to 6'
  - Desired operating speed: 35 mph in the community commercial areas; 35-55 mph in areas which remain rural

#### U.S. Route 11, north of Greencastle Borough

- Existing land use context: Rural (agricultural with some industrial uses)
- Future land use context: Suburban Corridor (commercial with some industrial uses)
- Existing functional classification: Major Collector
- Future functional classification: Community Arterial
- Recommended design criteria:
  - Lane width: 11' to 12'
  - Paved shoulder width: 8' to 10'
  - Parking lane: none
  - Bike lane: none (shoulders serve as bike lanes)
  - Median: none
  - Travel lanes: 1 in each direction with turning lanes provided at key intersections and passing lanes at regular intervals
  - Desired operating speed: 55 mph

#### Antrim Way (U.S. Route 11), within Greencastle Borough

- Existing land use context: Suburban Corridor
- Future land use context: Suburban Corridor
- Existing functional classification: Major Collector
- Future functional classification: Community Arterial
- Recommended design criteria:
  - Lane width: 11' to 12' (14' outside curbed lane if no shoulder or bike lane)
  - Paved shoulder width: 8' to 10' if uncurbed and no bike lane
  - Parking lane: none
  - Bike lane: 5' to 6' (if no shoulder)
  - Median: 11' to 14' for left turns; continuous center turn lane
  - Travel lanes: 2 in each direction with turning lanes provided at key intersections
  - Clear sidewalk width: 5'
  - Sidewalk buffer: 4'
  - Desired operating speed: 35-40 mph

#### U.S. Route 11, between Greencastle Borough and I-81 Exit 3

- Existing land use context: Suburban Corridor
- Future land use context: Suburban Corridor
- Existing functional classification: Major Collector
- Future functional classification: Community Arterial
- Recommended design criteria:
  - Lane width: 11' to 12'
  - Paved shoulder width: 8' to 10'
  - Parking lane: none
  - Bike lane: none (shoulders serve as bike lanes)
  - Median: 12' to 14' for left turns; continuous center turn lane
  - Travel lanes: 2 in each direction with turning lanes provided at key intersections
  - Desired operating speed: 35-50 mph

#### U.S. Route 11, between I-81 Exit 3 and Maryland Line

- Existing land use context: Suburban Neighborhood and Town/Village Center
- Future land use context: Suburban Neighborhood and Town/Village Center
- Existing functional classification: Principal Arterial
- Future functional classification: Community Arterial
- Recommended design criteria:
  - Lane width: 11' to 12' (14' outside lane if no shoulder or bike lane)
  - Paved shoulder width: 5' to 8' if no parking
  - Parking lane: 7' to 8' parallel
  - Bike lane: 5' to 6'
  - Median: 11' to 14' for left turns
  - Travel lanes: 1 in each direction with turning lanes provided at key intersections
  - Clear sidewalk width: 5' to 6'
  - Sidewalk buffer: 4' to 6'
  - Desired operating speed: 35-40 mph in the suburban neighborhood areas and 35 mph in the Village of State Line

### Williamsport Pike (SR 3001)

- Existing land use context: Suburban Neighborhood
- Future land use context: Suburban Neighborhood with some areas of Suburban Corridor
- Existing functional classification: Major Collector
- Future functional classification: Community Collector
- Recommended design criteria:

- Lane width: 10' to 12'
- Paved shoulder width: 4' to 8' if no bike lane
- Parking lane: None
- Bike lane: 5' to 6' if no shoulders
- Median: 11' to 14' for left turns
- Travel lanes: 1 in each direction with turning lanes provided at key intersections
- Clear sidewalk width: 5' to 6'
- Sidewalk buffer: 5' to 10' (desirable to set back sidewalks to avoid curbing the roadway)
- Desired operating speed: 35-45 mph

### **Transportation System Improvements**

Communities are continually challenged with providing safe and efficient transportation for residents and visitors. Transportation planning involves providing access for employees to local businesses and industry, and promoting efficient regional travel for residents and visitors, The struggle in providing for the needs of automobiles, trucks, pedestrians, and other non-motorized forms of transportation is often complicated by existing development patterns, available land for improvements, right-of-way widths, and the overall need to finalize proposed interconnections of the road network. The following transportation improvement recommendations were identified through interaction with the public, the comprehensive plan committee, and township and borough staff. They represent a general policy guide to assist local, county, and state officials with planning for future transportation improvements:

#### Interstate 81

- I-81 mainline
  - Widen to six lanes
  - Restrict trucks to the two right lanes
- Exit 1 improvements (PA Route 163/Mason Dixon Road)
  - Short term: Signalization of I-81 South ramps (potential developer funding)
  - Medium term: Construction of turn lanes at both ramp intersections
- Exit 3 improvements (U.S. Route 11/Molly Pitcher Highway)
  - Short term: Signalized I-81 south off-ramp intersection with Route 11 and construct 4<sup>th</sup> leg as driveway access
  - Medium term: Signalize I-81 north off-ramp intersection with Route 11 and construct 4<sup>th</sup> leg as beginning of Grindstone Hill Road extension
  - Long term: Construct new loop ramp for access to go south onto I-81 from northbound Route 11
  - Restrict driveway/road intersections within the functional area of the interchange
- Exit 5 improvements (PA Route 16/Buchanan Trail)
  - Short term: Designate John Wayne Drive as one-way southbound to remove traffic signal in close proximity to the interchange
  - Long term: Construct Single-Point Urban Interchange (SPUI)
  - Restrict driveway/road intersections within the functional area of the interchange

#### New Roadways

- Grindstone Hill Road Extension Phase 2
  - Provides a parallel route to I-81 between Exit 3 and Exit 5
  - Provides access to land-locked parcels located along I-81 limited access right-of-way
  - Component of the preferred by-pass.
- Walter Avenue
  - Complete Walter Avenue between Williamson Road and PA Route 16
  - Provide traffic calming to mitigate impacts of increased traffic using residential sections of Walter Avenue
  - Walter Avenue should be designed as a Neighborhood Collector street in accordance with the Smart Transportation Guidebook.
- Nova Drive
  - Complete Nova Drive between Dallas Drive and PA Route 16
  - Provide traffic calming to mitigate impacts of increased traffic using residential sections of Nova Drive

- Nova Drive should be designed as a Neighborhood Collector street in accordance with the Smart Transportation Guidebook.
- Moss Spring Avenue\*
  - Complete Moss Spring Avenue between Brookview Drive and PA Route 16
  - Provide traffic calming to mitigate impacts of increased traffic using residential sections of Moss Spring Avenue
  - Moss Spring Avenue extension should be designed and located in accordance with its intended purpose as identified through a traffic engineering study and the Smart Transportation Guidebook.

\* The Greencastle Borough Council objects to the Moss Spring Avenue extension because of the perceived impact it may have on the Moss Spring development; however, the Council recognizes that the connection will occur in Antrim Township and that it will be the responsibility of the Antrim Township Board of Supervisors to decide the appropriateness of the connection through a traffic engineering study, and discussions with PennDOT, Greencastle Borough, and local residents and businesses.

#### Dallas Drive

- Complete Dallas Drive to Grant Shook Road
- Provide traffic calming to mitigate impacts of increased traffic using residential sections of Moss Spring Avenue
- Dallas Drive should be designed as a Neighborhood Collector street in accordance with the Smart Transportation Guidebook.
- Century Parkway
  - Provides a connection from Rt. 11 to Leitersburg Street.
  - Century Parkway should be designed as a neighborhood collector.
  - Component of the preferred by-pass.

#### Intersection Improvements

- U.S. Route 11 & PA Route 16
  - Short term: Greencastle Borough is pursuing construction of right turn lanes on the eastbound, westbound, and northbound approaches through the local-lead process with PennDOT.
  - Long-term: provide two through lanes in each direction on U.S. Route 11
- Williamsport Pike & Shanks Church Road
  - Construct roundabout
- Williamsport Pike & Hykes Road
  - Correct elevations to improve site distance
- U.S. Route 11 & Williamsport Pike
  - Short term: restripe the passing lane on U.S. Route 11 northbound as an exclusive left turn lane
  - Long term: widen for a dedicated left turn lane on U.S. Route 11
- U.S. Route 11 & Williamson Road
- U.S. Route 11 & Commerce Drive
  - Widen for additional turn lanes
  - Improve turning radii for large trucks
- PA Route 16 & Hill Road
  - Short term: Construct left turn lane on PA Route 16
  - Long term: Construct roundabout
- U.S. Route 11 & Mason Dixon Road
  - Developer improvements
- U.S. Route 11 & Hykes Road
  - Developer improvements
- U.S. Route 11 & Milnor Road
  - Developer improvements
- US Route 11 Corridor Study

- Grove Miller Engineering conducted an oversight study for the US Route 11 corridor in Antrim Township to analyze
  existing traffic conditions, project and analyze future traffic volumes, and identify corridor improvements necessary to
  accommodate the projected traffic demands.
- The comprehensive plan supports the detailed recommendations contained in this study.

#### Other System Improvements

- Shared Use Pathway
  - Build a shared use pathway along Shanks Church Road and Grant Shook Road to the Antrim Township Park.
  - Bicycle network
    - Short term: Install "Share the Road" signage at key locations to remind drivers of the potential for encountering bicycles in the roadway
    - Long term: Develop bike lanes or wide shoulders on collector and arterial roadways in accordance with the design criteria established in this chapter.

### Access Management

- Access management is a means of controlling the ways in which vehicles can access roadways using techniques such as limiting the number, spacing, location, and operation of driveways and intersections along collector and arterial roadways. The purpose of access management is to provide vehicular access to land uses in a manner that preserves the safety and efficiency of the roadway network. When access is not managed properly, the number of crashes often increases and congestion which can deteriorate the quality of life for a community and necessitate large capital improvement projects to improve mobility.
- Several segments of the arterial and major collector roadways in the region have been identified as having poor access design, and are characterized by properties with several closely-spaced access points or open frontage with no delineated driveway, lack of auxiliary lanes, and driveways located within the functional area of intersections. The following corridors have been identified as having poor access management:
  - PA-16: Ridge Road to Greencastle Borough Line
  - PA-16: Greencastle Borough Line to Grant Shook Road
  - US-11: Mason Road to Washington Street
  - US-11: Milnor Road to Mason Dixon Road
  - Williamsport Pike: US-11 to Shanks Church Road

Antrim Township and Greencastle Borough should complete access management studies of the PA Route 11, PA Route 16 and Williamsport Pike corridors to identify access management improvements for improvements to individual parcels, such as driveway consolidation, curbing of open frontage, and shared driveways. The municipalities should then look to implement these types of improvements through the land development approval process and PennDOT maintenance and reconstruction projects. In addition, the studies should identify corridor wide strategies such as auxiliary turning lanes, access roads and reverse frontage roads. For the widening of the existing roadways or development of various types of access roads, the municipalities should update their official maps, so that right of way can be preserved and the improvements can be constructed as part of land development proposals.

- In addition to improving existing poor access design, it is critical to have municipal ordinances equipped with the proper design regulations that promote best access management practices. The existing municipal ordinances contain provisions that attempt to regulate the location and basic driveway design elements such as width, radii, sight distance, auxiliary lanes and pavement design. However, the ordinances do not include provisions for situations in which more complex access management practices may be required that affect the safety and efficiency of an entire corridor such as shared/joint access, internal access to outparcels, traffic signal spacing, frontage/service roads, and driveway spacing from interchange ramps. Other tools are also available to implement access management such as the official map and overlay districts that contain unique access management regulations for interchange areas. A review of municipal ordinances resulted in the following recommendations to improve access management provisions by incorporating requirements into the subdivision and land development ordinances:
  - Clearly identify driveway design standards for non-residential uses according to the functional classification of roadways identified in the classification system recommended in this transportation plan.
  - Clearly identify standards for auxiliary turn lanes, including when they are required and design standards.

- Revise sight distance standards according to currently accepted design standards.
- Revise intersection design standards according to currently accepted design standards.
- Provide standards for the number and spacing of driveways according to the functional classification of roadways.
- Provide standards for residential developments requiring that a development of more than three units must provide a common access drive.
- Eliminate the current standard that residential uses cannot have a shared driveway.
- Provide provisions for traffic signal spacing. Adopt by ordinance traffic signal specifications that are required as part for new installations or modifications to existing signals.
- Provide provisions for driveway spacing from the functional area of interchanges.
- Provide provisions for driveway spacing from the functional areas of intersections, including restriction of movements if a driveway must be located within the functional area.
- Provide provisions for when traffic impact studies will be required based on the amount of trips to be generated by various land types of land developments and include requirements for the content of the traffic impact study.
- Provide provisions for the design of shared access, internal access to outparcels, and frontage roads.

## Chapter 4 - Housing Plan

The quality, condition, location, and value of housing are extremely important to the future and prosperity of the Greencastle-Antrim region. This plan element provides direction for Antrim Township and Greencastle Borough to meet current and future housing needs of the community.

The Pennsylvania Municipalities Planning code states that the multi-municipal comprehensive plan must contain, "A plan to meet the housing needs of present residents and of those individuals and families anticipated to reside in the municipality, which may include conservation of presently sound housing, rehabilitation of housing in declining neighborhoods, and the accommodation of expected new housing in different dwelling types and at appropriate densities for households of all income levels."

Although a plan for housing is approached at a regional level, specific objectives and action items have been developed that pertain solely to Antrim Township or to Greencastle Borough. Strategies to achieve these objectives are detailed in this plan. Specific actions are detailed in the implementation plan.

### Goal: Housing in the Greencastle-Antrim Region

Continue to provide for a wide range of housing types at various densities and affordability levels that will meet the future housing needs of the region. New development in Antrim Township shall implement conservation practices to retain open space and maintain the rural feeling of the township. Encourage infill and redevelopment in Greencastle Borough and other developed areas of the region, and recognize the important role that Greencastle Borough and other designated growth areas in the region play in meeting housing needs for all individuals at all income levels.

### Antrim Township Objectives

- Require conservation practices to preserve open space and the rural character of the township.
- Require new development to be located in areas that are served or are planned to be served by water and sewer infrastructure.
- Require new housing development in areas where the road network can support new development.
- Educate current and new residents on the impacts associated with agriculture that are sometimes considered nuisances by residents moving into an agricultural or rural area.
- Work with developers and real estate professionals to determine desired development styles at a range of prices.
- Require walkable neighborhoods with pedestrian amenities.
- Allow for an additional dwelling on a farm that can house farm hands, relatives, or that can be used as a source of supplemental income for the farmer as a rental property.
- Encourage economic development.

### Greencastle Borough Objectives

- Require new housing to conform to the existing neighborhood character.
- Require elements of traditional neighborhood design in new and infill housing developments.
- Allow for housing that is able to be afforded by a variety of incomes.
- Develop neighborhoods, not just houses, and encourage neighborhood amenities that increase the appeal of the neighborhood including street trees and greening; neighborhood oriented community facilities including small park facilities and libraries; and certain improvements that foster pedestrian movement, such as sidewalk improvements and pedestrian oriented lighting.
- Ensure that houses in the borough are structurally sound by conducting maintenance inspections and encouraging civic organizations to assist or encourage maintenance of properties.
- Recognize duplexes as an alternative form of housing that is able to be afforded by families just starting out or those of the working class.

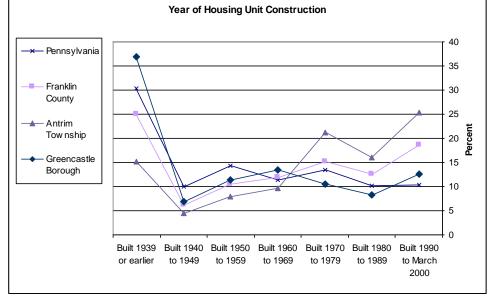
### **Overview of Key Findings – Reports and Community Outreach**

#### Housing Profile

In general, the homes in Greencastle Borough are older than the homes in the township, county, or state, which is not surprising considering the historical nature of the borough. Antrim Township has seen a rise in construction in the past decade; over 25% of the housing stock in the township was constructed between 1990 and 2000. Residential building permits indicate that

this trend has continued through 2006.

- Antrim Township has high very а percentage of single family detached dwellings, resulting in a low percentage of multi-family housing. Additionally, approximately 10% of the housing units in the township are mobile homes. The housing stock in
- The housing stock in Greencastle Borough is much more diverse in terms of the type of structure and tenure.



- Vacancy rates in the Greencastle-Antrim area were low in 2000. Antrim Township had a very low vacancy rate, 2.74%, which may indicate a high demand for housing in the area, a limited number of homes available, and can be a forewarning of inflated prices. The vacancy rate in Greencastle Borough in 2000 was considered to be within the healthy range of 4% to 6%.
   Gross rents increased by nearly 20% in Greencastle Borough between 1990 and 2000, when adjusted for inflation. In the
- township, rents also increased. During this time period, gross rents in the county and the state declined.
- The value of homes in the township and the borough were similar in 1990 and 2000. Antrim Township had a higher percentage of homes valued between \$150,000 and \$200,000 and Greencastle Borough had a higher percentage of homes valued at over \$250,000.

#### Community Public Meeting

- Residents generally feel that the Greencastle-Antrim area is a nice place to live. They feel that there is a good variety of housing, and they like that the housing caters to a moderate to upper moderate lifestyle. The fact that the houses in the downtown are well maintained is also a positive.
- Residents were concerned with the rate at which new housing is being constructed, and were worried that infrastructure improvements are not keeping pace with housing growth. There is a relationship between housing growth and storm water management problems due to increased runoff, as well as the impacts of housing growth on water and wastewater infrastructure, and on



#### the road network.

- Residents also raised concerns about managing growth with the specific concern that housing was taking up "too much space".
- The affordability issue was also discussed as residents were concerned that the region doesn't offer an adequate amount of starter homes for young families, and that many of the houses that are being built are not able to be afforded by those who currently live in the region.

#### Student Outreach Program

The student outreach program involved 11<sup>th</sup> and 12<sup>th</sup> grade students at Greencastle-Antrim High School in the comprehensive planning process, in order to gain perspectives on the issues in the community from this age group. A leadership team of students were involved in discussions related to community planning; these students then surveyed and



conducted a mapping activity with their peers.

- Students are concerned about the rising costs of housing in the Greencastle-Antrim area. Housing costs and the housing options available to students was identified by a majority of students as a factor that would influence their decision to stay in or to leave the Greencastle-Antrim area.
- Students indicated that homes are too expensive, and that the region is lacking affordable housing. These were considered to be issues, along with the fact that the region is growing too fast and that many new homes have sloppy construction.
- When asked about the type of housing they planned to look for as a young adult, the majority of students indicated that they planned to look for a single family dwelling. Approximately 30% of

students indicated that they planned to look for an apartment, half-house, or duplex. No students planned to reside in a mobile home.

When asked where they planned to reside, over 35% of respondents indicated that they planned to live in the rural countryside, and 20% of students planned to look for housing in the suburbs.

### Franklin County Comprehensive Plan

- The Franklin County Comprehensive Plan, adopted in 1999, sets forth a plan for land use and housing. Several overriding goals pertain directly to housing in the county, and can be applied to housing in the Greencastle-Antrim Area:
  - Protect the livability of residential areas with an emphasis on strengthening older neighborhoods.
  - Direct most residential development to locations where public water and sewage services can be efficiently provided.
  - Seek to extend the best features of older development into new development to provide a sense of community. Include pedestrian-orientation with sidewalks, street trees, modest densities, and landscaped front yards.
  - Provide opportunities for a variety of housing types, with an emphasis on affordable owner-occupied housing.
- The plan also speaks directly to the location of new homes and development patterns. It states, "The overall intent is to discourage low density "sprawled" development that consumes excessive amounts of land and intrudes into important agricultural areas and natural areas. The most efficient locations for new development are typically near boroughs, villages, and expressway interchanges." It goes on to say, "This plan encourages the development of new homes next to existing neighborhoods in order to:
  - Protect existing homes from incompatible development;
  - Maximize the efficiency of sewage service, water service, recreation, school busing, and other community services;
  - Minimize conflicts between homes and agricultural activities."



### Interrelationship of Housing to Other Elements of the Comprehensive Plan

This chapter focuses on providing housing to meet the needs of the current and future populations, but the housing element is intricately related to other plan elements. It is essential that as the comprehensive plan is implemented, Greencastle Borough and Antrim Township focus not only on the houses as structures, but on the creation and preservation of neighborhoods. This section looks at how housing is related to the other plan components and how the other components can assist in creating, preserving, and enhancing neighborhoods in the Greencastle-Antrim area.

#### Land Use

The placement of housing units is intricately related to the future land use plan and will ultimately depend on natural resources and local land use ordinances. The Greencastle-Antrim area will need to provide for housing to serve the existing and the projected future population. This housing will need to be designed in a manner that preserves the agricultural heritage in the township, conserves natural resources and water resources, and in locations which are planned for public infrastructure. In Greencastle Borough, it will be essential that older housing is rehabilitated and that new housing conforms to the character of the borough in lot dimensions, setbacks, building heights, and structural design.

#### Transportation

- Following World War II, the nation saw an increase in suburban housing developments and a heightened reliance on the personal automobile. As such, residential developments constructed post 1950 are evidenced by automobile dominance. Sidewalks are often absent from developments, and residents became accustomed to driving their automobiles up their driveways and into their two-car garages that were located on the front of the house. This fostered increased isolation from neighbors and distancing from community services.
- As new neighborhoods are constructed, and existing neighborhoods preserved and enhanced, it will be pertinent to focus on the connectivity within the neighborhood and to other places. This connectivity includes ways to link pedestrians, automobiles, bicycles, and other non-motorized forms of transportation. Bike paths, walking trails, and sidewalks help to interconnect places and decrease dependency on the automobile. The placement of housing in relation to transportation improvements will also affect how the community is perceived in terms of its connectedness and appeal.



#### Community Facilities / Community Character

- As identified at the public participation meeting, residents are concerned that housing development is outpacing infrastructure development.
  - Although this can specifically be related to water and sewer service or road improvements, it is also important to recognize the impacts of new housing development on other community services like the Greencastle-Antrim School District, and police and emergency services.
- Community character is often linked closely with community services. Identifying neighborhoods will help increase residents' sense of place in the community and increase community pride. It is often up to residents and stakeholders in a community to form the organizations that encourage neighborhood activities, improvements, and interactions. Neighborhood associations, crime watch groups, or student service clubs can help to build a sense of community and improve the welfare of the community, creating a neighborhood and not just a housing development.

### **Projecting Housing Unit Needs**

This section analyzes the amount and types of housing that will be required to meet the needs of the current and future population of the Greencastle-Antrim Area. In order to maintain consistency between planning documents, population and housing projections in the Antrim Township Act 537 Sewage Facilities Plan were utilized for the township. Projected housing units needed in Greencastle Borough were calculated based upon population projections released by the Pennsylvania Department of Environmental Protection.

#### Antrim Township

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- In order to adequately plan for sewage facilities in the township, the Antrim Township Act 537 Sewage Facilities Plan included population and housing unit projections. This information is used in the comprehensive plan to ensure that the township adequately plans for these dwellings by providing sufficient land and ensuring that adequate community facilities are in place to serve existing and future residents.
  - The projected population in the township in the year 2026 is 26,203. This figure is calculated based on housing unit projections and the average household size in the township at the time of the 2000 U.S. Census.
  - The population projection for Antrim Township was developed following housing unit projections; it assumes that a certain portion of the total units in the township will be vacant.

#### Table 4-1: Antrim Township Housing Unit Projections

	2000 Population	2000 Average Household Size	2000 Total Housing Units	2026 Projected Population	2026 Projected Additional Housing Units	2026 Projected Total Housing Units
Antrim Township	12,504	2.79	4,598	26,203	4,541	9,139

Source: U.S. Census Bureau; Antrim Township Act 537 Sewage Facilities Plan

#### Based on recent subdivision activity and past trends, it is estimated that there will be 4,541 new dwelling units in the township in the year 2026.<sup>1</sup>

#### Greencastle Borough

Housing unit projections for Greencastle Borough have been developed using the DEP population projection, the average household size in the borough at the time of the 2000 U.S. Census, and a healthy vacancy rate of 5%. The vacancy rate is a key indicator of the health of a community's housing market, and affects local economic stability. Vacancy rates in the Greencastle-Antrim area, as well as their relevance to the local economy, are discussed in the housing profile.

#### Table 4-2: Greencastle Borough Housing Unit Projections

	2000 Population	2000 Average Household Size	2000 Total Housing Units	2020 Projected Population	2020 Projected Housing Units, 0% Vacancy Rate	2020 Projected Housing Units, 5% Vacancy Rate
Greencastle Borough	3,722	2.24	1,748	3,814	1,703	1,792

Source: U.S. Census Bureau; PA DEP; RETTEW Associates, Inc.

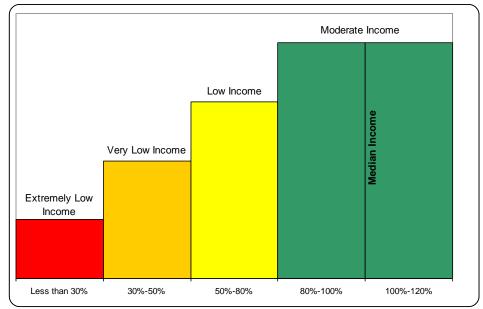
In order to accommodate the projected population and maintain a healthy vacancy rate in the borough, it is estimated that there will need to be a total of 1,792 housing units in the year 2020.

### Analyzing Housing Cost Burdens and Projecting Affordable Housing Unit Needs

The type of housing that is considered affordable to a renter or a homeowner depends on many factors including the age, quality, size, location, and availability of housing stock in an area. Ultimately, housing affordability is determined by household income. The U.S. Census Bureau evaluates the affordability of the housing stock by examining the cost of homes as a percentage of household income. Generally, when costs associated with housing exceed 30% of household income, the cost of housing is considered to be an unreasonable burden, exceeding the amount that the household income may afford.

Antrim Township Act 537 Sewage Facilities Plan

- The Department of Housing and Urban Development (HUD) programs and other federal programs use income limits as eligibility criteria for housing assistance. HUD determines income limits on the basis of area median income and maintains data compiled by the long form of the census on the number of households (of a sample) that are in each income category. These data are broken down by renter occupied households and owner occupied households. The income categories used in various HUD programs are as follows:
  - Moderate Income those households earning between 80% and 120% of an area's median income
  - Low Income those households earning between 50.1% and 80% of an area's median income
  - Very Low Income those households earning between 30.1% and 50% of an area's median income
  - Extremely Low Income those households earning less than 30% of an area's median income



#### Figure 4-1: Department of Housing and Urban Development Income Classifications

Source: HUD; RETTEW Associates, Inc.

#### Cost Burdened Households in the Greencastle-Antrim Area

The U.S. Census Bureau collects data on household income and housing costs and calculates the percentage of people in each income category that are considered to be experiencing a "cost burden". According to federal standards, when the amount that a family is required to spend on housing and associated costs exceeds 30% of their income, the cost of housing is considered to be an unreasonable burden.

The tables below show information collected by the U.S. Census Bureau. This information is representative of a sample of the population.

	Households	No C Bure		Cost Burdened		
	in Sample	Total	%	Total	%	
Antrim Township	4,470	3,651	81.68	819	18.32	
Greencastle Borough	1,660	1,313	79.10	347	20.90	
Greencastle- Antrim Region	6,130	4,964	80.98	1166	19.02	
Source: U.S. Census Bureau, HUD						

	Total Cost Burdened		come < )%		icome ⁄~50%		icome ⁄~80%		icome ⁄~95%		come > 5%
	Households	Total	%	Total	%	Total	%	Total	%	Total	%
Antrim Township	710	105	14.79	145	20.42	175	24.65	100	14.08	185	26.06
Greencastle											
Borough	157	35	22.29	40	25.48	34	21.66	8	5.10	40	25.48

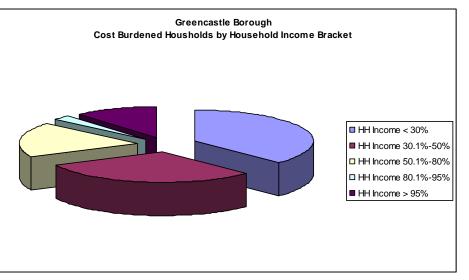
Source: U.S. Census Bureau, HUD

Table 4-5: Renter-Occupied Cost Burdened Households classified by Household Income

	Total Cost Burdened	HH Inc 30		HH In 30.1%		HH Inc 50.1%		HH Inc 80.1%		HH Inco 95°	
	Households	Total	%	Total	%	Total	%	Total	%	Total	%
Antrim Township	109	35	32.11	50	45.87	20	18.35	0	0.00	4	3.67
Greencastle Borough	190	95	50.00	65	34.21	30	15.79	0	0.00	0	0.00

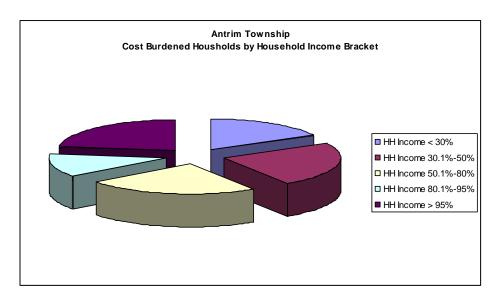
Source: U.S. Census Bureau, HUD

households Information on experiencing a cost burden can be used to determine if housing in the area is able to be afforded by those that live there. For example, if there are a high percentage of households that are considered to be extremely low income or low income households and these households represent the majority of households considered to be cost burdened, this may indicate that there may not be enough housing available that is considered to be affordable to this segment of the population. However, if the majority of households that are cost



burdened are considered to be in the moderate income category, this may indicate that families are buying beyond their means, or that the area contains homes valued at either end of the spectrum, or that the value of homes in the area is not in line with the wages garnished by area employers.

- Nearly 20% of all households in the region are experiencing a housing cost burden. In Greencastle Borough, most of the cost burdened households are renters, while in the township, the majority of cost burdened households are homeowners.
- In Greencastle Borough, the majority of households that are experiencing a cost burden are the households making less than 30% of the area median household income, or making between 30.1% and 50% of the area median income. This may indicate that there is not enough housing available in the borough for this segment of the population.
- In Antrim Township, households experiencing a cost burden are more evenly distributed across the income categories, indicating that wages in the region may not be keeping pace with the cost of housing.
- Renter occupied households in the township and the borough that are experiencing a housing cost burden are predominantly those that are considered to be extremely low or very low income households. Owner occupied cost burdened households in the region are more evenly distributed across the income categories.



### **Reducing Barriers to Affordable Housing**

It is important to differentiate between housing that is considered affordable by residents of the community and assisted housing developments which are often accompanied by connotations of high density, urban decline, and decreased property values. Many of the people who need affordable housing today are employed at respectable jobs and are part of the region's regular workforce; the price of housing in the area has started to outpace increases in income. Young families and children who were raised in the Greencastle-Antrim area and are looking to stay in the area will need a home that they can afford, just as senior citizens will need a home that they can afford and adequately maintain.

The Governor's Center for Local Government Services has compiled a series of common regulations that are often found in local land use ordinances and can act as barriers to affordable housing. For each barrier, a list of possible solutions have been offered as a potential means to mitigate the problem and encourage new housing to be constructed and sold at a price that will be able to be afforded by the residents of the community. Problems and solutions that can be applied to the Greencastle-Antrim area are listed below.

### Supply of Land, Affordable Housing Types, and Design Standards

Problem	Solution				
I       An insufficient amount of Land in the Commonwealth is Zoned for Medium density and High density residential Development to MEET HOUSING NEEDS	<ul> <li>Zone a greater amount of land for medium and high density residential development.</li> <li>Rezone land to allow differing types of residential structures and to allow mixed use districts in appropriate areas.</li> <li>Reduce or eliminate the minimum site size for PRDs and conservation subdivision designs.</li> <li>Reduce or eliminate minimum floor area</li> </ul>				
NEEDS	requirements and promote flexibility in establishing criteria for minimum floor area requirements.				

Sup	bly of Land, Affordable Hous	ing	Types, and Design Standards
Prot	olem	So	olution
2	LOT DIMENSIONS SUCH AS FRONTAGE, FRONT SETBACKS, AND SIDE YARD REQUIREMENTS CAN BE EXCESSIVE AND ADD UNNECESSARY COST WHILE OPERATING AS A REDUNDANT DENSITY CONTROL.	•	Reduce lot frontage and effectually reduce costs for paving, storm water control, and utility installations Reduce excessive front setbacks and thereby reduce costs for paving, service lines, site clearance, and landscaping Allow zero lot line and patio and atrium houses on smaller lots which can reduce costs and still provide amenity.
3	EXCESSIVE STREET WIDTHS AND CONSTRUCTION STANDARDS, WHICH ARE OFTEN UNRELATED TO EXPECTED USES, CAN BE REQUIRED IN SUBDIVISION ORDINANCES	•	Tailor development standards for streets to the expected use or size of development, thereby reducing the cost of other improvements
4	DEVELOPERS MAY NEED INCENTIVES TO PRODUCE AFFORDABLE UNITS AND TO ENCOURAGE INFILL DEVELOPMENT ON VACANT TRACTS.	•	Award density bonuses for construction of affordable housing units at controlled, below market rate prices, and for infill development of vacant tracts. Award density bonuses for rehabilitation of existing substandard housing provided the bonus units are available for low and moderate- income persons.
5	PARKING STANDARDS CAN CONSUME MORE LAND THAN NECESSARY, ESPECIALLY IN MULTIFAMILY DEVELOPMENTS		Reduce the size of a percentage of the stalls to accommodate smaller compact cars. Consider linking the number of required parking spaces to the number of bedrooms, rather than the number of units in multifamily developments.
6	MANY ZONING ORDINANCES LIMIT AFFORDABLE HOUSING OPPORTUNITIES FOR ONE AND TWO PERSON HOUSEHOLDS AND ELDERLY HOUSEHOLDS	•	Revise zoning provisions in select areas to facilitate conversion or alteration of an existing single family dwelling into two residential units (an accessory apartment) subordinate to the primary dwelling, or into two or more residential units (residential conversions) Allow the addition of a single, small elder cottage to a single family lot to be used by either elderly or disabled family members related to the occupant of the principal dwelling and to be removed from the property when no longer occupied. Adjust zoning ordinances to allow establishment of in-law quarters within existing single family dwellings.

Sup	ply of Land, Affordable Hous	ing	Types, and Design Standards
Prol	blem	Sc	olution
			Allow shared housing which involves the occupancy of a dwelling unit by two or more unrelated individuals who live as a single housekeeping unit and share kitchen, bath, living, and dining space.
			Allow group homes for foster children, the developmentally and mentally disabled, and the elderly by right in all districts where single family dwellings are permitted.
	lication Processing		
Prol	blem		olution
1	LACK OF UNIFORMITY AMONG LAND USE ORDINANCES ADDS TIME AND INCREASES COSTS TO DEVELOPERS.		Work to develop a common terminology that is agreed upon by Greencastle Borough and Antrim Township, and does not compromise the integrity of either municipality, to incorporate into local land use and housing regulations where appropriate. Common terminology can encourage consistency and increase understanding among property owners, thereby decreasing time and cost for making necessary improvements.
2	MEDIUM AND HIGHER DENSITY HOUSING DEVELOPMENTS USUALLY ENCOUNTER MORE RED		Allow more land for higher density uses by right. Allow various types of multifamily structures by
	TAPE IN THE APPLICATION PROCESS.		right
	<b>6</b>		Sponsor educational seminars on good design techniques Develop a library of preferred design styles that
3	GOOD COMMUNITY DESIGN NEEDS TO BE ACTIVELY PROMOTED.		can be referenced by developers looking to build in the community. Encourage energy efficiency in the design of structures.
Courses	Pennsylvania Department of Community and Economic Deve		Offer assistance in the design process

Source: Pennsylvania Department of Community and Economic Development; RETTEW Associates, Inc.

### Increasing Housing Choices – Preserving Existing Housing and Design of New Construction

Antrim Township and Greencastle Borough contain different types of houses by their very nature. As detailed in the housing profile, Greencastle Borough contains many older and potentially historic homes on smaller lots and multi-family housing, while the township has seen a recent wave of development consisting of mainly single family detached structures. Mobile homes are also more common in the township. Furthermore, the average price of residential property has increased and many of the new homes that are being constructed in the region are larger, more expensive units.

Supporting diversity in the types of housing units that are constructed in the Greencastle-Antrim area can increase the amounts of

choices and opportunities for residents looking to purchase a home. This section provides tools for new residential construction, and for the rehabilitation or reuse of existing structures.

#### Preserving Existing Housing Stock

As the comprehensive plan is implemented, it will be important for Greencastle Borough and Antrim Township to take appropriate measures to ensure that the existing housing stock remains in sound condition and is continuously maintained. The housing projections represent the amount of housing units that will be needed to serve the projected population in each year. The number of additional housing units needed does not take into account any demolitions that may occur over this time period. Properties that are old and in need of repair must be targeted for



conservation and rehabilitation. Property owners should be encouraged and assisted with improvements such as updates to plumbing and electrical systems and weatherproofing to reduce energy consumption.



#### Conservation

Conservation of existing housing is a technique that is directed towards the prevention of blighted conditions. This technique should be applied to areas with little or no existing blight. The technique involves continued maintenance of structures and properties, repair of deteriorated structures, and enforcement of housing and building code standards.

#### Rehabilitation

Rehabilitation is a revitalization technique that is to be applied to areas that are experiencing a greater amount of deterioration. The goal of rehabilitation is to turn these places into sound, healthy neighborhoods. This is accomplished through an area wide renovation plan designed to facilitate the rehabilitation of deteriorated structures and properties.

#### Redevelopment

- Redevelopment is the most comprehensive method of removing blight from an area. This technique is directed towards
- the removal of severely blighted areas through the combined use of conservation and rehabilitation. In a redevelopment project, property is normally acquired by a public body and substantially modified and sold to an agency to improve in accordance with an approved plan.
- As properties are redeveloped, it is important that the improvements or new structures are designed in a context sensitive manner. New structures should fit into the existing character of the neighborhood by retaining features such as the average setback, depth, height, building materials, façade characteristics, and color scheme. As shown in the pictures on this page, the multi-family housing development to the right contains features that better conform to the character of the borough than the multi-family housing development shown above and to the left.



#### Type and Design of Structures

Many of the recently constructed homes in the area have been single family detached dwellings. Although this style is popular, other housing types may appeal to different segments of the population and offer additional and more affordable choices for residents.

#### Two Family Dwellings

Two family dwellings can be in the form of semi-detached structures or two family detached dwellings (duplexes). Semi-detached housing relates to two housing units, side by side, with one shared wall; the term two family detached dwellings (duplex) refers to two housing units, one stacked above the other. This type of development reduces lot sizes and is less costly to heat. These types of homes are often smaller in size than fully detached single family dwellings, resulting in a less costly housing choice.

#### Accessory Apartments

Accessory apartments are private, self-contained units located within an existing dwelling. This type of unit may be used as a rental unit or as a private space for a family member. When rented, accessory apartments are usually less expensive to rent than a regular apartment, increasing affordable rental opportunities. First time home buyers can benefit from the additional income generated by an accessory apartment. Older adults whose children have grown and moved out of the house no longer require a large dwelling. An accessory apartment can allow these individuals to downsize and generate additional income to maintain the entire dwelling. Accessory apartments may also offer families a more private option for caring for an elderly family member.

#### More than One Dwelling on a Farm

Allowing more than one dwelling unit to be constructed on a farm provides an option for farmers and agricultural families comprised of several generations. The additional dwelling may be used by a young family, those "leaving the nest" and wishing to stay in the area or it may be used by an aging family member. This situation also allows for the dwelling, when not in use by a family member, to be rented to farm labor or someone else, and offer a means of additional income for the farmer. This increases the sustainability of agriculture in the area by offering the farmer an additional income that is alternative to the one-time income received from the sale of a piece of the farm that has been subdivided.

#### Smaller Lot Sizes

- One way to increase affordability is to encourage smaller lot sizes. There are several ways to create developments with smaller lot sizes that maintain the appearance and amenities of single family detached dwellings including usable yard space.
- Zero Lot Line Zero lot lines place the house on one of the side lot lines, concentrating the open yard space to one side of the house, creating the illusion that the lot is much larger. It provides usable yard space and preserves privacy by maintaining space between homes.

#### Prefabrication

- Approximately 10% of the housing units in the township are mobile homes. This option can be considered in the township in conjunction with the existing mobile homes as an option for more affordable dwellings. Prefabrication refers to the use of factory assembled housing or building materials. Prefabrication offers increased affordability since the materials are purchased in larger quantities and are assembled with mass production techniques, which reduces labor costs for on-site construction. There are three forms of prefabrication and the savings will vary with each situation.
- Housing components such as windows, doors, and cabinets can be prefabricated for lower cost.
- Modular housing refers to prefabricated sections of housing that are assembled onsite.
- Manufactured housing refers to situations in which the entire house is constructed in a warehouse and shipped to the site intact.

#### Live / Work Units

Live/Work units may be appropriate in areas of Greencastle Borough and in village areas of the township. These structures offer a mix of commercial and residential uses in the same building. In the borough and villages in the township, first floor commercial uses with upper floor residential uses are considered appropriate, if designed in a context sensitive manner. Encouraging owner occupancy of these spaces often encourages better property maintenance and upkeep. First floor commercial uses and pedestrian oriented window displays add to the character of these places and support the local economy.

## **Chapter 5 - Community Facilities and Utilities Plan**

Residents in the Greencastle-Antrim Area utilize a multitude of community facilities throughout their lives including public schools, libraries, and emergency services, to name a few. The community facilities profile analyzes the existing conditions and functional adequacy of community facilities in the area; this plan component evaluates the need for community facilities and services in the future, based upon the projected population growth, desired future land use patterns, and existing demand for services.

The Pennsylvania Municipalities Planning Code states that the multi-municipal comprehensive plan must contain, "A plan for community facilities and utilities, which may include public and private education, recreation, municipal buildings, fire and police stations, libraries, hospitals, water supply and distribution, sewerage and waste treatment, solid waste management, storm drainage and flood plain management, utility corridors and associated facilities, and other similar facilities or uses."

This plan signals the direction that Greencastle Borough and Antrim Township must take to ensure adequate community facilities are available to serve current and future residents of the Greencastle-Antrim area. This plan will also look at how different community services influence community character, and the relationships that exist between community facilities and creating livable neighborhoods.

### **Goal: Community Facilities**

Ensure community services are adequate to meet the demands of existing and future residents and businesses of the region, and to guide future development within well defined growth areas that are adequately served by necessary community services, such as public water, public sewer, fire and police protection and recreational opportunities and programs.

#### Objectives

- Recognize that Antrim Township and Greencastle Borough are often regarded as the Greencastle-Antrim Community and allow for joint services or community facilities to ensure efficient and high quality services are delivered to residents of both municipalities.
- Utilize the Greencastle-Antrim Regional Police Study to explore a regional police force.
- Work with the Greencastle-Antrim School District to ensure that youth in the community are receiving a high quality education in a safe, supportive atmosphere.
- Encourage student volunteers to become involved in various local government functions and community service or civic organizations.
- Support programs in the school district that focus on preparing students for careers and work with local employers and businesses to secure internship or training opportunities for students, or to present at the high school.
- Support the establishment of neighborhood based business or community service organizations that add to the quality of life in the community. Encourage these organizations to take an active role in the community through various programs and events.
- Develop a Greencastle-Antrim comprehensive and detailed parks, recreation, open space, and greenways plan to ensure that residents of all ages have access to active and passive recreational opportunities.
- In Antrim Township, require conservation practices in residential developments as a way to preserve open space, protect natural features, and to provide passive recreational opportunities for residents.
- Communicate with the emergency service providers to understand their needs as they relate to volunteers, equipment, and funding. Alert emergency service providers of new developments coming on line to determine if the quality of service will be affected, and to mitigate such occurrences.
- Ensure that residents that are served by public sewer and public water continue to receive high quality services.
- Encourage residents and farmers to undertake practices that will help to ensure the health and quality of groundwater and surface water in the region, as discussed in the water resources plan.
- Improve the operation, maintenance, and management of on-lot disposal systems and on-lot wells.
- Support environmental programs as a way to meet the Chesapeake Bay Strategy without requiring expensive upgrades to the sewage treatment plants.

### **Overview of Key Findings – Reports and Community Outreach**

#### **Community Facilities Profile**

- Residents of the Greencastle-Antrim area are served by a variety of community facilities and services which are described extensively in the profile section.
- These facilities and services are located in the Greencastle-Antrim area, or in proximity to the area and include:
  - The Greencastle-Antrim School District
  - Private educational institutions
  - Colleges and universities
  - Parks and recreational facilities
  - Community organizations
  - Community events
  - Lilian S. Besore Memorial Free Library
  - Allison-Antrim Museum
  - Churches and faith based organizations
  - Greencastle Police Department and the Pennsylvania State Police
  - Rescue Hose Company fire and emergency services
  - Public water and sewer services
  - Solid waste disposal
  - Recycling programs

#### Community Public Meeting

- Several community facilities available to residents in the Greencastle-Antrim area were considered to be strengths by residents. Several of these strengths related directly to the Greencastle-Antrim School District. The school itself is seen as a major asset to the region, and residents also stated that they liked the following items related to the school district:
  - Tayamentasachta
  - The campus setting at the school
  - The curriculum taught at the schools and the quality of education
  - Schools are well maintained
  - The school facilities are also used for community functions
- Other strengths of the region include the library, private and public parks and recreational facilities, Martin's Mill Bridge, the senior center, churches, and the good coverage provided by the fire company and EMS.
- Although residents had many positive things to say about the community facilities and services available in the region, they also identified several things that they considered to be issues. After residents voted on the stated issues, results showed that residents felt most strongly about the need for Antrim Township and Greencastle Borough to combine services. In addition to general sharing of services, residents felt that there was a need for a joint police force and a sharing of resources.
- Other issues included the need for a YMCA or a facility for indoor recreation, and the need to renovate the train station as a meeting place.
- Several identified issues related to trails and linkages between destinations. Residents felt that there was a need for hiking and bike trails in the township and the borough, and that there needed to be walking paths that would allow pedestrians to get from places "just outside of town" to destinations in town or to the park. The need for bike lanes was also identified.
- Residents also discussed the impacts of development on services in the area including the tax burden placed on residents for new schools, the need for more businesses and industry to pay for services, and the need to expand water and sewer services in the township.

#### Business Owners Public Meeting

When discussing strengths of the region, or opportunities for business growth, the business owners acknowledged that the Greencastle-Antrim School District is the number one reason why people move into the area. The school district and nearby colleges and universities contribute to a good workforce in the area.

- Businesses also felt that the Chamber of Commerce was well connected and that the Chamber is one of the first contacts made by perspective residents and businesses.
- The social organizations in the area and community events, such as Old Home Week, were also identified as strengths.
- Identified obstacles for business growth included the inadequate capacity of infrastructure to support business growth, and the long term water and sewer capacity, and capacity of the roadway network and Interstate 81, in particular.
- Business owners felt that there was a need to create a supportive commercial and industrial base to balance the tax base and support community services that are required by new residential development.

#### Student Outreach Program

- Students expressed interest in improving emergency services in the area. They discussed the need for better hospitals and healthcare facilities, and were able to make the connection between community growth and the pressures placed on emergency services.
- Lack of emergency care was identified as the number one issue. Students also indicated that emergency services (fire, police, EMS) should be a top priority for local officials.
- Students recognized the school district as a strength in the region. Other assets included Tayamentasachta, churches, and parks.
- The students shared concerns of overcrowded schools and a lack of police protection.
- Students felt that there was a need for more things to do in the area including theaters and activities, and that there should be a YMCA or summer camp for kids.

#### Franklin County Comprehensive Plan

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- The Franklin County Comprehensive Plan identified several goals related to community facilities and services:
- Provide adequate community facilities with capacity to serve future growth.
- Provide a well distributed system of public recreation facilities coordinated with public schools, residential development
  patterns, and open space preservation efforts.
- Encourage full coordination of community services across municipal borders, with an emphasis on public water, public sewage, police, fire and emergency medical services.
- Provide for human services needs as it relates to future growth in population.

### Antrim Township / Greencastle Borough Regional Police Study

- This study was prepared to explore the feasibility of consolidating the police department of Greencastle Borough with Antrim Township (which currently does not have a police department), examine existing staffing and equipment, and to create one consolidated police department to serve the citizens of the municipalities. The study examined the potential cost benefit, service effectiveness, and efficiency benefits of such an endeavor. The study was prepared to assist the local governing officials in making decisions regarding a joint police force, but does not require that either municipality follow the recommendations contained in the report.
- The study concluded that the consolidation of the existing police department of Greencastle Borough with Antrim Township, with the addition of necessary staffing and equipment to meet the requirements of the new regional police agency is both feasible and workable. The new regional police agency would provide full time 24 hour service to both municipalities. Immediate and long term results identified include:
  - The new regional police department will provide immediate and direct response to calls for service 24 hours per day within the entire 71.47 square mile jurisdiction (17,181 residents).
  - The new agency will provide strengthened administration, supervision, and specialization services while allowing for better training opportunities and career advancement.
  - The new agency will have the ability to utilize police personnel more effectively by staffing and deploying officers based on workload. The proposed organizational structure distributes personnel in accordance with sound administrative practices.
  - The new agency will provide enhanced professional police services to the communities. Each municipality would in essence benefit from the abilities of the entire organization, staffed with 19 sworn personnel.
  - Additional facts are listed to reinforce the recommendation for a regional police department:
    - The National Advisory Commission on Criminal Justice Standards and Goals notes in Standard 5.2 that every state and local government and every police agency should provide police services by the most effective and efficient

organizational means available to it. It also notes that, at a minimum, police agencies that employ less than ten (10) sworn employees should consolidate for improved efficiency and effectiveness.

- Pennsylvania adopted in its Pennsylvania Police Standards for the Improvement of Police Services, Standard 6.4 which notes that where appropriate to do so, police departments should consolidate to improve efficiency or effectiveness, but in no case should an arbitrary limit on agency size be imposed, and in no case should individual agency members lose salary or status as a result of such consolidation.
- The Pennsylvania Crime Commission in its annual report notes that Pennsylvania has over a thousand individual police departments. There is no other state in the nation that even comes close to Pennsylvania's number of local police units. Over sixty percent of Pennsylvania full-time police departments have less than five officers. Small agencies lack officers to provide adequate continuous patrol and an ability to provide a full range of police services. A consolidated force eliminates duplication, better utilizes resources, provides better training, and is better able to respond to area-wide problems.
- A study titled, A Review of the Northern York County Regional Police Department, completed in 1989 by the Pennsylvania Department of Community Affairs, concluded that the regional police department was providing a higher level of service at a significantly lower cost by using less personnel and resources. This fact was recently affirmed through another DCA study conducted using data from 1996.<sup>1</sup>

#### Greencastle-Antrim School District Strategic Plan, 2002-2008

- This plan follows the guidelines and required formats of the state, but the plan is non-traditional in that it is a strategic design focused on student need and market flexibility. The following educational and organizational goals are outlined in the plan. The last six goals relate to student achievement and high school graduation requirements.
  - Children First Continue to passionately pursue our purpose by never failing to ask, "Is this best for the children?"
  - Opportunity Continue to equitably expand learning opportunities for children and adults.
  - Learning Community Continue to pursue the concept of a district wide learning community through the wise application of resources and by integrating the reading of books that stimulate communication, thought, team building, and personal growth.
  - Transparency Create a transparent learning organization through the use of data.
  - Environment Continue to maintain an exemplary educational environment through class size, expanded uses of technology, the use of information, and creative problem solving.
  - Entry Opportunity Continue to expand opportunity for all children by working to ensure that each child enters school with the rudimentary skills for success.
  - Time Rethink our perceptions of time by looking at its use through the filters of simplification and purpose.
  - Communication Maintain and expand constructive communication to all of the district's communities through the use of dialogue and technology



- Expectation Continue to increase expectations by ensuring that every child is pulled not pushed through his or her educational experience as he or she prepares for tomorrow.
- Standards Maintain demanding and high standards for everyone; accept mediocrity from no one while creatively ensuring that everything possible is being done to eliminate any child being left behind.

<sup>&</sup>lt;sup>1</sup> Franklin County Regional Police Study, Antrim Township / Greencastle Borough, A Police Peer Project. Pennsylvania Department of Community and Economic Development, Governor's Center for Local Government Services.

### Interrelationship of Community Facilities to Other Elements of the Comprehensive Plan

This chapter focuses on ensuring that adequate community facilities are available to meet the needs of the current and future populations of the Greencastle-Antrim area. Many times, community facilities and character help to define the quality of life in the area. As such, this chapter is directly related to other elements of the comprehensive plan, including housing and land use. This section looks at these interrelationships and the ways in which they influence the provision of community facilities and quality of life in the Greencastle-Antrim area.

#### Housing

- As identified in the community public meeting, residents are concerned that housing development is outpacing infrastructure improvements. Fast paced residential development has impacts on all types of community facilities including water and sewer service, road infrastructure, police, fire, and emergency services, and the Greencastle-Antrim School District. New residents will demand that adequate services are available; therefore, it is pertinent that Antrim Township and Greencastle Borough adequately plan for projected development and implement necessary community facilities improvements.
- Residents of the Greencastle-Antrim area often associate themselves with their place of residence or neighborhood. Community and neighborhood events, as well as service clubs and organizations can help to enhance the quality of life for residents and further create a sense of place.

#### Land Use and Transportation

- The use of the land influences the demand for community facilities, and conversely, the availability of community facilities can influence the ways in which land can be used.
- Land use and transportation also affect community facilities including the placement of trails and walking paths, the impact on the school district and the connections between the school district, neighborhoods, and other destinations, the demand for and location of parks and recreational facilities, and the provision of water and sewer services.

#### **Community Facilities Needs Assessment**

#### Educational Facilities

- The Greencastle-Antrim School District provides public education for students of Greencastle Borough and Antrim Township. The district's four schools are all located on the 120 acre campus bordered by Ridge Avenue and Leitersburg Street. The district has a very good reputation for providing high quality education and many residents choose to move to the Greencastle-Antrim area specifically for the schools.
- It will be essential that Antrim Township and Greencastle Borough support the district to retain the high quality of education for students in the community.
- There are also opportunities for the municipalities to work with the school district to involve students in the community and further integrate the visibility of the district in the community. The following represent specific opportunities to enhance the relationship between the school district and the community.
  - Continue to offer a student government association where high school students attend local government meetings as student representatives, junior supervisors, or junior council members.
  - The Greencastle Chamber of Commerce is involved with the school district through the Business Education Partnership, a committee that meets monthly with the district to assist students with making informed career decisions. Subcommittees meet as needed to schedule career speakers, career expo, and shadowing. This program represents one way for students to interact with the Chamber, but there is an opportunity for further involvement with a community service perspective. Involving students in special events, community development and



promotion, and finances will teach the students a new skill set, encourage increased participation in community events from the youth population, and give students a greater sense of community pride and identification or association.

- The school district is the greatest taxing body in the region, and as such, it is possibly the strongest tie that binds Greencastle Borough and Antrim Township. Additionally, growth occurs in the region as a direct result of the school district's reputation, and this growth affects the district as a whole, as well as other community facilities and services in the township and the borough. It is imperative that Greencastle Borough and Antrim Township maintain an open line of communication and plan together to accommodate growth in the region.
- Encourage the formation of extracurricular clubs and organizations that contribute to the community through community beautification and service projects.
- The use of school facilities for community functions was regarded as an asset at the community public meeting. Continued use of the building by area groups and organizations when it is available, would allow this structure to continuously be used to its fullest potential.

#### Parks and Recreational Facilities

- Several public and private parks and recreational facilities are available to Greencastle-Antrim residents. As the community grows, it is essential that the Township and Borough continue to offer safe and adequate facilities for passive and active recreational opportunities, and that these facilities are adequately maintained and promoted. One way to ensure that residents continue to have access to a variety of recreational opportunities is to develop a parks and recreation plan.
- Greencastle Borough and Antrim Township should develop a regional parks and recreation plan that analyzes and plans to



meet the recreational needs of residents in the region in the following topical areas:

- Evaluation of existing and planned park facilities and identification necessary improvements
- Evaluation of maintenance and safety at facilities.
- Open space and natural recreational resources, including the Tayamentasachta Environmental Center
   Trails and connectivity
- Programming for parks and recreation
- Financing and funding parks and recreation and staffing needs.

 Needs that have been identified in this plan include the need for an indoor recreation center or YMCA, the possible

need for a skate park, the need for additional activities for youth and teens in the community, and continued maintenance at township and borough facilities.

#### Community Events and Organizations

- Several community events are put on throughout the year by various organizations. This plan supports the continuation of these events as they enhance the quality of life in the community. Many events, such as sidewalk sales, also act as promotional support for the local businesses in Greencastle.
- Antrim Township and Greencastle Borough should support these organizations and encourage them to undertake projects or offer services that would better the community. Such services may include community clean-up days, gardening or landscaping contests, neighborhood watch programs, maintenance or yard keeping assistance for seniors or the disabled, and holiday decorating, among other things.



#### Other Community Resources – Lilian S. Besore Memorial Library and the Allison-Antrim Museum

Residents have access to library facilities at the Lilian S. Besore Memorial Library in Greencastle. In addition to library resources, the library also houses some historical artifacts and maintains genealogical resource materials. There is currently a question as to whether or not the library is duplicating the services of the Allison-Antrim Museum by housing historical artifacts. The Allison-Antrim Museum Inc. (AAMI) houses several historical artifacts and tells the history of the Greencastle-

- Antrim area. This resource is useful to residents and historians, and has the potential to attract visitors and tourists that are interested in Civil War History.
- Greencastle Borough and Antrim Township, in conjunction with the Chamber of Commerce, should work with the library and the Allison-Antrim Museum to determine the most appropriate location to house and showcase the historical resources of the Greencastle-Antrim area. If the most appropriate is decided to be the museum, Chamber involvement could assist the museum in promoting its services to the public and drawing additional tourism dollars to the region.
- Currently the museum is only open limited hours. Involving the school district and recruiting student volunteers could allow for expanded hours, give students a hands-on educational opportunity, and connect them to the history of their home community.
- The library is not currently ADA accessible and as such, is looking into offering all of its services on one floor to avoid the costs of an elevator. If the library chooses to expand and add additional rooms, the renovation should improve the outside appearance of the structure as well to better conform to the character of structures in the borough. Additionally, if the lower floors of the library are not being utilized for library purposes, the library should consider renting or leasing this space to area community organizations for use as a meeting space or other functions.

#### Churches and Faith Based Organizations

Several churches and faith based organizations are located in and are active in the Greencastle-Antrim area. These organizations increase the quality of life for residents in the area.

#### Police Services

Currently, the Greencastle Police Department responds to incidents in Greencastle Borough. The Pennsylvania State Police respond to incidents in Antrim Township. The comprehensive plan recommends that municipal officials utilize the *Regional Police Study* that was prepared for Greencastle Borough and Antrim Township.

#### Fire and Emergency Services

- The Rescue Hose Company provides fire and basic life support services to residents in Antrim Township and Greencastle Borough. Response times are generally adequate, but can be lengthy at times depending on the location of the call. As development increases in the township, it may be necessary for the department to locate a satellite station in the township to ensure that all residents are adequately served.
- Manpower at the Rescue Hose Company is considered adequate the majority of the time, but additional demands may require additional volunteers. Moving forward, it is important that the Rescue Hose Company communicate their needs with the Township and the Borough, and that the municipalities alert fire and emergency services personnel of expected developments coming into the area.



Photo taken from the Rescue Hose Company website, www.rescuehose.com.

#### Healthcare

- Students at the Greencastle-Antrim High School identified health care as a concern and as an area of focus for municipal officials. As the region expands, provisions will need to be made to ensure that adequate health care services and facilities are available to residents of the Greencastle-Antrim area. As the baby-boomers enter into retirement, there will be an even greater demand for these services. Greencastle Borough and Antrim Township should keep in close contact with the health care providers and ensure that adequate land is available for expansion of current facilities.
- Many students also indicated that they were planning on entering the medical field. Additionally, business owners stressed the need to match students with local employers. The school district should work with the health care providers to determine if student volunteer or part-time employment opportunities exist at these facilities.

#### Senior Services

- The Greencastle Senior Center was identified as an asset at the community public meeting. It offers a variety of activities for seniors in the Greencastle-Antrim area. The Township and Borough should support the senior center and determine if an expansion of hours is desired by its users. Currently, the center is not open on evenings or weekends. County level transportation services and in-home services are also available to senior citizens in the area.
- In addition to these services, the area may benefit from an organization that could assist seniors with home maintenance, yard work, or snow shoveling, among other things. Antrim Township and Greencastle Borough should work with the senior center to determine if there is a desire for this type of organization, and work with existing community service organizations to determine if this is a service they would be interested in providing.

#### Water Supply

A plan for the reliable supply of water is included as a separate element of the comprehensive plan.

#### Sewage Disposal

- Antrim Township is in the process of updating the Act 537 Sewage Facilities Plan. This plan supports the findings of the Act 537 Plan and encourages the designated areas for development to be in line with the areas that are planned for water and sewer expansion.
- The entire borough is served by public water and public sewer. Moving forward, it will be important for Greencastle Borough monitor the capacity of the sewer system and update their Act 537 Plan as necessary.
- Antrim Township residents utilize on-lot sewage disposal systems where sewer is not available. Antrim Township has adopted an OLDS program that requires residents with on-lot systems to periodically have their septic tanks pumped, and a pumping inspection report submitted to the township. A list of approved septic haulers is listed on the township website. Educational information is also available to residents on the website through links to publications of the Environmental Protection Agency. This ordinance will help to ensure proper maintenance and management of on-lot disposal systems in the township.
- Continue to support ways to meet the Chesapeake Bay Strategy without requiring expensive upgrades to the sewage treatment plants.

#### Solid Waste Disposal and Recycling

- The Mountain View Reclamation, which is partially located in Antrim Township, allows township residents to dispose of their trash free of charge on Saturday mornings at the landfill. The other option township residents have for trash disposal is to contract with a private hauler. Information about the free disposal is located on the township website. As the township population grows, the township should consider curbside trash collection for residents in more populated areas of the township.
- Recycling is available at the township building, or through private waste haulers, for township residents free of charge, following the purchase of a recycling container at the township.
- Residents and businesses in Greencastle Borough have curbside waste disposal and recycling services, and recycling is mandatory. Residents may also take their waste to the Mountain View Reclamation for free disposal.
- Mountain View Reclamation allows residents to lower their costs for waste disposal by accepting waste from residents free of charge. It also improves the economic situation in the area.

#### Utilities

#### Electrical Utility Service

Residents of Greencastle Borough and Antrim Township receive electrical utility services from Allegheny Power. Deregulation of the electric industry occurred in 1996 in Pennsylvania, allowing residents to compare electric service providers and choose a provider which best fits their needs and budgets. As part of the deregulation, the state established limits on the prices utility companies could charge for electricity generation. The price limits are set to expire at the end of 2009, and starting in 2010, electric companies will be allowed to charge their customers the true rates for generating electricity based on an open market. As such, it is estimated that customers' bills could increase by 20% or 30%. Given the

projected significant rate increase, it is recommended that Greencastle Borough and Antrim Township be proactive in comparison shopping for electricity providers.

The Borough and Township should also work with residents to ensure that they are aware of their options during times when electric service is not available. When power outages result from weather related issues or other reasons, rural customers may experience lengthy periods of time without electricity. Residents in more remote areas, especially elderly or disabled residents, should be encouraged to consider purchasing a backup generator to ensure that they will have a source of heat and necessary electrical devices.

#### Internet Service

- Greencastle Borough and Antrim Township should work with utility service providers, specifically high speed internet service providers, to ensure that residents and businesses in the borough and in designated growth areas of the township have access to high speed internet and the latest in communications technology.
- A new law mandates that telephone companies must offer high speed internet access by 2015. More rural municipalities, especially, may not see high speed internet access until close to this time. If high speed internet access is not available in certain portions of Antrim Township, residents should communicate their needs to the township. The township should in turn, discuss options for high speed internet with the local phone or cable company providers.

#### Natural Gas

- A portion of the Greencastle-Antrim region receives natural gas service from Columbia Gas. As the prices for oil and electricity continue to increase, the Borough should educate residents on the availability and option of using natural gas for home heating.
- Natural gas will also play an important role in the development of the proposed industrial areas in Antrim Township. The Township should work with Columbia Gas to coordinate servicing of the future growth areas, as delineated in the future land use map.

### **Storm Water Management**

Impervious surfaces, including roofs and pavement, prevent storm water from naturally sinking into the ground. Instead, storm water is carried over the land surface and directly into small tributaries and larger streams, which are not suited to handle the increased water volume and flow. As a result, these waterbodies may experience erosion of their banks, loss of habitat, degradation of quality, and an increased flooding potential. Especially in Greencastle Borough, and in the developed areas of Antrim Township, an Act 167 Storm Water Management Plan can help to address storm water issues and encourage storm water best management practices. In order to better manage storm water in Pennsylvania, the Department of Environmental Protection (DEP) developed a Comprehensive Storm Water Management Policy. To assist with the implementation of the policy, DEP is developing a Storm Water Best Management Practices Manual and Model Storm Water Ordinance to provide guidance for local governments. The goals of the policy are to improve use of planning practices and Best Management Practices (BMP) that minimize the generation of storm water runoff, provide groundwater recharge, and minimize the adverse effects of storm water discharges on water resources. The BMP Manual describes a storm water management approach to land development that strives to prevent or reduce storm water runoff volume through planning and development techniques.

#### The BMP Manual is designed to support:

- Implementation of federal and state water quality programs and municipal ordinances (Act 167)
- Practices that encourage onsite storm water management and increased groundwater infiltration as a means to minimize storm water discharges
- A mix of structural and non-structural techniques and technologies
- The reuse/recycling of storm water
- Minimizing rates and volumes of surface water runoff from development activities during and following development
- Limiting the amount of surface pollutants entering Pennsylvania's streams

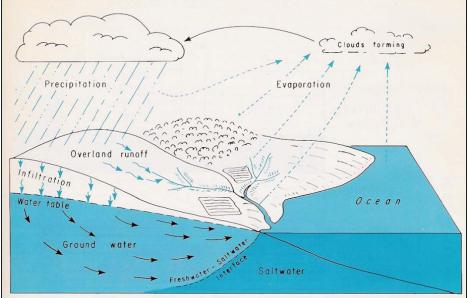
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## Chapter 6 - Water Resources Plan

An understanding of a community's water resources is critical to achieving balance among human, economic, and environmental needs. The most significant challenge for preserving future water resource goals is growth patterns and activities on land. Protecting water supplies by strategically directing growth and development to suitable areas, promoting safe use and disposal of pollutants, such as fertilizers, industrial wastes, sewerage effluent from septic systems, and minimizing excessive erosion, is crucial in municipal planning.

The occurrence and interrelationship of water from and to the atmosphere, on the land surface, and in the ground is known as the hydrologic cycle (Figure 6-1). Understanding the pathways and impact from human activities is fundamental to proper management of water resources. Surface waters consist of perennial and intermittent streams, lakes, reservoirs, ponds, wetlands, springs, and natural seeps. Groundwater is water contained in the soils and rock formations of the township. Most groundwater is derived from precipitation that has infiltrated and percolated through the soil, recharging the aquifer. The rates of recharge vary by location due to the diverse properties of soils and the underlying bedrock. After reaching the water table, groundwater moves towards points of discharge, such as surface waters, springs, and wells.

Information in this chapter builds upon data and maps in the Natural and Historic Features Profile of this Plan.



#### Figure 6-1: Diagram of the Hydrologic Cycle

Source: Heath, 1987

### Physiography and Hydrogeologic Setting

Antrim Township and Greencastle Borough are located of the Great Valley Section of the Ridge and Valley Province that consist of the great valley shale province and the great valley limestone province which are described in the natural and historic resources profile.

The hydrology of the Greencastle-Antrim region is strongly influenced by geology. Groundwater recharge rates, well yields, and drainage patterns and flow of streams are largely dependent on the spatial distribution of rock types and structure. Two principle types of aquifers are shale containing significant graywacke interbeds, and limestone and dolomite. One third of the Greencastle-Antrim region is underlain by shale-graywacke aquifers located west of U.S. 11 corridor. Carbonate aquifers underlie the remaining area east of U.S. 11.

### Surface Water, Base Flow, and Groundwater - An Introduction

In order to properly manage and utilize water, the surface water and groundwater resources of Antrim Township and Greencastle Borough must be described and quantified. While surface water and groundwater are often characterized separately, it is important to acknowledge that they represent one resource.

Water flowing in streams is a combination of surface or overland runoff and groundwater discharge (base flow). Overland runoff from precipitation events contributes inflow to streams resulting in higher stream flows of short duration. During periods between precipitation events, the discharge of groundwater from springs and seeps provides most of the water in streams. Stream flow in the watersheds crossing Antrim Township and Greencastle Borough is dominantly base flow within hours to a few days after precipitation events.

The base flow in streams is a good indicator of groundwater recharge in the watershed, and groundwater available for development. Groundwater recharge accounts for nearly a third of annual precipitation. On average, base flow provides 70 percent to 80 percent of the total stream flow in watersheds of the region (Becher and Taylor, 1982). Differences in groundwater contribution reflect the effect of geology and to a lesser extent, topography and land use. The combination of land use activity and aquifer properties are important factors in understanding the quantity and quality of water resources of the area.

### Surface Water

#### Watersheds and Stream Classification

The streams of the Greencastle-Antrim region are located in the Potomac River Basin and flow toward one of two major tributaries of the Potomac: the Conococheague Creek or Antietam Creek. The three named watersheds in the area are Muddy Run and Paddy Run, which flow westward to the Conococheague Creek, and Marsh Run which flows southward to Antietam Creek. Also discussed in the natural and historic resources profile, watersheds in the region are shown on Appendix Map 6-5.

Water uses protected in these watersheds are set forth in Chapter 93, Title 25 of the Pennsylvania Code. The Pennsylvania Department of Environmental Protection (PA DEP) protects four stream water uses: aquatic life, fish consumption, potable water supply, and recreation. Chapter 93 stream classifications for the Greencastle-Antrim region streams include Warm Water Fisheries (WWF) waters, and High Quality-Cold Water Fisheries (HQ-CWF) waters. High Quality classified streams warrant Special Protection status and are to be maintained and protected based on the chemical and biological water quality standards established for these classifications. Streams qualify for HQ status if long-term water quality exceeds levels necessary to support the propagation of fish, shellfish, and wildlife and recreation in and on the water by being better than the water quality criteria specified in Chapter 93.7 and/or the surface water supports a high quality aquatic community.

The four major watersheds located in the region along with their stream classification are listed below:

- Conococheague Creek and its unnamed tributaries are designated WWF
- Muddy Run and its tributaries are designated HQ-CWF
- Paddy Run its tributaries are designated WWF
- Marsh Run its tributaries are designated WWF

All efforts should be made through the development of the Future Land Plan to protect the HQ-CWF designation of Muddy Run.

### **Springs and Reservoirs**

In the Greencastle-Antrim area, springs are major points of discharge from the carbonates and provide a window to the groundwater system. Table 6-1 presents most of the larger springs and ancillary information.

Name	Geologic Unit	Spring Discharge or Reservoir Storage (if known)	Notes
Moss Spring	Rockdale Run Formation	650 gpm	Greencastle Borough public supply.
Cold Spring	Stonehenge Formation		
Eshelman-Spangler Springs	Unknown		
Ebberts Spring	Unknown		
McCauleys Spring	St. Pauls Group & Martinsburg Formation		Spring surfaces just east of Greencastle Borough
Muddy Run Spring	Rockdale Run Formation		
Oak Spring	Stonehenge Formation	300 gpm	
Tayamentasachta Spring	Rockdale Run Formation		
Gibble Spring	St. Paul Group	600 gpm	Flows into sinkholes within 700 feet downstream. Owner Ray Gibble.
Greencastle Borough Reservoir	Stonehenge Formation		

#### Table 6-1: Significant Springs and Reservoirs

Source: Pennsylvania Infrastructure Investment Authority; USGS; topozone.com; clocations.com; brainygeography.com

### Water Quality and Attainment of Use

Use attainment is a way of describing whether or not a stream is meeting Pennsylvania's water quality standards. PA DEP provides use attainment assessment updates through the agency's Stream Integrated List. The list presents if a stream is attaining or not attaining its designated uses. If a stream segment is not attaining any one of its four uses for aquatic life, fish consumption, potable water supply, and recreation, the stream segment is considered impaired.

Two tributaries to Muddy Run north of Greencastle Borough do not attain their designated uses. The source of impairment is agricultural activities causing organic enrichment, low dissolved oxygen, and stream siltation. These streams reside on carbonate terrain where groundwater is very vulnerable to contamination. The degraded water quality of these streams is indicative of the combination of rapid infiltration rates and intense agricultural land use activities on the carbonate aquifer.

A tributary to Conococheague Creek northeast of Upton did not attain its designated use due to grazing related agricultural nutrients and siltation, and sediment transported from land development activities.

Appendix Map 6-9, Watershed and Stream Status, graphically shows the stream attainment status of all streams in the region.

### Groundwater

The hydrogeologic information presented in this section can assist decision makers in their efforts to efficiently develop water and land resources. Individuals drilling wells for home or farm use may also benefit from this information to select optimum drilling depths and anticipated yields. However, professionals with geologic experience and skill in interpreting field conditions can best provide selection of actual drilling sites.

### Estimate of Groundwater Availability

The maximum limit of aquifer development or safe yield is equal to the amount of natural replenishment or recharge that the aquifer receives annually. Recharge quantities are expressed as a groundwater discharge (yield) per unit of land surface. Groundwater yields from base flow measurements provide an estimate of the quantities available. Becher and Taylor (1982) studied the groundwater resources of the Cumberland Valley in Franklin County and reported on groundwater yields estimated from base flow. Gehart and Lazorchick (1988) conducted an evaluation of groundwater resources in the lower Susquehanna River Basin and reported on model estimates of recharge for several hydrogeologic units. Table 6-2 presents the referenced groundwater yield estimates and the average yield of 0.50 million gallons per day per square mile (mgd/sqmi) and 0.80 mgd/sqmi for the Martinsburg shale and carbonates, respectively.

### Table 6-2: Estimates of Groundwater Recharge by Hydrogeologic Unit

Hydrogeologic Unit	Groundwater Yield (Mgal/d/sqmi)	Reference
Martinsburg shale	0.48	Becher and Taylor (1982)
Western Great Valley Shale	0.53	Gehart and Lazorchick (1988)
Average for Shale	0.50	
Carbonate Rocks	0.85	Becher and Taylor (1982)
Cumberland Valley Carbonate	0.75	Gehart and Lazorchick (1988)
Average for Carbonates	0.80	

Source: Becher and Taylor, 1982; Gehart and Lazorichick, 1988

The use of the safe yield as a limit for groundwater development will result in a substantial reduction of stream and spring flow during extended periods (several months or longer) with below average precipitation. When water supply demands approach the safe yield, normal base flows supporting in-stream flow needs (e.g., aquatic habitat and dilution of treated wastewater discharges) are reduced. Water resource managers refer to a sustainable yield of a groundwater basin that is equal to the safe yield minus an amount of water to maintain a base flow to support in-stream needs.

One measure to balance in stream flow needs and groundwater available for development is the use of the 1-in-10 year recharge as the sustainable limit. The 1-in-10 year recharge is approximately 60 percent of an average or normal year's base-flow. Therefore, the sustainable limits presented in Table 6-3 provide a reasonable estimate for water supply planning in the Greencastle-Antrim region.

### Table 6-3: Comparison of Safe Yield and Sustainable Limit for Rock Types of the Greencastle-Antrim Area

Rock Type	Safe Yie	ld	Sustainable Yield			
	(mgd/sqmi)	(gpm/sqmi)	(mgd/sqmi)	(gpm/sqmi)		
Shales	0.50	347	0.30	208		
Carbonates	0.80	555	0.48 333			

Source: Becher and Taylor, 1982; Gehart and Lazorichick, 1988

### Water-Bearing Characteristics of Aquifers and Well Yield

Groundwater flows through interconnected openings of fractures, bedding-plane partings, intergranular pores, and karst voids that are the water-bearing zones of the aquifer. Geologic factors that control the type and distribution of water-bearing zones are lithology, topography, and geologic structure. These factors influence the number, size, distribution, and the degree of these water-bearing zones and are directed related to well yield.

Table 6-4 presents the water-bearing characteristics of each geologic unit located in the Greencastle-Antrim area based on the specific capacity, sustained-yield calculations, maximum reported yield of operational wells, and percent of wells that cannot supply domestic

needs without storage for peak demands. Wells that are inadequate to supply minimum domestic needs have reported yields of less than 5 gpm and require standby storage (i.e., deeper well volume). The sustained yield is defined as the amount of water that can be obtained continuously from a well in a 24 hour period and was calculated based on specific capacity data (the yield of a well per foot of drawdown) of each geologic unit.

Geologic Unit (Symbol)	Geologic Description	Water Quality	Water-bearing characteristics
Martinsburg Formation (Om–shale) (Omg-graywacke)	Black carbonaceous and fissile shale with medial unit of graywacke; basal unit of platy limestone	Shale:         Median hardness = 120         mg/I         Conductance = 310         micromhos.         Graywacke:         Median hardness = 120         mg/I         Conductance = 225         micromhos         Objectionable amounts of         iron and hydrogen sulfide         are commonly present.	Good aquifer. <u>Shale characteristics:</u> Maximum reported yield = 150 gpm. Specific Capacity = 1.4 gpm/ft. Median sustained yield = 29 gpm. Maximum sustained yield = 100 gpm. Percent requiring standby storage = 3. <u>Graywacke characteristics:</u> Maximum reported yield = 50 gpm. Specific Capacity = 0.8 gpm/ft. Median sustained yield = 50 gpm. Maximum sustained yield = 100 gpm. Percent requiring standby storage = 3.
Chambersburg Formation (Oc)	Dark-gray, thin-bedded limestone.	Median hardness = 300 mg/l Conductance = 610 micromhos.	Poor aquifer. Maximum reported yield = 40 gpm. Specific Capacity = 0.22 gpm/ft. Median sustained yield = 11 gpm. Maximum sustained yield = 35 gpm. Percent requiring standby storage = 25.
St. Paul Group (Osp)	Light-gray limestone with minor interbeds of dolomite containing black chert.	Median hardness = 256 mg/l Conductance = 620 micromhos.	Fair aquifer. Maximum reported yield = 225 gpm. Specific Capacity = 0.28 gpm/ft. Median sustained yield = 15 gpm. Maximum sustained yield = 160 gpm. Percent requiring standby storage = 30.
Pinesburg Station Formation (Ops)	Medium-gray dolomite with some interbeds of limestone. Black chert and white quartz rosettes are present near base.	Median hardness = 290 mg/l Conductance = 670 micromhos.	Fair aquifer. Maximum reported yield = 30 gpm. Specific Capacity = 0.88 gpm/ft. Median sustained yield = 46 gpm. Maximum sustained yield = 150 gpm. Percent requiring standby storage = 25.
Rockdale Run Formation (Orr)	Medium-gray limestone with some thick dolomite containing small white chert rosettes present near top. East of Greencastle, lower part is light-gray limestone containing nodules of brown chert. West of Greencastle, lower part contains abundant chert-bearing dolomite and banded limestone.	Median hardness = 273 mg/l Conductance = 620 micromhos.	Good aquifer. Maximum reported yield = 410 gpm. Specific Capacity = 0.6 gpm/ft. Median sustained yield = 32 gpm. Maximum sustained yield = 220 gpm. Percent requiring standby storage = 25.
Stonehenge Formation (Osh)	Medium-gray limestone with abundant algal limestone in upper half.	Median hardness = 239 mg/l Conductance = 565 micromhos.	Very good aquifer. Maximum reported yield = 80 gpm. Specific Capacity = 4.5 gpm/ft. Median sustained yield = 138 gpm. Maximum sustained yield = 500 gpm. Percent requiring standby storage = 0.
Stoufferstown Formation (Ost)	Medium-gray, thin-bedded conglomeratic limestone containing prominent siliceous seams. Very thin when mapped with the Stonehenge Formation	Median hardness = 291 mg/l Conductance = 625 micromhos.	Very poor aquifer. Median reported yield = 15 gpm. Median sustained yield = < 30 gpm. Very little data exists; believed to be the poorest yielding carbonate aquifer in south- central Pennsylvania.

### Table 6-4: Water-Bearing Characteristics and Water Quality of Geologic Units

Geologic Unit (Symbol)	Geologic Description	Water Quality	Water-bearing characteristics
Shadygrove Formation (Csg)	Thick bedded, light-gray limestone containing brown chert nodules and a few thin beds of sandstone and dolomite.	Median hardness = 274 mg/l Conductance = 595 micromhos.	Good aquifer. Maximum reported yield = 50 gpm. Specific Capacity = 1.3 gpm/ft. Median sustained yield = 68 gpm. Maximum sustained yield = 240 gpm. Percent requiring standby storage = 20.
Zullinger Formation (Czl)	Cyclical sequence containing medium-gray limestone, limestone conglomerate, dolomitic limestone, banded limestones and dolomite, dolomite, and sandy limestone.	Median hardness = 274 mg/l Conductance = 630 micromhos.	Maximum reported yield = 120 gpm. Specific Capacity = 0.81 gpm/ft. Median sustained yield = 43 gpm. Maximum sustained yield = 390 gpm. Percent requiring standby storage = 15.
Elbrook Formation (Ce)	Massive beds of shaly limestone, calcareous shale, some algal limestone, and minor amounts of calcareous sandstone.	Median hardness = 239 mg/l Conductance = 565 micromhos.	Good aquifer. Maximum reported yield = 100 gpm. Specific Capacity = 2.0 gpm/ft. Median sustained yield = 45 gpm. Maximum sustained yield = 250 gpm. Percent requiring standby storage = 15.

Source: Becher and Taylor, 1982

Table 6-5 provides the percentage of water-bearing zones encountered for each formation by selected depth ranges, and the median depth of wells drilled in the respective formation. The wells drilled in the Martinsburg Formation indicate that reasonable well yields are obtained at shallower depths than wells drilled in the carbonates. A comparison of the Ordovician carbonates and Cambrian carbonates indicates that deeper wells and water-bearing zones occur in the Cambrian carbonates. While drilling costs may be higher for wells in the Cambrian carbonates, these wells can be cased deeper and may be less susceptible to contamination.

Table 6-5 provides valuable information on well depth decision during drilling. For example, 88 percent of the graywacke water-bearing zones occur within the first 100 feet. If water quantities attained are not adequate, the chances of deeper water-bearing zones are limited. Conversely, if quantities of water were marginally adequate in a 150 foot well in the Pinesburg Station Formation, drilling deeper may be practical to encounter more water-bearing zones and provide additional well volume storage. Location of the drilled well is important. If a dry hole penetrates fresh rock to 200 feet, then water at greater depths is unlikely.

### Table 6-5: Distribution of Water-Bearing Zones in Well and Median Well Depth

Geologic Unit	Percent	Median Well Depth						
	0-50	0-50 51-100 101-150 151-200 200-400						
Martinsburg Shale	33	50	13	3	1	80		
Martinsburg Graywacke	34	53	5	8	0	88		
Chambersburg Formation	20	28	28	16	8	160		
St. Paul Group	11	41	22	8	18	130		
Pinesburg Station Formation	5	45	5	25	20	128		
Rockdale Run Formation	15	33	23	18	11	157		
Stonehenge Formation	14	52	19	10	5	120		
Stoufferstown Formation <sup>1</sup>	33	33	0	0	33	145		
Shadygrove Formation	16	26	36	5	17	172		
Zullinger Formation	6	39	28	9	18	151		
Elbrook Formation	15	52	17	8	8	130		

<sup>1</sup>Limited data

Source: Modified after Becher and Taylor, 1982; RETTEW Associates Inc.

### **Topography and Potential Well Yield**

Many groundwater resource investigations have shown that for similar rock types, in general, wells drilled in lower topographic positions (valleys) have higher yields than wells drilled in higher positions (hilltops). Hilltops form on the more resistant rocks where there are fewer openings in the underlying bedrock and less opportunity for weathering. Conversely, valleys are the collecting areas where upslope waters drain. These areas tend to have a greater distribution of solution features and a capability for handling greater amounts of water. Yields from valley wells in the shales and carbonates are 3 to 20 times greater, respectively, than those on hilltops. Topographic position has a more significant effect on well yield in carbonate rocks than in shale and graywacke. Table 6-6 presents the median specific capacity for the given topographic position.

### Table 6-6: Median Specific Capacity in gpm/ft for the Given Topographic Position

Rock Type	Hilltop	Hillside	Swale	Flat	Valley
Carbonate	0.25	0.5	0.9	3.1	5.5
Shale/Graywacke	0.67	0.9	0.62	1.7	1.9
	1				

Source: Becher and Taylor, 1982

### **Groundwater Quality**

Natural groundwater quality is a function of the composition of the soil and rock through which water flows. Major differences in groundwater quality occur between the noncalcareous (shale and sandstones) and calcareous (limestone and dolomite) rocks. Groundwater in the Greencastle-Antrim region is of good quality for most uses. Water in the carbonate formations is hard (121 mg/l to 180 mg/l) to very hard (greater than 180 mg/l). In the Martinsburg Formation, high iron and manganese greater than the recommended limits of 0.3 mg/l and 0.2 mg/l, respectively, are common in well water.

The majority of the dissolved constituents present in the carbonate aquifer are calcium and magnesium, and high iron and manganese in the shales. The occurrence of these and other constituents are factors in the specific conductance and hardness found in groundwater. A summary of median hardness and specific conductance values found in groundwater for each geologic unit are presented in Table 6-4. Specific conductance is a measure of the capacity of water to conduct an electric current that proxies for the amount of dissolved constituents in groundwater. An approximation of the dissolved solids content in water can be obtained by multiplying the specific conductance by 0.65. The recommended maximum limit of dissolved solids in drinking water is 500 mg/l. While water hardness is not a safety issue, water hardness is a common water quality problem. Hardness in water occurs when excess minerals in the water create certain nuisance problems for household plumbing and water-using appliances.

While the most commonly reported groundwater quality problems are due to naturally occurring constituents, groundwater is susceptible to contamination from land surface activities. An investigation of groundwater quality in Franklin County (Becher and Taylor, 1982) showed that the nitrate levels in wells and springs, and reports of bacterial contamination were a wide-spread problem in the carbonates. Common problems leading to contamination were shallow wells, wells with little casing, and wells sited near intensive agricultural operations and down-gradient of septic systems.

### **Public Water Supplies**

### Antrim Township

The community facilities and utilities profile of this plan touches upon public water supply. The township's Water System Master Plan and Act 537 Plan provides a more detailed analysis of the public water system.

### Antrim Township Municipal Authority

- Antrim Township Municipal Authority (ATMA) operates two miles of water lines and one water treatment plant that serves approximately 406 residential and three commercial connections.
- Many of the township residents and businesses rely upon groundwater for potable water; however, these areas also consist of carbonate geology that is susceptible to groundwater contamination.

- A major source of groundwater contamination is from nutrient runoff associated with agricultural operations.
- ATMA provides potable water to small portion of the township that includes all of Sherwood Manor, Cedarbrook Estates, Nottingham Meadows, PA Department of Transportation Interstate 81 Welcome Center, Jerr-Dan Corporation, CCX (Conway), and Hoffman and Yellow.
- In 2004, ATMA supplied 31.6 million gallons of water, which equates to 86,662 gallons per day.
- Through September of 2005, the average and peak water demand from existing public water service areas was estimated to be approximately 87,000 and 185,000 gallons per day.
- ATMA currently uses raw water from two ground wells. Well #1 is located inside the existing water treatment plant on Sherwood Drive and is permitted by the PA DEP for a maximum pumping rate of 250 gallons per minute. Well #2 is located in the same area and has a permitted pumping rate of 302 gallons per minute.
- A well testing project in 2006 confirmed that the sustained yields of both wells are greater than the PA DEP permitted yields. According to the study, the combined maximum average production is 0.596 million gallon per day, or 423 gallons per minute. The peak production, which assumes continuous pumping is 0.795 million gallons per day or 552 gallons per minute, and should be sustainable for several days to at least one week.
- The treatment process consists of filtration and disinfection and includes four multimedia filters each rated at 86 gallons per minute. Chlorine is injected after the filtration process. The treated water is distributed to the end users by two 250 gallons per minute high service pumps.

ATMA projects that potable water needs are expected to increase substantially over the next decade as new development occurs and water lines are extended. The ATMA Water System Master Plan recommends the following:

- The proposed expansion areas, East, West and South, around the existing service area will be served by upgrading the existing water treatment plant.
- The North expansion area will be served by constructing a new water supply and distribution system.
- Connect the two water supply and distribution systems via a booster pump and check valve arrangement for providing water to one another during times of emergency needs.

The existing and proposed water service areas of ATMA are graphically shown in the Antrim Township Act 537 Plan.

### The Greencastle Area, Franklin County, Water Authority

The Greencastle Area, Franklin County Water Authority (GAFCWA) was established in 1977 to serve Greencastle Borough and portions of Antrim Township that immediately surround the borough.

- In 2005, the authority had a total of 2,054 connections, 83% (1,686 connections) of which were located in the borough and 17% (368 connections) of which were located in Antrim Township. The authority serves 100% of the borough's population, versus only 7% of the population of Antrim Township.
- The peak day water usage in 2005 was 972,000 gallons per day. Minimum day water usage for 2005 was 232,000 gallons per day. In 2006, the peak day water usage was 1,047,000 gallons per day.
- The authority commissioned a Source Water Protection Plan to carefully plan for the protection of its water supply sources.
- Moss Spring, Ebberts Spring, and three Eshelman-Spangler Springs and two wells, well #1 and #2 are the sources of water used by the authority.
- The Eshelman-Spangler Spring is the main reservoir and has a capacity of 13 million gallons per day. When flows from these springs decline during periods of drought, Well #1 and #2 and Ebberts Spring are used.
- Moss Spring has a ground level holding tank of 500,000 gallons and Ebberts Spring has a 20,000 gallon holding tank.
- All of Greencastle Borough is served by or within the service area of the authority.
- The authority is pursuing a public water supply source at proposed Well #4.
- The authority is acting to protect its sources by monitoring farming activities in proximity to its sources, advising farmers of proper water quality protection techniques, and working with Greencastle Borough and Antrim Township to develop appropriate construction and planning techniques.
- As required by the PA DEP, the authority is developing a well head protection area around proposed Wells #1, 2, and 4.
- The authority is considering implementation of the following management tools:

- Acquire property or development rights for recommended Zone I.
- Implement an Overlay Zoning Ordinance.
- Promote use of Best Management Practices (BMPs) and Nutrient Management Plans.
- Provide public education through posting drinking water source protection area posters and highway signs.
- Educate hazardous materials spill responders.
- Review and revise the existing Emergency Response Plan.
- Properly abandon unused water supply wells, including domestic and commercial wells.
- Update the list of potential contaminant sources in proximity to the authority's water sources every three years.
- A review of the authority's 2005 Annual Drinking Water Quality Report showed that the drinking water met all federal and state requirements.

### Water Resources Protection Strategies

The Pennsylvania Municipalities Planning Code (MPC) requires that municipal comprehensive plans address the issue of resource preservation, specifically identifying natural, cultural, and historic resources. The MPC describes natural resources to include wetlands and aquifer recharge zones, woodlands, steep slopes, prime agricultural land, flood plains, unique natural areas and historic sites (section 301(a)(6)). The MPC further states, the comprehensive plan shall include a plan for the reliable supply of water, considering current and future water resources availability, uses, and limitations, including provisions adequate to protect water supply sources. Any such plan shall be generally consistent with the State Water Plan and any applicable water resources plan adopted by a river basin commission (section 301 (b)).

This plan recognizes several strategies that are available to Antrim Township and Greencastle Borough to address water resource protection and preservation. These include:

- Critical Aquifer Recharge Area Identification
- Water Budget & Groundwater Availability Analysis
- Wellhead Protection
- Well Drilling Techniques
- Groundwater Management Plans
- Water Supply Plans
- Storm Water Management Plans
- Integrated Water Resources Plan
- Water Conservation Plans

### Critical Aquifer Recharge Area Identification (CARA)

Recharge occurs wherever the land surface is pervious and the water table is below the surface. However, some areas are characterized by features that provide an exceptional amount of recharge to the aquifer per unit area. These are termed critical aquifer recharge areas (CARAs).

One indication of high recharge areas is a watershed containing a low tributary density. The high permeability results in a water table with a low gradient under the land surface, thus fewer perennial streams. These watersheds typically are located in carbonate areas where the topography shows an integrated network of broad valleys of low relief that lack stream flow or discrete channels. Instead of a dense network of streams, water floods the valley floor in a series of pools during precipitation events. Water then gradually percolates to the underlying aquifer. Groundwater aquifers associated with high recharge areas are also at a higher risk of contamination.

Other potential CARAs include losing stream reaches where stream flow is lost to the underlying aquifer, streams crossing from siliciclastic terrains to carbonate areas, and karst (solution-enhance permeability) modified uplands (Edwards and Pody, 2005).

Municipalities should identify and maintain these CARAs to maximize recharge and the amount of groundwater available for utilization. Appendix Map 6-9, Watersheds and Streams, clearly shows low tributary density in the eastern portion of Antrim Township, which is a carbonate area.

### Water Budget & Groundwater Availability Analysis

A water budget analysis provides an understanding of water flows through an area by treating the water resources of an area as an account, with recharge (income); withdrawals and in stream flow needs (expenses); and storage (savings). Water budgets are useful for evaluating surface and groundwater resources available for development, troubleshooting water supply and well interference issues, and planning for future water needs. A groundwater availability analysis provides an assessment of the total volume of water withdrawn from (demand) and recharged to (supply) aquifers in a defined area, providing an indication of stress upon aquifers and stream base flow. When compared to projected demand in a defined area, a municipality can better prepare for targeting growth areas.

### **Wellhead Protection**

Pennsylvania's Wellhead Protection (WHP) program is a proactive effort designed to apply proper management techniques and various preventive measures to protect ground-water supplies, thereby ensuring public health and preventing the need for expensive treatment of wells to comply with drinking water standards. The underlying principle of the program is that it is much less expensive to protect ground water than it is to try to restore it once it becomes contaminated.

A wellhead protection plan should detail the provisions of the local program, including a schedule for implementation, and demonstrate the commitment needed to support the on-going efforts necessary for a successful local WHP program. Therefore, the plan should not only describe how sources will be protected, but also document the resources necessary to implement the plan, thus linking implementation and management to finances. The minimum elements for a WHP plan in order to be considered for DEP approval include:

- Steering Committee and Public Participation
- WHP Area Delineation
- Contaminant Source Inventory
- WHP Area Management and Commitment
- Contingency Planning
- New Source Planning

In November 2003, PA DEP, Bureau of Water Supply Management, conducted an assessment of potential contamination sources to six groundwater sources that comprise the public drinking water supply of the Greencastle Area, Franklin County, Water Authority (GAFCWA). The objectives of this assessment were 1) to identify all potential contaminants within the area that contribute water to each drinking water source, and 2) to prioritize the potential contaminants' influence upon each drinking water source. This assessment evaluated contaminants that may enter the groundwater supplying GAFCWA's drinking water sources. With this information, GAFCWA may develop an effective source water protection program.

### **Well Drilling Techniques**

State law requires drillers to have a valid rig permit and a Water Well Drillers License. They must also give the state and homeowner a copy of the Water Well Completion report. This report describes where, when, and how the well was constructed. However, when a new well is drilled, no state requirements for construction materials, yield, or quality apply. Pennsylvania is second among all states in the number of residences served by private water wells, with more than a million households relying on private wells. But Pennsylvania is among just four states that do not have private water well construction standards. Poor well construction is increasingly the prime suspect in the presence of bacterial contamination. A properly constructed well minimizes the threat of contamination entering the well, and keeps people healthy who otherwise might get sick from their own well water.

A few local and county governments have adopted standards for private water supplies (e.g. Chester and Montgomery counties). Those rules and regulations have established minimum standards for the location, construction, modification or abandonment of water

wells and installation; required a permit for the construction of a water supply including production wells, test wells, test borings, and monitoring wells, and/or the installation of pumping equipment; and required a license for well contractors and pump installation contractors. Mortgages associated with federal housing may require certain water analyses for the well. Other lending institutions also may have sampling requirements. But for the most part, private well owners must take responsibility for their own water quality and for maintaining their well.

### **Groundwater Management Plans**

Groundwater management plans provide a thorough understanding of the basin's hydrogeologic characteristics to protect and improve water supply reliability. The plan should address existing and anticipated quantity and quality groundwater problems and management issues, recommend a series of actions needed to ensure the sustainability of the basin's groundwater resources, and address impacts on the resource, including those from growth and development, droughts, current and past mining, transfers out of watersheds, unknown and unregulated uses, and management measures. Components of the plan may include monitoring, as well as identification of wellhead protection areas and appropriate areas for development of groundwater models.

### Water Supply Plans

The goal of a water supply plan is to provide a guidance document for municipal officials and local planners, water suppliers, and other interested groups to follow and implement as they address water supply needs for the municipality. The water supply plan provides basic information and the direction needed to make planning decisions to provide residents with safe, adequate, and reliable drinking water at reasonable cost.

These plans inventory and evaluate available data and information on water systems and service areas. Results are compared to existing water system capabilities and future water need. Water system overviews for each community water system include estimates of water demands, identification of potential deficiencies, formulation of water supply alternatives, presentation of preliminary cost estimates for the selected alternatives, and recommendations for implementing improvements. Water systems need to provide an adequate supply of water, treatment capacity, treated storage capacity, and fire flow. The plan presents recommendations on supply-side and demand-side options.

### **Storm Water Management Plans**

Storm water discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during precipitation events. Changes in watershed hydrology due to growth and development directly impact the availability and quality of water resources. For example, in areas where residents depend on wells for their drinking water supply, underground aquifers can be depleted because of increasing demand from new development and an associated decrease in infiltration as impervious surfaces replace natural land cover. Changes in watershed hydrology include:

- Increases in storm water flows and flooding;
- Decreases in infiltration and groundwater recharge;
- Reduction in stream networks due to storm water conveyances channeling water away from developing areas;
- Lowering of stream base flows and groundwater levels;
- Increased contaminant loading to streams and groundwater;

Proper storm water management efforts attempt to minimize the above problems by addressing not only the quantity of storm water produced, but also the quality of the storm water and the amount of water that is lost from the watershed. PA DEP promotes a comprehensive watershed approach to storm water management to improve water quality and quantity through the use of best management practices (BMPs). The storm water management approaches integrate existing planning and regulatory requirements to reduce pollutant loads to streams, recharge aquifers, maintain stream base flows, prevent stream bank erosion, and protect the environmental integrity of receiving waters.

The types and degree of BMPs that are prescribed in the watershed plan are based on the expected development pattern and hydrologic characteristics of each individual watershed. The final product of the Act 167 watershed planning process is a comprehensive and practical implementation plan and storm water ordinance developed with a firm sensitivity to the overall needs (e.g. financial, legal, political, technical, etc.) of the municipalities in the watershed.

### Integrated Water Resources Plan

Integrated Water Resource Plans (IWRPs) provide guidance to balance land use and growth that is consistent with the sustainability of aquifers and streams. Objectives outlined in IWRPs should be consistent with Pennsylvania's State Water Plan (Act 220) and should recognize storm water, water quality, and aquatic resource issues. IWRPs are very comprehensive and include components of other water resource related plans, such as Act 167 storm water management plans, groundwater management plans, wellhead protection areas, and water conservation. Water supply and wastewater planning needs are a component of the plan. The IWRP should allow a county to understand needs and opportunities within its watersheds, as well as present recommendations for improving and sustaining resources.

### Water Conservation Plan

The benefits of implementing water conservation concepts throughout a water supply service area are many and should be carefully examined. Saving water will save money for consumers on their water, sewer, and water heating bills. Demand for water has a pronounced impact on the environment by lowering stream flows, depleting groundwater aquifers, and in certain cases, requiring the impoundment of free flowing streams or the diversion of water from one drainage basin to another. Reducing per capita water use will decrease the amount of wastewater generated, and thereby, maintain the operating efficiency of treatment plants over a longer period of time. Reducing water consumption will reduce operating costs for utilities, and will delay costly capital improvements. When compared to the cost of expanding existing facilities or developing new water sources, the most cost-effective alternative is conservation.

Pennsylvania's current water conservation program emphasizes education and guidance to reduce water use at the local level. PA DEP offers guidelines for designing a water conservation program. Under the provisions of recent legislation, the State Water Plan (Act 220), water conservation will continue as a voluntary program. The act establishes a formal program to promote voluntary water conservation and water use efficiency practices for all water users. As a resource to municipalities, PA DEP will create a Water Resources Technical Assistance Center to promote the use and development of water conservation and water use efficiency education, and technical assistance programs. The Act also authorizes grants for water resources education and technical assistance.

### Land Development and Zoning Ordinances

The most significant challenge for preserving future water resource goals is growth patterns and activities on land. The decisions on planning for growth are made at the local level. Local officials have the most direct influence on water resources through their authority to regulate land use. The Pennsylvania Municipalities Planning Code grants authority to municipalities to regulate development activity through subdivision and land development ordinances and zoning ordinances. Many of the water resources protection strategies outlined in the previous section can be incorporated into both regulatory ordinances.

For example, the subdivision and land development ordinances may require that a development site plan include a specific amount of land for parkland, which could be part of a groundwater preservation area strategy. Site design standards that promote pervious surface designs (i.e. porous pavement) or the stockpiling of designs for materials that may be sources of potential contaminants can help protect groundwater by controlling runoff and contaminants that could potentially pollute the underlying aquifer.

Maps of specific features, such as critical aquifer recharge areas or wellhead protection areas can be compared to a municipality's zoning map creating an overlay zoning district. Where important water resource features coincide with specific zoning types, conditional uses are added to the basic requirements of the zoning district in which the water resources feature is located. Using vehicle fueling, maintenance and storage areas as an example, these uses located in a wellhead zone 2 district would need a containment system for collecting and treating all runoff from such areas and preventing the release of fuels, oils, lubricants, and other automotive fluids into soil, surface water, or groundwater.

### **Chapter 7 - Downtown Greencastle**

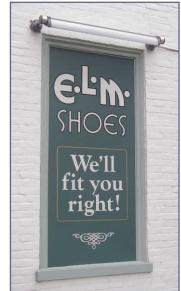
Although this comprehensive plan has been developed on a regional level, this plan element speaks specifically to Downtown Greencastle. The downtown area of Greencastle is unique in form and function, and as such, has tremendous potential to serve as the central point of commerce and social activity for the region. The historical character that is evident in the downtown adds to its attractiveness as a local and heritage destination. This plan is designed to lay the groundwork for the revitalization of the borough and to enhance its level of significance.

### Goal: Downtown Greencastle

Maintain and enhance the downtown area of Greencastle Borough so that it serves as an attractive and functional central business district that contains a mix of residential, commercial, and civic uses, and supports the surrounding Greencastle-Antrim community.

### Objectives

- Determine priority areas in downtown Greencastle to target for rehabilitation and redevelopment.
- Work with the Greencastle-Antrim Chamber of Commerce to encourage a business friendly atmosphere, to attract and retain a variety of businesses to locate in pedestrian scaled storefronts.
- Encourage the highest and best use of structures in the downtown ensuring that they are occupied with commercial or residential uses, or if unoccupied, are kept in good condition through maintenance, window treatments, and window displays.
- Attract a variety of visitors to the downtown including students, working adults, and retired adults, by offering a variety of retail stores and services.
- Enhance pedestrian accessibility, connectivity, and safety between the downtown and surrounding neighborhoods and amenities.
- Encourage the identification, documentation, and preservation of historic resources in the downtown.
- Support infill and redevelopment of properties in a context sensitive manner that preserves the character of the downtown.
- Develop design guidelines for properties in the downtown.
- Encourage visual and aesthetic improvements to the downtown including streetscape improvements, landscaping, gateway improvements, lighting, and general façade improvements.



### **SWOT Analysis**

As part of the planning process, it is helpful to analyze the current conditions of the downtown through an analysis of strengths, weaknesses, opportunities, and threats (SWOT). Classifying current conditions in the downtown as a strength or weakness, and grouping external factors based upon whether they are considered an opportunity or a threat can help to provide an organized picture of the current state of the borough, and provide an indication of where the borough may be headed, should these trends continue. Following the SWOT analysis, a plan can be formed that will capitalize upon opportunities and ensure the continuance of the strengths of the downtown, while addressing the weaknesses and defending against any potential threats.



### Strengths

#### Existing Development Patterns

Because Greencastle was established before automobile dominance, the compact pattern of development does not require that residents or visitors use an automobile as their mode of travel. Pedestrian scale development affords residents the opportunity to reach a variety of destinations in the downtown within a relatively short distance of one another. Compact patterns of development are also more energy efficient if older structures.

patterns of development are also more energy efficient, if older structures are kept up to code.

### Structural Design

The age of many of the structures in the downtown warrants investigation into their historical relevance. Their design reflects a quaint, small town, community feeling that accentuates the character of the downtown. Documenting historical significance and design characteristics will ensure that the character of the downtown is preserved as necessary rehabilitation, infill, and redevelopment occur.



### Pedestrian Friendly Amenities

In addition to the existing development patterns that encourage pedestrian movement, the borough has taken steps to improve the square in the downtown with enhanced pedestrian amenities. These improvements, including wide sidewalks, pedestrian scaled street lamps, benches, trash receptacles, and plantings help to increase the friendliness of the downtown for pedestrians. These features create a welcoming environment and encourage increased pedestrian movement.



#### Old Home Week and Other Events

Greencastle has the potential to draw a large number of people to the downtown area through events such as Old Home Week. These events encourage residents and visitors to frequent the downtown, thereby increasing the livelihood of the community and providing an increased customer base for downtown businesses. Old Home Week is unique in that its events are held at numerous locations throughout the downtown and the borough as a whole, encouraging increased pedestrian movement and vitality.

#### Weaknesses

### Lack of People

Locations that have people are perceived as safe and inviting, and will, in turn, attract more people. Although people are drawn to Greencastle during events, the downtown is not as lively with pedestrian activity when people are not given a special reason to go downtown. The lack of pedestrian activity puts a damper on the atmosphere in the downtown, and can also hurt local businesses that depend on foot-traffic to succeed. This may also indicate that residents are not drawn to the existing business climate in the downtown, and that the types of businesses they desire are not available in the downtown.



### Parking and Drive Through Uses

Parking is seen as an issue in many boroughs and downtowns, and people tend to think that additional parking would encourage more people to come downtown. However, often the problem is not a lack of parking, but rather, a poor use of existing parking resources. Such is the case in Greencastle. Analyzing a map of existing parking opportunities shows that there are plenty of on-

street and off-street parking opportunities available in proximity to the downtown. To improve upon this weakness, the borough should encourage shared parking between different uses, and implement a system of signage that directs people to public parking areas.

- Also related to parking is the placement of parking facilities. Although many of the parking areas are located to the rear of buildings, which is desirable, there are some areas where parking consumes a large portion of the street frontage. These areas may be better suited to accommodate a structure, with a defined entrance and exit to the parking area on the interior of the lot, behind the structure.
- There are also uses in the downtown, such as the bank, that have drive-through establishments and further encourage use of the automobile. Automobile dominated uses are not considered appropriate to locate in the downtown.

### Lack of an Organization to Champion Downtown Revitalization

The borough currently lacks an organized group to champion downtown revitalization. The borough is served by the Greencastle-Antrim Chamber of Commerce, but this organization focuses on economic development for the entire region, rather than focusing specifically on the downtown. Downtown Greencastle could benefit from an organization that focuses on all aspects of revitalizing the downtown including promotions, design, and economic restructuring, in addition to bringing together the business owners and the community.

### Vacant Buildings / Vacant Storefronts

Vacant buildings in the downtown can detract from its appeal, and vacant storefronts in occupied buildings can have the same effect.

The borough should work with property owners and business owners to encourage them to decorate and maintain their storefront windows. Currently, there are several buildings in the downtown that are vacant or appear vacant because of vacant storefront windows. This can detract from the appeal of the downtown by making it seem less inviting. If the business does not offer a product that can be easily advertised or displayed in a storefront window, consider allowing the school district or a community organization to decorate the window.

### Opportunities

#### Location of Nearby Community Facilities

Downtown Greencastle is located in proximity to several community facilities including the library, Greencastle-Antrim School Campus, and Jerome King Park. The Allison-Antrim Museum and Tayamentasachta Environmental Center are also located within a short distance. The proximity of these places lend Greencastle to being more walkable. Pedestrians are able to walk from the downtown to one of the community facilities stated above, and reach multiple destinations within one walking trip.

### Regional Location

Greencastle Borough is located in the center of Antrim Township, and is completely surrounded by the township. Although the borough is nearly built out and has seen only minimal growth in the past years, the township has seen considerable residential and commercial growth in the past decade. As such, Downtown Greencastle has an opportunity to serve as the anchor for the region, and provide the goods and services that these residents may currently have to travel to Hagerstown or Chambersburg for. In order to ensure successful revitalization, the borough must be proactive in attracting the types of businesses that can serve the needs of the Greencastle-Antrim region.



#### Civil War History

Greencastle Borough has a very rich history, much of which can be tied to the Civil War. The borough has an opportunity to attract heritage tourists by accentuating these resources and making them available for the public to enjoy. Heritage tourists typically stay longer and spend more money than other types of tourists; the borough may benefit from attracting this customer base, if it can provide adequate amenities including overnight accommodations with hotels or bed and breakfasts, restaurants and cafes, historical places of significance, and retail shopping.

#### Infill and Redevelopment

There are a few vacant lots in the borough that pose opportunities for infill and redevelopment. There are also structures within the borough that do not conform to the existing character, and may be able to be renovated to better represent downtown Greencastle. As infill and redevelopment occurs, the borough should ensure that new development coming in conforms to the existing character of the structures in the downtown, by maintaining similar size, building height, and setbacks. In order to ensure infill and redevelopment that conforms to the existing character of the downtown, it will be necessary that the borough review and update its ordinances to make sure that it is encouraging the type of development that it would like to see. The borough should also be proactive in communicating with property owners and developers to discuss desired design styles. The post office is one example of a building that does not fit in with the character of the downtown, but offers an opportunity for renovation.



Post Office - Out of Character

#### Threats

#### Proximity of Major Transportation Corridors

The proximity of I-81, U.S.11 and S.R.16 has resulted in increased truck traffic through the downtown area of Greencastle, as trucks traveling between these two parallel north-south routes do not have an alternate route except to go through the borough via Baltimore Street. Although increased truck traffic can threaten the character of the downtown and the safety for motorists and pedestrians, the proximity of these two major routes also can be seen as an opportunity, as the borough is easily accessible to residents coming into the downtown.



Post Office – Potential Transformation

### Sprawling Development

Although the downtown has an opportunity to provide goods and services for the Greencastle-Antrim region, increased suburban style development may also threaten its existence. If the downtown is unable to meet the needs of the residents, the region is likely to see an increase in strip malls, and suburban style commercial development that will attract motorists from the township, thus drawing them away from the downtown. It will be necessary for Greencastle Borough to effectively market the downtown so that residents moving into the surrounding area are aware of what the downtown has to offer.

### Property Maintenance

The borough has an abundance of historic resources and historic structures, but as these structures age, it will be important that the borough work with property owners to ensure their continued maintenance and upkeep. Poorly maintained structures can lead to conditions that are less aesthetically pleasing, and can have a negative impact on the surrounding properties and the entire street block.

### Planning for Downtown Greencastle

Downtown or central business district revitalization should be thought of as an on-going, multi-faceted process that involves the energy, enthusiasm, experience, and efforts of a committed group of volunteer stakeholders including business owners, residents, community groups, and local officials working together on multiple issues to achieve one common vision for the downtown. Although it is beyond the scope of this plan to develop a detailed strategic plan for the revitalization of Downtown Greencastle, following the analysis above, this plan will provide recommendations that the borough may consider to begin a successful revitalization program. Much of the information included in this plan is derived from principles established by the National Trust for Historic Preservation's Main Street Approach.

### The Main Street Approach

The Main Street Approach is a comprehensive community revitalization strategy for downtowns that pairs historic preservation with economic development to encourage downtowns to prosper. The approach is based upon four points which work together to encourage revitalization and sustainability. Eight principles serve as a philosophical tool to support the four points. As described by the National Trust for Historic Preservation, the four points are listed below.

### Four Points

- Organization
  - Organization involves getting everyone working toward the same goal and assembling the appropriate human and financial resources to implement a Main Street revitalization program. A governing board and standing committees make up the fundamental organizational structure of the program. Volunteers are coordinated and supported by a paid program director. This structure divides the workload, clearly delineates responsibilities, and builds consensus and cooperation among the various stakeholders.
- Design
  - Design means getting Main Street into top physical shape. Capitalizing on its best assets, such as historic buildings and pedestrian oriented streets, is just part of the story. An inviting atmosphere, created through attractive window displays, parking areas, building improvements, street furniture, signs, sidewalks, street lights, and landscaping, conveys a positive visual message about what the downtown has to offer. Design activities also include instilling good maintenance practices, rehabilitating historic buildings, encouraging appropriate new construction, developing sensitive design management systems, and long term planning.
- Promotion
  - Promotional efforts sell a positive image of the commercial district and encourage consumers and investors to live, work, shop, play, and invest in the Main Street district. By marketing a district's unique characteristics to residents, investors, business owners, and visitors, an effective promotional strategy forges a positive image through advertising, retail promotional activity, special events, and marketing campaigns carried out by local volunteers. These activities improve consumer and investor confidence in the district and encourage commercial activity and investment in the area.
- Economic Restructuring
  - Economic restructuring strengthens a community's existing economic assets while expanding and diversifying its economic base. The Main Street program helps to sharpen the competitiveness of existing business owners and recruits compatible new businesses and new economic uses to build a commercial district that responds to today's consumers' needs. Converting unused or underused commercial space into economically productive property also helps boost the profitability of the district.

### Eight Principles

- In addition to the four points, the approach stresses the importance of the eight guiding principles listed below throughout implementation.
- Comprehensive
  - Revitalization activities should occur in each of the four points, rather than adopting one single focus.

#### Incremental

- Basic and simple activities will demonstrate to the community that new things are happening. Communities are often more likely to realize success when carrying out a simple activity than trying to tackle complex and ambitious projects from the start.
- Self-help
  - Local leaders must have the will and desire to mobilize local resources and commit to revitalization.
- Partnerships
  - Both the public and private sectors have a vital interest in the downtown and must work together.
- Identifying and capitalizing on existing assets
  - Downtowns must identify and capitalize upon existing assets and unique qualities.
- Quality
  - Emphasize quality over quantity to squash negative images of the downtown.
- Change
  - A carefully planned revitalization program will require changes in attitudes and processes, and will help to shift any negative public perceptions.
- Implementation
  - Frequent, visible results will serve as a constant reminder that revitalization is occurring.

### The Main Street Program and Utilizing the Main Street Approach in Downtown Greencastle

In Pennsylvania, the Department of Community and Economic Development (DCED) operates and funds the Main Street Program, which applies the four points of the Main Street Approach. Although the borough is not enrolled in DCED's official Main Street Program, there are certain aspects of the Main Street Approach that the borough can undertake to take develop a comprehensive approach to downtown revitalization and sustainability. These items have been organized as strategies based on the four points of the Main Street Approach. Although the bern organized as strategies based on the four points of the Main Street Approach.

### Organization

- Develop a comprehensive, multi-year fundraising plan both to support ongoing organizational expenses, and to implement specific downtown programs and projects.
  - In order to ensure successful downtown revitalization, it will be essential that the organization consider its long term financial sustainability from the onset. The organization will need funds to implement specific programs and projects, as well as funds to support the ongoing operation of the organization. Developing a fundraising plan involves considering all potential funding sources, determining which of these sources will be most effective, following through and securing funds, and evaluating the process to determine where adjustments are needed.
- Coordinate, support, recognize, and manage volunteer and other resource development to ensure maximum benefits and effectiveness.
  - Volunteers are often an overlooked component of downtown revitalization efforts. Volunteers provide much needed labor and/or resources, through donated products, machinery, equipment, knowledge, or services. It is important that the revitalization organization consider where and how volunteers can help a project or program, and actively solicit people and/or resources to fill these needs. Successful coordination of available resources involves appropriately matching volunteers and/or resources with needs and making sure that people are placed in areas or on projects where their contributions will be most valuable. Having a coordinated system in place will demonstrate to the volunteers and to the community that the organization functions smoothly and that the revitalization effort is well planned and well thought out.
  - Once someone makes a commitment to become involved, it is important that the volunteer receives the support that he or she needs. The level of support needed may vary from volunteer to volunteer, but there are several things that the organization can do to ensure that support is available. The support system may include giving the volunteer a person that they can contact with any questions; confirming the volunteer's availability and expectations, or resource contribution prior to the time that it is needed; checking in with them, if possible, while they are volunteering; and following up with volunteers after their volunteer experience to ask for their feedback on the process and overall experience. Coordination and support

also relate to making sure that volunteers are given appropriate tasks, not only by seeing that they are not asked to do something that is impossible or that they are not able to do, but also making sure that they are not placed in a situation where they are not needed. Placing volunteers appropriately will help them to feel that they are making a valuable and meaningful contribution.

Just as important, if not more important than coordinating and supporting volunteers, is recognizing their efforts. Recognizing volunteer contributions will let the volunteers know that their efforts are appreciated, and will encourage them to stay involved. It can also help to keep up the momentum for the downtown revitalization effort and attract additional volunteers. There are a variety of ways to recognize volunteers including saying thank you, presenting awards or certificates for outstanding volunteers, making sure that media involvement includes highlights of not only the program or project, but also the volunteer contributions, or publicly thanking the volunteers by listing their name or organization on a website or in a newsletter.

### Develop a communication plan to ensure the consistent flow of accurate information both internally within the downtown revitalization organization(s) and externally throughout the community and region.

- Effective communication will be necessary to ensure that all interested parties, and the public, are able to receive the information that is required for the organization to operate effectively, and for the downtown revitalization effort to move forward. In order to reach everyone, it will be necessary to consider a variety of mediums for communicating, connecting, and posting information, including the internet, emails, printed information that is distributed, printed information that is posted in a common location, and verbal communication.
- The communication plan should identify who needs to receive what information, and how that information will be distributed. It will be necessary to distinguish between internal information that allows the organization to function and its members to stay connected, and external information that is publicized throughout the community. The latter is geared more towards marketing the organization and providing information about the organization to interested stakeholders, potential members, or funding organizations.

#### Develop a comprehensive management plan for the organization to ensure ongoing success and sustainability.

- Immediately following the establishment of the organization, it is imperative to determine how it will operate and how it will be managed. Effective management includes aspects of communication, coordinating and organizing volunteers and resources, and funding, but the management plan should also involve making sure that these three aspects work together and that the revitalization effort, as a whole, is properly managed and planned for. As with any successful planning effort, the management plan should involve data collection and analysis, prior to the development of strategies, and should be reviewed and updated periodically.
- Short Term Focus on determining how the organization will operate, and on data collection and interpretation to understand the current state of the downtown.
  - Complete the Pennsylvania Downtown Center's downtown profile. This will help the community document existing conditions in the downtown, and determine what "next steps" are appropriate.
- Mid Term Determine what downtown revitalization approach the borough will pursue, based on the data collected.
  - Investigate the level of local interest, support, and capacity for moving beyond the Main Street four point approach and pursuing full Main Street Program designation. If the borough determines that it wants to pursue Main Street Program designation, funding and technical support may be available to help with the revitalization program, including the funding of a manager or coordinator.
- Long Term Focus on the long term sustainability of the organization. Determine the level of interest for creating a Business Improvement District (BID) for the downtown area.
  - A BID allows a modest fee to be assessed on all taxable property within the downtown. Generally, money generated through a BID may be used for improvements to the business district, allowing property owners to enjoy a safer and more attractive downtown. Possible improvements include street lighting, street cleaning, street maintenance, security service, improved recreational equipment, facilities or public spaces, planting of trees and other landscaping, sidewalk maintenance, and placement of waste receptacles or recycling bins.

### Design

- Pursue a coordinated streetscape improvement effort for Baltimore Street, Carlisle Street, and other important corridors that exist within the core commercial area of Greencastle.
  - Streetscape projects typically involve a variety of aesthetic improvements that are designed to increase the appeal of the downtown or central business district. Such improvements may include decorative street lighting, brick or specialty paved sidewalks or accents, specialized crosswalks, on-street parking, street trees, landscaping, utility line relocation, and the placement of street furniture, such as benches and trash receptacles. Many of the physical improvements are designed at the scale of the pedestrian, as opposed to the scale of the automobile. This helps to create a pedestrian friendly environment and encourages additional pedestrian movement in the downtown. Traffic calming measures may also be included as part of a streetscape project, helping to decrease vehicle speeds and increase awareness of pedestrians in the downtown. Altogether, streetscape improvements can lead to increases in the real and perceived safety of the street for pedestrians and motorists, in addition to aesthetic improvements and an improved retail environment.

### Develop a comprehensive downtown parking strategy and management plan.

- Parking is often a topic that is highly debated in a downtown setting. One of the common misconceptions is that there is not enough parking available in the downtown, and that the lack of parking is prohibiting the downtown from being as vibrant and successful as it could be, if additional parking opportunities were available. Often compounding the problem are stringent offstreet parking requirements that are based on suburban parking standards, and prohibit new businesses from locating downtown as lot sizes and configurations are unable to accommodate large amounts of off-street parking. In many cases, further analysis of parking in the downtown reveals that there are many parking opportunities available; it is just that the available parking is marked as private, or that people visiting the downtown are unaware of the location of available parking. Additionally, if business owners and their employees are parking on the street in front of their businesses, on street parking will always be limited and may in turn, hinder the level of business.
- Often, the actual problem is not a lack of parking, but poor management of the existing parking resources. In order to successfully manage parking resources, it is necessary to evaluate existing conditions, implement short term improvements, and develop a long term plan for the management of parking facilities in the downtown.
- Develop a plan to create, enhance, and maintain sustainable public spaces and public amenities in the downtown.
  - Public spaces can take on a variety of forms. They may include courtyards, plazas, pocket parks, community gardens, and benches, among other things. Different public spaces may be used for different purposes in the downtown. Additionally, the same public space may be used for different purposes throughout the day. A public space gives a business owner or worker a place to go that is away from the business, but still downtown, for lunch or a break. A pocket park may be used by parents and their children when they frequent the



downtown for shopping or other reasons. Plazas can serve as a venue for events or music. Community gardens allow residents to connect with each other and enhance the natural environment. Public spaces draw people, and places where people congregate are often perceived as being safe. This in turn draws more people downtown. It is important though, that adequate safety measures are incorporated into the design of public spaces. They should be welcoming and well lit to discourage improper use or delinquent behavior.

- Establish a design improvement program for enhancements to downtown properties, buildings, or businesses to include technical and financial assistance, incentives, and recognition.
  - In addition to larger design projects, such as a streetscape project or projects that involve public spaces or public amenities, design enhancements to individual structures or buildings within the downtown can also help to improve the appearance of the downtown and further the revitalization effort. This type of design enhancement is dependent on the property owner, which is often a private individual or business owner. Establishing a design improvement program can encourage individuals to



make improvements to properties in the downtown and build momentum for the revitalization effort.

A design improvement program for enhancements to downtown properties, buildings, or businesses may include technical assistance, financial assistance, incentives, and recognition. Technical assistance may be in the form of suggestions for improvements, pairing property owners with contractors or other industry professionals, or a volunteer group of citizens that assists with improvements through donated labor or equipment. Financial assistance may be in the form of a tax abatement or similar program, or through grants or low interest loans. Incentives can be in the form of financial incentives, or by educating the property owner and/or business owner on the positive effects that design improvements can have on a business, e.g. encouraging additional people to frequent the downtown and increasing the customer base. People appreciate being recognized for their hard work. After enhancements have been made, consider recognizing the business or property owner by holding a ribbon cutting ceremony, involving the press, or by presenting a plaque or certificate documenting the improvement.

Incorporate appropriate infill and redevelopment design standards into zoning and subdivision and land development ordinances for buildings, uses, parking, signs, etc. for the downtown and central business district.



Vacant Lot

enhances the existing character of these areas.

and orientation; parking supply and locations; sign sizes and lighting standards; and sidewalks, street trees, and pedestrian improvements, among other things. Municipalities can incorporate appropriate infill and redevelopment principles and standards into local building and development plans and ordinances to ensure that new development

Infill and redevelopment within the downtown involves the siting and design of new buildings, uses, parking, signs, and other improvements on vacant or underutilized lots within an established area such as a downtown or central business district. New buildings and development in these areas should occur in a manner that is consistent, compatible, and reflects the uses and design of the surrounding

built environment. Elements contributing to the character of these areas include the types and location of permitted uses; building types, heights, footprints,

**Transformation of Vacant Lot** 

### Promotion

- Develop a marketing program to include image and brand development that will promote the downtown as the "place to be" to live, work, shop, and play.
  - A key component to any downtown revitalization program will be marketing the downtown, and its businesses and events, to consumers and the public. Although marketing the downtown is closely related to marketing the revitalization organization, the two are distinctly different; this strategy refers to marketing the downtown. Marketing can be thought of as the ongoing process of moving people closer to making a decision to purchase, use, follow, or conform to someone else's products, services, or values. At the onset, the marketing program should focus on branding the downtown and enhancing its image. Branding includes creating a unique identity for the downtown, increasing awareness of the downtown, generating community preference, and developing customer loyalty. Aspects of branding include the development of a logo and slogan and incorporating these items into various published materials or products. Understanding the image that the downtown currently conveys, and that which is desired, is key to effectively developing the brand. In turn, the brand should be used to enhance the overall image of the downtown - the way that others perceive the downtown. Image building promotion should be an ongoing campaign that is designed to combat negative perceptions and build a positive image for the downtown.

- In order to effectively market the downtown, it is necessary to have an understanding of market segments. The primary market refers to those who use the downtown businesses for convenience, e.g. Starbucks focuses their business and their business locations on their appeal for being convenient for customers. The secondary market refers to people who are looking to comparison shop, and typically frequent malls, jewelers, galleries, etc. The tertiary market refers to a destination market. This strategy focuses on making the downtown a destination and bringing outsiders in, as well as increasing awareness of the opportunities available downtown to residents in the community. The overall promotions strategy should focus on marketing the characteristics of the downtown to shoppers, investors, new businesses, tourists, and others, to capture each of the markets.
- It is also important that the marketing program incorporate aspects of both advertising and public relations. Advertising is a paid message, and as such, lets the purchaser control the content. Public relations involves seeking publicity or responding to media requests. Because public relations involves someone else writing about the downtown, it conveys a sense of truthfulness and credibility, and is more cost effective; however, it is not always possible to control the content.

### Provide coordinated advertising, visual merchandising, and vacant store front enhancement assistance.

This strategy focuses on promoting the downtown and enhancing its image through advertising and visual improvements to downtown windows and storefronts. Vacant buildings detract from the downtown, as do vacant or boarded storefront windows. These spaces contain an enormous amount of opportunity and will impact the image of the downtown, either positively or negatively. Developing a program to assist business or building owners with enhancing store front windows with displays, advertising, and visual merchandising will provide the mechanism for storefront enhancement that will add to the appeal of the downtown or the community. Visual merchandising displays and good advertising can help to attract new customers and pull people in off of the street. The window may also serve as a space for local works of art or seasonal decorating displays. Another key aspect to consider is lighting of storefront windows or window displays. Lit windows will make the downtown more inviting in the evening hours, even if the business is not open. A nicely decorated window will also add to the appeal of the street for pedestrians in the downtown.

### Sponsor business recognition and community pride events and activities to celebrate existing and new business in the downtown as well as the overall revitalization effort within the community and region.

- Recognizing people for their efforts and their contributions to the downtown revitalization effort will help to enhance pride in the downtown and the community, and keep up the momentum for downtown revitalization. This strategy involves highlighting new and existing businesses through various means including press releases, presenting awards, ribbon cuttings, open house events, and announcements in publications or on a website. Welcome new businesses to the downtown and let the public know they are open for businesses by announcing their arrival or holding events such as an open house or a ribbon cutting ceremony. Highlight existing businesses and increase awareness of the different types of businesses in the downtown, e.g. maintain a "business of the month" column in a newsletter or on a website. Also consider working with the local press to see if they will highlight downtown businesses through a "business of the month" column that is published on a regular day each month, e.g. the first Friday.
- In addition to highlighting new or existing businesses, recognize businesses for their efforts to contribute to the revitalization effort. This can be done through awards, or publicly recognizing and thanking the business and/or business owner. Consider distributing small tokens of appreciation such as trophies, prizes, gifts, or special awards to acknowledge the contributions of specific businesses to the revitalization effort. Involving the media in the presentation of the award will also help to shine light on the business and the revitalization effort as a whole. Consider awards for expansions, renovations, building or design improvements, window enhancements, extended hours, or other contributions to the revitalization effort.
- Coordinate the planning and execution of business promotional and community events to maximize resources and effectiveness, and minimize conflicts with other regional events.
  - Community events and special events add to the character of the downtown and help to bring life to the community and the downtown revitalization effort by giving people a reason to come to the downtown. Coordinating downtown promotional events with community events will help to enhance the visitors' experiences by giving them additional things to do downtown. It will also help to increase awareness of the types of businesses that are downtown, and generate additional sales for the businesses. Even if people choose not to purchase something while at a community event, the business has gained exposure, and there is a greater chance that the customer will return at another time.

Promotional events may be coordinated with annual special events, or with regular or seasonal events, such as high school football games that are held in a nearby neighborhood. By using the community calendar of events, businesses can plan promotional events that coincide with certain community or special events, and design their promotions to appeal to the types of people that are expected to be traveling to the downtown for a certain community or special event. Additionally, if multiple businesses can be encouraged to hold promotional events at the same time, this increases the likelihood that people will travel downtown specifically for the promotions.

### **Economic Restructuring**

### Conduct a market assessment and cluster analysis of the business climate in the downtown.

- The market assessment and cluster analysis will help the revitalization organization, business owners, and all interested stakeholders gain a better understanding of how the downtown functions as a result of existing conditions. These tools are a mechanism for collecting and presenting data that, when interpreted, will help everyone understand the type of people that frequent and make purchases in the downtown, where they are coming from, and when they shop. It will also help provide insight on what the downtown can support, versus what is desired. This information can also serve as a starting point for developing a brand and marketing the downtown.
- A market assessment refers to the collection of data on the current business environment in a community, and the assembly of this information into a format that is understandable to the community. The components of a market assessment provide an indication of the existing downtown business climate. The next step, a market analysis, refers to the mathematical manipulation and interpretation of the data collected in the market assessment in a way that depicts the business opportunities and business needs of the downtown. The market analysis is a step towards developing a business plan for the downtown to deal with the identified needs and promote the opportunities to new and existing businesses.
- Business clustering refers to the grouping together of a mix of businesses such that each business is put in a position to benefit from the others' sales, customers, and markets. Clustering provides customers with a broad selection and variety at a single, convenient location and enables them satisfy a number of shopping needs in one trip. It allows a business district to function as a single economic unit, instead of a series of unrelated destination businesses. It increases spending in the downtown as the appropriate mix of businesses will offer more goods and services that appeal to target shoppers. It also increases impulse buying among clustered stores that offer complimentary goods. Following a market assessment and analysis, a business clustering plan can be developed that involves identifying existing businesses and available commercial space, the types of clusters and locations that might be appropriate for the downtown, and identifying specific types of businesses and their optimal placement, given the available space.

### Create a business recruitment, retention, and expansion strategy (and corresponding marketing plan) based on current market assessment information.

- After collecting and analyzing data collected as part of a market assessment and market analysis, the next step is to create a strategy for business retention and business recruitment. Although business retention and business recruitment go hand in hand in the downtown revitalization effort, retaining existing businesses is thought to be more efficient, in terms of time and value, than recruiting new businesses. Attracting new businesses may seem more exciting, but getting the existing businesses to "buy in" to the revitalization effort, and encouraging them to stay and/or expand, will help to set the stage for improving the economic climate in the downtown, and will in turn, help with business recruitment.
- The market assessment and cluster analysis should be used to determine the types of businesses that should be targeted for expansion or relocation within or into the downtown. The organization should also determine if a certain niche market exists in the downtown that can be capitalized upon in the revitalization effort. A niche refers to specialization that allows a business district to gain dominance in certain categories of the retail market. A niche can be based on a variety of things, including a particular group of customers, specific kinds of goods or services, a specific shopping environment, or a specific industry or corporation.
- The strategy for recruiting new businesses should focus on capitalizing upon market opportunities. The types of businesses that are recruited should strengthen the economic base of the downtown by filling gaps in the existing business mix. In order to successfully recruit appropriate new businesses, it will be essential to develop a marketing plan to attract new businesses. In addition to printed materials, it is pertinent that someone is available to answer questions about the market in the downtown and about available locations.

- Develop an entrepreneurial and business development assistance system both to provide direct technical and financial assistance, and to connect business owners with appropriate resources within the region's existing economic development network.
  - To ensure successful revitalization, it will be essential that existing businesses and new businesses just starting up are able to receive the support that they need to be successful. Businesses that are in different operational stages will need different types of assistance, and it is important that the revitalization organization be able to offer support to businesses in all stages.
  - Businesses that are just starting up may need assistance with training employees or developing a business plan. Another business that has experienced success may be looking to expand its market or change its location to gain more space. Businesses that are struggling to keep up with the market may need assistance identifying ways to improve their image, dip into a new product line, or recover from financial trouble. It will be necessary that the revitalization organization work with the businesses and offer them the support that they need to create a stable economy in the downtown.

### Identify investment opportunities to engage interested developers and investors in rehabilitating key downtown properties.

The market assessment and analysis will help to identify vacant properties in the downtown, and properties that are in need of rehabilitation or redevelopment. This strategy involves further analysis of these properties, to determine which properties hold the greatest potential for the downtown and the factors that contribute to their potential, whether it is a characteristic of the property, or something in the surrounding environment. Each vacant or dilapidated structure poses an opportunity for the downtown, and each property is unique in the level of effort that is needed to maximize its benefit to the downtown. Some properties may need structural improvements, while others may just need a new coat of paint. Other properties may need to be demolished, and replaced with appropriate infill or redevelopment. It is important to document the needs of each property, in addition to the opportunities that are presented by their location or built features. These opportunities should then be used to market these properties to developers and investors, to convince them that their investments in these properties will not only be beneficial for the downtown revitalization effort, but will be profitable for them as well.

### **Appendix 1 - Community Background Information**

### **Historic Population Trends**

Communities constantly change as the residents mature and marry, have children, and go through the various life stages. In addition, people are continually moving to and from the community. By studying demographic trends, a community can better understand the changes taking place and plan for the future needs of its residents. This section provides a picture of regional and municipal growth trends and changes that are affecting the Greencastle-Antrim area now, and are likely to affect it in the future. Analyses of population and socioeconomic trends, coupled with an analysis of housing provides a context for making decisions about land use and the nature and intensity of development to be either encouraged or discouraged.

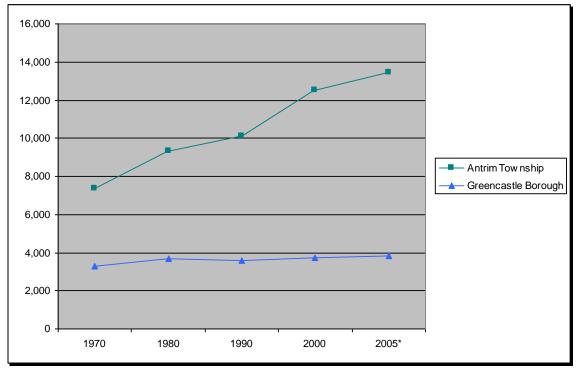


Figure 1-1: Historic Population of Antrim Township and Greencastle Borough, 1970-2005

Sources: U.S. Census Bureau; Greencastle-Antrim Chamber of Commerce

### Table 1-1: Historic Population Counts and Trends

	1970 Total	1980 Total	1970- 1980 % Change	1990 Total	1980- 1990 % Change	2000 Total	1990- 2000 % Change	2005 est.	2000- 2005 % Change	1970- 2005 % Change
Pennsylvania	11,793,909	11,863,895	0.59	11,881,643	0.15	12,281,054	3.36	12,429,616	1.21	5.39
Franklin County	100,833	113,629	12.69	121,082	6.56	129,313	6.80	137,409	6.26	36.27
Greencastle-Antrim School District	10,671	13,005	21.87	13,707	5.40	16,226	18.38	17,297	6.60	62.09
Antrim Township	7,378	9,326	26.40	10,107	8.37	12,504	23.72	13,459	7.64	82.42
Greencastle Borough	3,293	3,679	11.72	3,600	-2.15	3,722	3.39	3,838	3.12	16.55

\* 2005 data are U.S. Census Bureau population estimates

Source: U.S. Census Bureau; Greencastle-Antrim Chamber of Commerce

### State and County Statistics and Trends

- Population growth has been minimal in Pennsylvania since 1970.
- During the 1970s and the 1980s, population growth in the state was nearly stagnant. Population growth increased slightly in the 1990s, when the state saw a 3.36% increase in population. Between 2000 and 2005, it is estimated that the state increased its population by 1.21%.
- The population of Franklin County increased the most in the 1970s. During the 1980s and 1990s, the rate of growth was still more than twice that of the state, but was only half of the growth rates experienced in the 1970s. Growth between 2000 and 2005 has almost matched the growth that occurred between 1990 and 2000. If the rate of growth continues in the second half of the decade, the rate of growth will be similar to that which occurred during the 1970s.

### Greencastle-Antrim School District and Municipal Trends

- The Greencastle-Antrim School District grew much more rapidly than the state in each decade, and grew more rapidly than the county in both the 1970s and the 1990s. Growth between 2000 and 2005 exceeded growth that occurred in the 1980s, but is slightly behind pace to match the rate of growth that occurred in the 1990s.
- Growth that occurred in the school district was a reflection of the growth that occurred in Antrim Township.
- Antrim Township grew at a faster rate than the county in each decade, increasing its population by over 80% between 1970 and 2005.
- Greencastle Borough lost population during the 1980s, after seeing an 11.72% increase in population in the 1970s. During the 1990s, the borough increased their population by 3.39%. The total population increase for Greencastle Borough was 16.55% between 1970 and 2005.

### **Population Projections**

The 2020 population projection for Antrim Township is from Antrim Township's Act 537 Update, June 2006, written by BRINJAC Engineering, Inc. The methodology to determine the 2020 population projections for Antrim Township is shown below:

- 26,203= 13,081 + (450 + 4,541) \* 2.79 (Average Household Size from 2000 Census)
  - It is estimated that 450 development EDUs are constructed during the period from July 2004 to April 2006.
  - It is estimated that the 4,541 new development EDUs will be built by 2026

Based on the above calculations and assuming a steady population growth rate (610 new persons added/year), Antrim Township is projected to have a population of 22,541 by 2020.

The 2020 population projection for Greencastle Borough was provided by Franklin County Planning Department. Based on the limited potential for further expansion within borough, the 2020 population projection is consistent with current development trends.

#### Table 1-2: Population Projections

Municipality Name		Census <sup>1</sup>		Estimated Population	Population Projections	
	1980	1980 1990 2000		1-Jul-04 <sup>2</sup>	2020	
Antrim Township	9,356	10,107	12,504	13,081	22,541	
Greencastle Borough	3,679	3,600	3,722	3,756	3,814 <sup>4</sup>	
Greencastle-Antrim School District	13,005	13,707	16,226	16,837	26,203 <sup>3</sup>	

<sup>1</sup> Source: U.S. Census Bureau

<sup>2</sup> Source: U.S. Census Bureau, 2004 Population Estimate (July 1, 2004)

<sup>3</sup>26,203= 13,081 + (450 + 4,541) \* 2.79 (Average Household Size from 2000 Census)

It is estimated that 450 development EDUs are constructed during the period from July 2004 to April 2006. It is estimated that the 4,541 new development EDUs will be built by 2026.

Source: Antrim Township Act 537 Plan, BRINJAC Engineers, 2006

<sup>4</sup> Year 2020 Projections provided by Franklin County Planning Department

### Age Composition of the Population

Classifying the population of a community by age indicates what particular facilities, services, or housing types may be needed. An area in which a high percentage of the population is comprised of senior citizens will express different needs than an area which contains a lot of families with small children or an area in which there are a lot of single working adults. Examining the distribution of the population across the different age cohorts will give an indication as to which types of facilities and services will be needed by the community now and in the future. Examining the change in the composition of the population over a period of time will provide an indication of how the population is changing and will help to define socioeconomic trends.

### Table 1-3: Median\* Age of the Population, 2000

	Both sexes	Male	Female
Pennsylvania	38	36.5	39.4
Franklin County	38.3	37	39.5
Antrim Township	36.1	35.8	36.4
Greencastle Borough	40.9	39	42.2

\*Median Age was not available at the school district level Source: U.S. Census Bureau

#### Trends

- The median age of residents in Franklin County in 2000 was slightly above the state median age.
- The median age of residents in Antrim Township was lower than the median age of residents in Franklin County.
- The median age of residents in Greencastle Borough was higher than the median age of residents in Franklin County.

 Table 1-4: Age Composition of the Population, 1990

Age	Pennsyl	ylvania Franklin County		Greencastle- Antrim School District		Antrim Township		Greencastle Borough		
	Total	%	Total	%	Total	%	Total	%	Total	%
Under 5	797,058	6.71	8,018	6.62	994	7.25	789	7.81	205	5.69
5 to 9	788,301	6.63	8,239	6.80	918	6.70	757	7.49	161	4.47
10 to 14	755,161	6.36	8,110	6.70	897	6.54	706	6.99	191	5.31
15 to 19	818,058	6.89	8,980	7.42	1,036	7.56	792	7.84	244	6.78
20 to 24	863,007	7.26	8,190	6.76	962	7.02	680	6.73	282	7.83
25 to 29	920,217	7.74	9,360	7.73	1,177	8.59	867	8.58	310	8.61
30 to 34	992,239	8.35	9,585	7.92	1,135	8.28	876	8.67	259	7.19
35 to 39	923,018	7.77	9,330	7.71	1,089	7.94	818	8.09	271	7.53
40 to 44	821,849	6.92	8,647	7.14	963	7.03	733	7.25	230	6.39
45 to 49	656,083	5.52	7,349	6.07	901	6.57	661	6.54	240	6.67
50 to 54	557,762	4.69	5,988	4.95	750	5.47	565	5.59	185	5.14
55 to 59	552,378	4.65	5,863	4.84	654	4.77	484	4.79	170	4.72
60 to 64	607,406	5.11	5,925	4.89	642	4.68	460	4.55	182	5.06
65 to 69	590,557	4.97	5,705	4.71	537	3.92	318	3.15	219	6.08
70 to 74	479,464	4.04	4,481	3.70	451	3.29	258	2.55	193	5.36
75 to 79	361,306	3.04	3,431	2.83	302	2.20	176	1.74	126	3.50
80 to 84	225,943	1.90	2,114	1.75	195	1.42	115	1.14	80	2.22
85 +	171,836	1.45	1,767	1.46	104	0.76	52	0.51	52	1.44

Source: U.S. Census Bureau

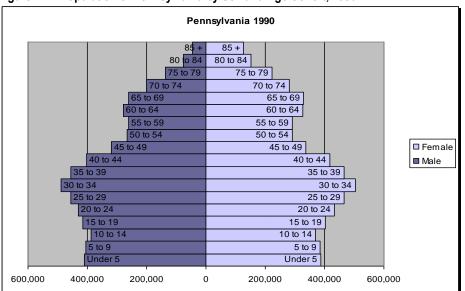
### Table 1-5: Age Composition of the Population, 2000

Age	Pennsylvania		Franklin (	Franklin County		Greencastle- Antrim School District		Antrim Township		Greencastle Borough	
	Total	%	Total	%	Total	%	Total	%	Total	%	
Under 5	727,804	5.93	8,087	6.25	1,008	6.21	817	6.53	191	5.13	
5 to 9	827,945	6.74	8,677	6.71	1,223	7.54	994	7.95	229	6.15	
10 to 14	863,849	7.03	8,902	6.88	1,275	7.86	1,062	8.49	213	5.72	
15 to 19	850,986	6.93	8,660	6.70	1,070	6.59	863	6.90	207	5.56	
20 to 24	746,086	6.08	7,006	5.42	792	4.88	581	4.65	211	5.67	
25 to 29	732,701	5.97	8,123	6.28	999	6.16	761	6.09	238	6.39	
30 to 34	827,785	6.74	8,716	6.74	1,187	7.32	933	7.46	254	6.82	
35 to 39	951,400	7.75	9,799	7.58	1,386	8.54	1,123	8.98	263	7.07	
40 to 44	996,676	8.12	9,891	7.65	1,384	8.53	1,085	8.68	299	8.03	
45 to 49	908,650	7.40	9,284	7.18	1,210	7.46	936	7.49	274	7.36	
50 to 54	796,382	6.48	8,484	6.56	1,042	6.42	811	6.49	231	6.21	
55 to 59	619,969	5.05	7,116	5.50	924	5.69	697	5.57	227	6.10	
60 to 64	511,656	4.17	5,817	4.50	739	4.55	546	4.37	193	5.19	
65 to 69	480,656	3.91	5,520	4.27	592	3.65	414	3.31	178	4.78	
70 to 74	488,616	3.98	5,240	4.05	566	3.49	389	3.11	177	4.76	
75 to 79	422,311	3.44	4,483	3.47	408	2.51	229	1.83	179	4.81	
80 to 84	290,015	2.36	3,056	2.36	264	1.63	157	1.26	107	2.87	
85 +	237,567	1.93	2,452	1.90	157	0.97	106	0.85	51	1.37	

Source: U.S. Census Bureau

### **Population Pyramids**

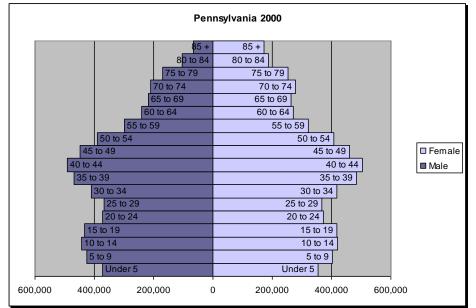
Figures 1-2 through 1-11 lists the total number of people in a certain age cohort at a certain time. The overall composition of the population is best viewed using population pyramids. The pyramid graphically depicts the distribution of the population in the various age groupings. By comparing the population pyramids at two different times, in this case the 1990 and 2000 censuses; one can see how the composition of the population has changed. By comparing population pyramids of two or more geographic locations, one can see spatial differences in the composition of the population and determine how the composition of the local population compares to the composition of the population on a county or statewide scale.



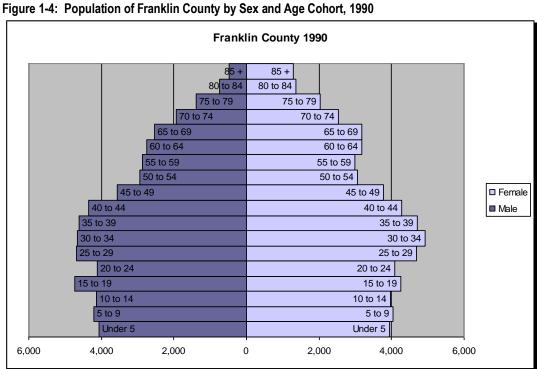
#### Figure 1-2: Population of Pennsylvania by Sex and Age Cohort, 1990

Source: U.S. Census Bureau

### Figure 1-3: Population of Pennsylvania by Sex and Age Cohort, 2000

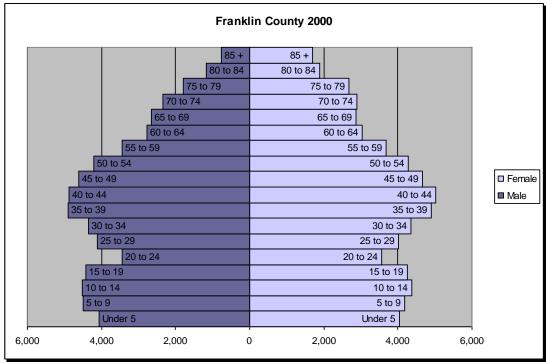


Source: U.S. Census Bureau



Source: U.S. Census Bureau

### Figure 1-5: Population of Franklin County by Sex and Age Cohort, 2000



Source: U.S. Census Bureau

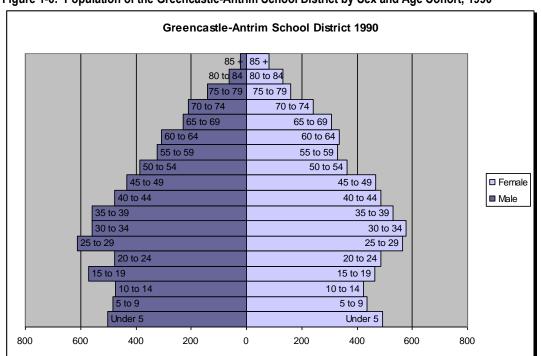
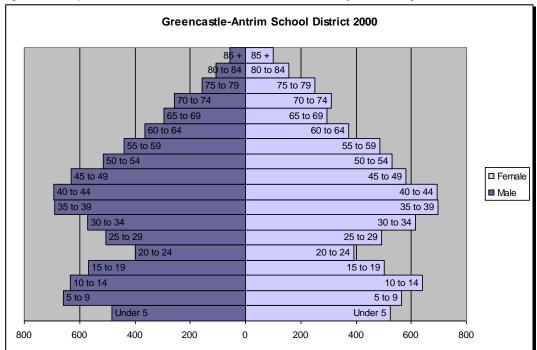


Figure 1-6: Population of the Greencastle-Antrim School District by Sex and Age Cohort, 1990

### Figure 1-7: Population of the Greencastle-Antrim School District by Sex and Age Cohort, 2000



Source: U.S. Census Bureau

Source: U.S. Census Bureau

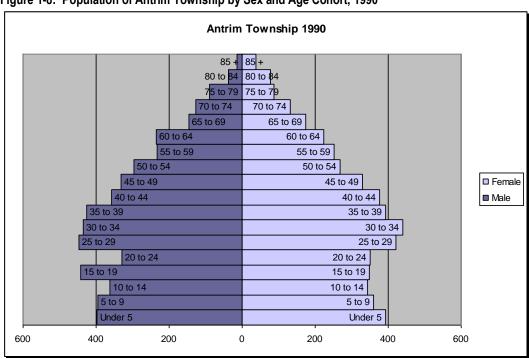
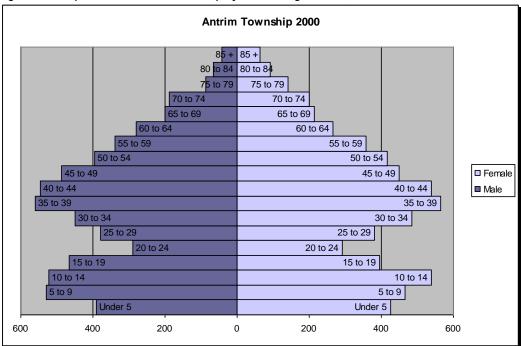


Figure 1-8: Population of Antrim Township by Sex and Age Cohort, 1990

Source: U.S. Census Bureau

Figure 1-9: Population of Antrim Township by Sex and Age Cohort, 2000



Source: U.S. Census Bureau

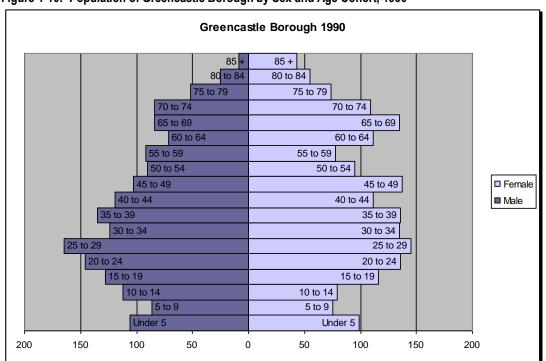
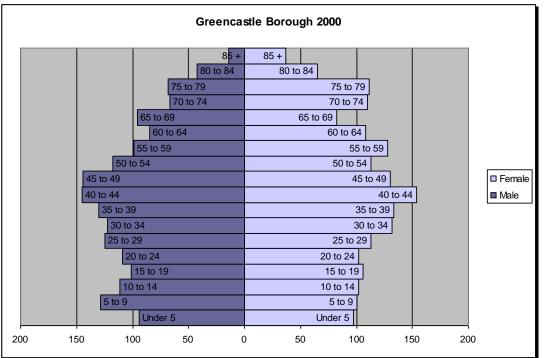


Figure 1-10: Population of Greencastle Borough by Sex and Age Cohort, 1990

Source: U.S. Census Bureau





Source: U.S. Census Bureau

### Pennsylvania Statistics and Trends

- Comparisons of the 1990 and 2000 population pyramids for Pennsylvania show little change. The population is growing minimally.
- The number of older adults in Pennsylvania increased between 1990 and 2000, while the percentage of young adults, mainly those in their twenties, declined.
- There were also fewer youth under age five in 2000 than there were in 1990.

#### Franklin County Statistics and Trends

- The population pyramids for Franklin County closely resemble the state population pyramids, indicating similar trends. However, in Franklin County, the number of adults in their thirties and forties is increasing, as is the number of children under 14.
- Similar to the state, the number of older adults also increased between 1990 and 2000, while the percentage of young adults, mainly those in their twenties, declined.

#### Greencastle-Antrim School District and Municipal Statistics and Trends

- The composition of the population in the Greencastle-Antrim School district changed dramatically between 1990 and 2000. The changes almost appear as an exaggerated version of the changes that occurred in the county population pyramid. Where increases occurred at the county level, they are accentuated at the school district level. In cases where decreases in the number of individuals in a certain age group are apparent at the county level, these changes are even more noticeable at the school district level.
- The shape of the population pyramid for the school district is highly influenced by the composition of the population in Antrim Township, considering that the population of the township is three times greater than the population of the borough.
- Antrim Township saw a greater shift in the composition of the population between 1990 and 2000 than that which occurred in the county. Not only can increases in the overall population be seen, but the relative increase in the amount of families with children is also apparent.
- Similar to the state and the county, Antrim Township experienced a decrease in the relative percentage of young adults. However, in Antrim Township, it appears that the population of young adults rebounds slightly following traditional college years of the 20-24 age grouping.
- The composition of the population in Greencastle Borough changed the least of the various geographies that were considered in this portion of the analysis. The shape of the pyramid for Greencastle Borough in both 1990 and 2000 was much more uniform than Antrim Township or the county in that there were no distinct "bubbles" or "holes" in the population. The baby boom is still visible, but is much less apparent than in the other locations.
- Greencastle Borough also has a smaller relative percentage of children, and a greater relative percentage of young adults than Antrim Township. The largest segment of the population of Greencastle Borough in 1990 was 25-29. In 2000, 40-44 year olds represented the largest segment of the population.

### Educational Attainment

Data relating to educational attainment are presented according to the highest level of attainment. Therefore, someone who received an Associates Degree before going on and completing a Bachelors Degree would only be counted as having attained a Bachelors Degree, as opposed to being represented as having attained all other levels prior to attaining a Bachelors Degree. Data on educational attainment can provide an indication of how the region compares to the rest of the county or the state. It can also be linked to employment and other socioeconomic statistics.

#### High school 9th to 12th Graduate or Bachelor's Less than diploma Some college, Associate grade, no professional 9th grade (includes degree no degree degree diploma degree equivalency) Total % 1.253.111 412.931 Pennsylvania 741.167 9.41 15.92 3.035.080 38.55 1.017.897 12.93 5.24 890.660 11.31 522.086 6.63 Franklin County 10,621 13.32 13,806 17.32 34,056 42.72 8,263 10.36 3,102 3.89 5,861 7.35 4,019 5.04 Greencastle-Antrim School 5.28 45.67 1,023 11.49 369 District 1,173 13.18 1,367 15.36 4,065 433 4.87 470 4.15 11.06 Antrim Township 863 13.52 978 15.32 2,961 46.39 706 265 4.15 357 5.59 253 3.96 Greencastle 4.49 Borough 310 12.32 389 15.45 1,104 43.86 317 12.59 168 6 67 113 116 4.61

Table 1-6: Highest Level of Educational Attainment for the Population Age 25 and Over, 1990

Source: U.S. Census Bureau

#### High school Some high Graduate or graduate Less than Some college, Associate **Bachelor's** school, no Professional (includes 9th grade no degree degree degree diploma Degree equivalency) Total % 452,069 694,248 Pennsylvania 5.47 1,044,036 12.63 3,150,013 38.11 1,284,731 15.54 487,804 5.90 1,153,383 13.95 8.40 Franklin County 6.246 7.10 12.291 13.97 39.522 44.93 12.791 14.54 4.114 4.68 7.744 8.80 5.251 5.97 Greencastle-Antrim School District 629 5.78 1,355 12.46 5,367 49.34 1,738 15.98 495 4.55 800 7.35 494 4.54 Antrim Township 513 6.25 1.079 13.14 4,036 49.16 1,384 16.86 319 3.89 536 6.53 343 4.18 Greencastle 4.35 10.34 49.89 354 13.27 176 6.60 9.90 116 276 1,331 264 151 5.66 Borough

### Table 1-7: Highest Level of Educational Attainment for the Population Age 25 and Over, 2000

Source: U.S. Census Bureau

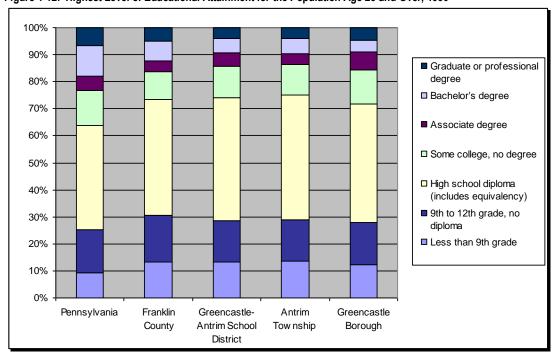


Figure 1-12: Highest Level of Educational Attainment for the Population Age 25 and Over, 1990

Source: U.S. Census Bureau

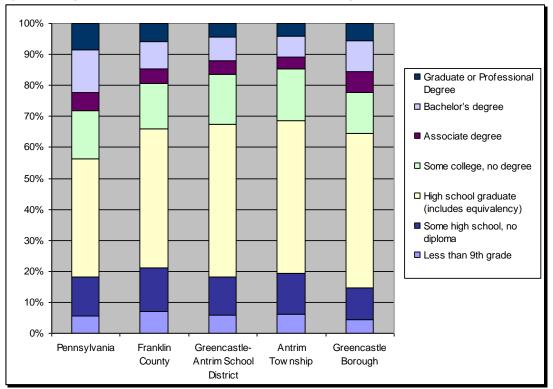


Figure 1-13: Highest Level of Educational Attainment for the Population Age 25 and Over, 2000

Source: U.S. Census Bureau

### Pennsylvania Statistics and Trends

- In Pennsylvania, there were greater percentages of adults age 25 and over with a higher education in 2000 than in 1990. Increases occurred in the percentages of adults with some college, an associate's degree, a bachelor's degree, and a graduate or professional degree.
- The percentage of adults age 25 and over with less than a high school diploma decreased.

### Franklin County Statistics and Trends

- Similar to the Commonwealth, Franklin County saw the percentage of individuals with a level of education beyond high school increase between 1990 and 2000.
- Franklin County had a larger percentage of people with less than a high school diploma than the state, and a higher percentage of people that had graduated high school. The percentage of people with an education beyond high school was lower in the county than the state in both 1990 and 2000.

### Greencastle-Antrim School District and Municipal Statistics and Trends

- In the Greencastle-Antrim School District and both of the comprising municipalities, there are lower percentages of individuals with less than a high school diploma than in the county.
- Between 1990 and 2000, the percentages of people with a Bachelor's Degree or Graduate or Professional Degree increased, while the percentage of people who had attained an Associate's Degree as their highest level of attainment decreased.
- The percentage of people with less than a high school diploma also decreased, while the percentage of people who were considered to be high school graduates increased.
- There are larger percentages of high school graduates in the school district, Antrim Township, and Greencastle Borough than there are in the county or the state. Residents whose highest level of educational attainment is a high school diploma account for nearly half of the residents (age 25 or over) in each geographic area.

### **Household Income**

The U.S. Census Bureau defines a household as all of the people who occupy a housing unit as their usual place of residence. This section will analyze the median household income and its change over time, considering both the absolute change, and the change that results when the amounts are adjusted to account for inflation. The median represents the middle value (if the total number of values is an odd number) or the average of two middle values (if the total number of values is an even number) in an ordered list of data values. The median divides the total frequency distribution (total list of values) into two equal parts: one-half of the cases fall below the median and one-half of the cases exceed the median. A median value was not available at the school district level.

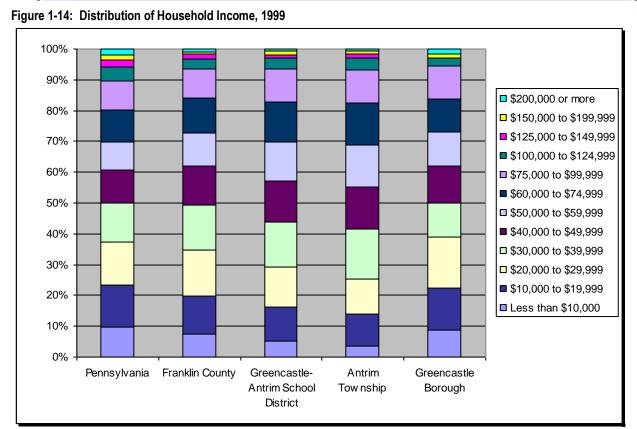
Household income data can be analyzed with data on the value of housing and other factors to determine the economic stability of an area and if adequate, affordable housing opportunities exist.

#### Table 1-8: Median Household Income, 1989-1999

	Median household income in 1989	Median household income in 1989 adjusted*	Median household income in 1999	1989- 1999 % Change	1989 adjusted*- 1999 % change
Pennsylvania	29,069	38,952	40,106	37.97	2.96
Franklin County	28,806	38,600	40,476	40.51	4.86
Antrim Township	31,153	41,745	46,050	47.82	10.31
Greencastle Borough	28,036	37,568	40,031	42.78	6.56

Source: U.S. Census Bureau

\* 1989 values have been adjusted using the Consumer Price Index to account for inflation.



Source: U.S. Census Bureau

### Pennsylvania Statistics and Trends

- When considering the affects of inflation, the median household income in Pennsylvania rose nearly 3% between 1989 and 1999.
- In general, the range of household incomes across the state is very wide and fairly balanced. Approximately 50% of the households in Pennsylvania saw an annual income of less than \$40,000 and 50% saw an annual income of greater than \$50,000.

### Franklin County Statistics and Trends

- Between 1989 and 1999, the median household income rose by 4.86% in Franklin County, which was a greater rate than Pennsylvania. In 1989, Franklin County has a lower median household income than the state; in 1999, the county had a higher median household income.
- Franklin County had a higher percentage of families making \$20,000 to \$75,000 than the state. The state had higher percentages of families with a household income less than \$20,000 and greater than \$75,000.

### Greencastle-Antrim School District and Municipal Statistics and Trends

- The median household income in Antrim Township was higher than the state and county median values in both 1989 and 1999, while the median household income in Greencastle Borough was lower than the state and county median values in both years.
- The percentage increase in the median value, when adjusted for inflation, was greater in both Antrim Township and Greencastle Borough than the county and state increases.
- There are no extreme discrepancies between the distributions of households based upon level of income in the different geographies represented.

# Per Capita Income

Per capita income represents an average obtained by dividing aggregate income by the total population of an area. Analyzing per capita income can provide an indication of the financial well-being of the population.

# Table 1-9: Per Capita Income, 1989-1999

	Per capita income in 1989	Per capita income in 1989 adjusted*	Per capita income in 1999	1989- 1999 % Change	1989 adjusted*- 1999 % change
Pennsylvania	14,068	18,851	20,880	48.42	10.76
Franklin County	13,060	17,500	19,339	48.08	10.51
Antrim Township	12,444	16,675	18,590	49.39	11.48
Greencastle Borough	14,385	19,276	22,844	58.80	18.51

Source: U.S. Census Bureau

\* 1989 values have been adjusted using the Consumer Price Index to account for inflation.

# Pennsylvania Statistics and Trends

When considering inflation-adjusted values, the per capita income in Pennsylvania increased by 10.76% between 1989 and 1999.

# Franklin County Statistics and Trends

The per capita income in Franklin County was slightly lower than that of Pennsylvania in 1989 and 1999. The percentage increase of inflation-adjusted values was also slightly lower, 10.51% as compared to the 10.76% increase in the state.

# Greencastle-Antrim School District and Municipal Statistics and Trends

- The per capita income in Antrim Township was slightly lower than the county and the state in 1989 and 1999, while the per capita income in Greencastle Borough was slightly higher during these years.
- The percentage increase in per capita income, when considering inflation-adjusted values was higher in both Antrim Township and Greencastle Borough between 1989 and 1999. Antrim Township saw an 11.48% increase and Greencastle Borough saw a 18.51% increase in the per capita income.

# Poverty

Following the Office of Management and Budget's (OMB's) Directive 14, the U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level." The official poverty thresholds do not vary geographically, but they are updated for inflation using the Consumer Price Index. The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps).

For this analysis, the amount of people classified as having an income that is considered to be below the poverty level was examined in 1989 and 1999 across different age groups. The analysis looked at three age groups specifically: children under the age of 18; adults considered to be in their "working years" aged 18-64; and senior citizens and those of retiree age, 65 years or older. The percentage of people in poverty in the region was compared with the percentage of people in poverty in the county and the state.

Table 1-10: Individuals C	onsidered		low the Pov	erty Leve	, 1909			
	Under 18	years	18 to 64	18 to 64 years 65 years and Total below over poverty level		-		
	Total	%	Total	%	Total	%	Total	%
Pennsylvania	432,227	3.75	668,307	5.79	183,095	1.59	1,283,629	11.13
Franklin County	3,487	2.95	4,613	3.90	1,705	1.44	9,805	8.29
Greencastle-Antrim School District	308	2.25	366	2.68	139	1.02	813	5.94
Antrim Township	158	1.57	222	2.20	85	0.84	465	4.61
Greencastle Borough	150	4.18	144	4.01	54	1.50	348	9.69
Source: U.S. Census Bureau								

Table 1-10: Individuals Considered to be below the Poverty Level, 1989

## Table 1-11: Individuals Considered to be below the Poverty Level, 1999

	Under 18 years		18 to 64 years		65 years and over		Total below poverty level	
	Total	%	Total	%	Total	%	Total	%
Pennsylvania	421,745	3.55	718,277	6.05	164,095	1.38	1,304,117	10.98
Franklin County	3,125	2.48	4,785	3.80	1,664	1.32	9,574	7.59
Greencastle-Antrim School District	226	1.40	402	2.49	164	1.01	792	4.90
Antrim Township	158	1.27	265	2.13	83	0.67	506	4.06
Greencastle Borough	68	1.83	137	3.69	81	2.18	286	7.71

Source: U.S. Census Bureau

## **Pennsylvania Statistics and Trends**

- The total percentage of people below the poverty level in Pennsylvania decreased between 1989 and 1999 from 11.13% to 10.98%.
- Between 1989 and 1999, the percentages of children and senior citizens below the poverty level both decreased, while the percentage of people below the poverty level aged 18-64 years increased.
- 8 In Pennsylvania, poverty rates are the lowest among senior citizens.

# Franklin County Statistics and Trends

- Similar to the state, the percentage of people below the poverty rate decreased in Franklin County between 1989 and 1999. .
- Franklin County had a lower percentage of people below the poverty level in both 1989 and 1999 than the state.
- The percentage of people below the poverty level decreased in each age group examined.

#### Greencastle-Antrim School District and Municipal Statistics and Trends

The percentage of people considered to be below the poverty level decreased between 1989 and 1999 in both Antrim Township and Greencastle Borough.

- In both 1989 and 1999, Antrim Township had a lower percentage of people in poverty than the county or the state. The percentage of people below the poverty line in Greencastle Borough was higher than the county percentage, but lower than the state percentage in both years.
- In Greencastle Borough, adults aged 18-64 account for the greatest percentage of those considered to be below the poverty level in 1999, like the county and the state. This represents a change from 1989 in which children under 18 accounted for the largest segment of the population in poverty.
- In Greencastle Borough, the percentage of senior citizens in poverty increased between 1989 and 1999. In 1999, there were a higher percentage of senior citizens in poverty in the borough than in the county or the state.
- The Greencastle-Antrim School District had a lower percentage of people in poverty in both 1989 and 1999 than the county or the state.

# Location of Employment

Because Franklin County shares a border with Maryland, the location of residents' employment was analyzed to determine if people are leaving the county or state for employment, or if acceptable employment sources are located in Franklin County.

	Worked in county of residence		Worked outside county of residence		Worked outside State of residence	
	Total	%	Total	%	Total	%
Pennsylvania	4,006,525	74.91	1,110,200	20.76	231,407	4.33
Franklin County	45,395	76.69	5,569	9.41	8,225	13.90
Greencastle-Antrim School District	4,809	67.63	149	2.10	2,153	30.28
Antrim Township	3,399	64.94	90	1.72	1,745	33.34
Greencastle Borough	1,410	75.12	59	3.14	408	21.74

## Table 1-12: Location of Employment for the Employed Civilian Population, Age 16 or Over, 1990

Source: U.S. Census Bureau

## Table 1-13: Location of Employment for the Employed Civilian Population, Age 16 or Over, 2000

	Worked in county of residence		Worked outside county of residence		Worked outside state of residence	
	Total	%	Total	%	Total	%
Pennsylvania	4,023,014	72.40	1,275,522	22.96	257,775	4.64
Franklin County	44,473	71.76	6,279	10.13	11,221	18.11
Greencastle-Antrim School District	5,207	61.29	251	2.95	3,037	35.75
Antrim Township	3,892	59.32	195	2.97	2,474	37.71
Greencastle Borough	1,315	67.99	56	2.90	563	29.11

Source: U.S. Census Bureau

## Pennsylvania Statistics and Trends

The percentages of people working outside of the state and outside of their county of residence increased between 1990 and 2000.

## Franklin County Statistics and Trends

The percentage of people leaving the county and the state for employment increased in Franklin County between 1990 and 2000.

- Franklin County had a higher percentage of people leaving the state for employment than the state percentage, which is not surprising considering its location on the Mason-Dixon Line.
- The percentage of people leaving the county for employment, but staying in the state for employment was lower than the state percentage.
- The percentage of people who remained in the county for employment was higher than the state percentage in 1990, but fell behind the state percentage in 2000.

# Greencastle-Antrim School District and Municipal Statistics and Trends

- The percentage of the working population in the school district leaving the state for employment increased from 30.28% in 1990 to 35.75% in 2000.
- There is a greater percentage of workers leaving the state for employment in Antrim Township than in Greencastle Borough, but both municipalities have much higher percentages than the state and the county.
- The percentage of workers leaving the county for employment, but remaining in state, is much lower in the school district than in the county or the state.
- The percentage of workers remaining in Franklin County was lower in both Antrim Township and Greencastle Borough than the state or the county in 1990 and 2000. In Antrim Township, less than 60% of the workers were employed in Franklin County in 2000.

# Appendix 2 - Existing Land Use Study

Economic influences, development trends, cultural attitudes, and natural features of the landscape all contribute to the existing land use patterns in a community. As one of the major components of the comprehensive plan, the Existing Land Use Study provides important information regarding the general development patterns and characteristics of the Greencastle-Antrim area. Information collected in the inventory of existing land uses will be used in conjunction with other studies to form the basis of recommendations regarding future land uses in the Greencastle-Antrim area.

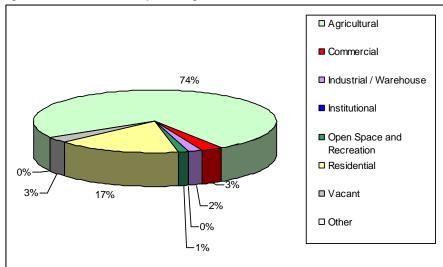
The following discussion and analysis describes the categories used to inventory and report existing land uses in the Greencastle-Antrim area. The existing land use pattern is graphically depicted in Appendix Maps 2-1 and 2-2. Efforts were made to develop similar categories to describe the use of the land in the township and the borough. Although it is important to maintain consistency when possible, the borough and the township, by their very nature, have unique development characteristics that differentiate them from one another. Existing land use of downtown Greencastle is shown on Appendix Map 2-3.

A list of existing land use categories was utilized in conjunction with tax parcel data and local knowledge of the area to develop a parcel based existing land use categorization in the township. Antrim Township Geographic Information Systems (GIS) data were used to map the specific parcels and show the spatial arrangement of land uses in the township. Land uses in the borough were categorized at the block level as parcel data were not available. The different blocks were mapped using Antrim Township GIS data to display the general arrangement of land uses in the borough.

Because the borough is unique in its arrangement and density of land uses, especially in the downtown area, Downtown Greencastle is analyzed separately in the Downtown Plan component of this comprehensive plan. Existing land uses as well as the location of other important community features such as sidewalks, street trees, and street lights, are shown and described in the plan for the downtown.

# **Composition of Land Uses**

The following tables and graphs show the types of land uses in the township and the borough and the relative amount of each type of land use compared to the rest of the municipality. The land uses and their locations in the township and borough are described in later sections.



# Figure 2-1: Antrim Township Existing Land Use

Source: Antrim Township, RETTEW Associates, Inc.

# Table 2-1: Antrim Township Existing Land Use

Land Use	Acres	% of Total Land Area
Agricultural - Agricultural with Commercial (10+ Acres)	48	0.11
Agricultural - General (10+ Acres)	31,792	74.00
Agricultural Total	31,840	74.00
Commercial - Bank	4	0.01
Commercial - Exempt	179	0.42
Commercial - General	600	1.40
Commercial - Motel, Hotel, Inn, Bed and Breakfast	19	0.04
Commercial - Office	13	0.03
Commercial - Other	76	0.18
Commercial - Public Utilities	309	0.72
Commercial - Restaurant	2	0.00
Commercial - Service Station	7	0.02
Commercial - Store	17	0.04
Commercial Total	1,226	2.85
Commercial - Warehouse	163	0.38
Industrial	691	1.61
Industrial / Warehouse Total	854	1.99
Institutional	0	0.00
Institutional Total	0	0.00
Open Space	12	0.03
Recreation	512	1.19
Open Space and Recreation Total	523	1.22
Residential - Apartments (<4 Units, <10 Acres)	52	0.12
Residential - Detached, Duplex (<10 Acres)	6,174	14.37
Residential - General (<10 Acres)	633	1.47
Residential - Mobile Home	30	0.07
Residential - Residential with Commercial (<10 Acres)	52	0.12
Residential Town House	12	0.03
Trailer - Doublewide	26	0.06
Trailer - Trailer with Land (one owner)	125	0.29
Residential Total	7,105	16.54
Vacant Lot (1-5 Acres)	237	0.55
Vacant Lot (<1 Acre)	75	0.17
Vacant land (10+ Acres)	1,071	2.49
Vacant Total	1,382	3.22
Other	34	0.08
Total	42,964	100.00

Source: Antrim Township, RETTEW Associates, Inc.

# Antrim Township Land Use Percentages

- Nearly three quarters of the land in Antrim Township is currently considered to be in agricultural use.
- Residential use accounts for approximately 17% of the land in the township, and commercial and industrial land uses together account for approximately 5% of the land in the township.

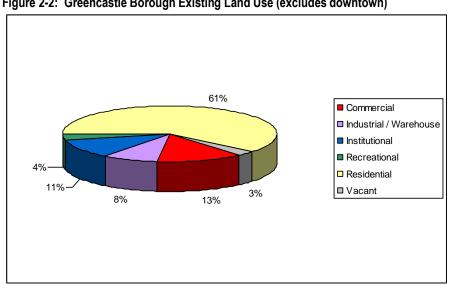


Figure 2-2: Greencastle Borough Existing Land Use (excludes downtown)

Source: Antrim Township, RETTEW Associates, Inc.

Table 2-2: Greencastle Borough Existing	Land Use (excludes downtown)
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L and Llag	Aaraa	% of Total Land
Land Use	Acres	Area
Commercial - Bank	2.6	0.29
Commercial - Exempt	7.21	0.81
Commercial - General	39.47	4.45
Commercial - Office	1.32	0.15
Commercial - Other	23.03	2.60
Commercial - Public Utilities	10.34	1.17
Commercial - Restaurant	6.49	0.73
Commercial - Service Station	6.14	0.69
Commercial - Store	19.7	2.22
Commercial Total	116.3	13.12
Commercial - Warehouse	2.56	0.29
Industrial	71.72	8.09
Industrial / Warehouse Total	74.28	8.38
Institutional	97.18	10.96
Institutional Total	97.18	10.96
Recreation	32.24	3.64
Recreation Total	32.24	3.64
Residential - Apartments (<4 Units, <10 Acres)	3.08	0.35
Residential - Detached, Duplex (<10 Acres)	453	51.08
Residential - General (<10 Acres)	62.09	7.00
Residential - Residential with Commercial (<10 Acres)	5.2	0.59
Residential Town House	9.89	1.12
Trailer - Trailer with Land (one owner)	7.78	0.88
Residential Total	541.04	61.01
Vacant Lot (1-5 Acres)	10.85	1.22
Vacant land (10+ Acres)	14.88	1.68
Vacant Total	25.73	2.90
Total	886.76	100.00
Source: Antrim Township, RETTEW Associates, Inc.		

# Greencastle Borough Land Use Percentages

- Approximately 60% of the total land in the borough, excluding the downtown, is being used for residential use.
- Commercial, industrial, and institutional land uses each account for approximately 10% of the land in the borough.
- Institutional uses are much more prevalent in the borough than in the township, which is not surprising considering the location of the Greencastle-Antrim school campus in the borough, as well as the various churches and religious facilities.

# **Categorization of Land Uses**

This section reviews the specific categories that were developed to classify land in the township and the borough. Each specific land use is noted under the broader categories of agricultural, residential, commercial, industrial/warehouse, institutional, vacant, and other, as discussed above.

# Agricultural

- <u>General Agricultural</u> land includes land that is being used for an agricultural purpose, contains more than 10 acres, and does not have a commercial business affiliated with the property.
  - There is no land in the borough classified as general agricultural, which is not surprising, but this use accounts for approximately 75% of the land in the township.
  - General agricultural land is located throughout the township, in all areas, and is separated by roadways and pockets of residential, commercial, or industrial development.
- <u>Agricultural with Commercial</u> land refers to land which is being used for agricultural purposes, but which also has a commercial business associated with it. Five properties in the township currently have this classification.

# Commercial

- The commercial land use classification is divided into specific categories that are more representative of the actual use that is occurring on the property. These categories include:
  - <u>Commercial Bank</u> including banks and financial institutions
  - <u>Commercial Exempt</u> which includes public or semi-public tax exempt commercial-type uses
  - <u>Commercial General</u> which does not have a specific use tied to the business or use on the property
  - Commercial Motel, Hotel, Inn, Bed and Breakfast and other travel or hospitality business that are in the business of overnight stays
  - <u>Commercial Office</u> including professional offices and personal services
  - <u>Commercial Other</u> which includes other types of commercial uses
  - <u>Commercial Public Utilities</u> which includes public utility structures or owned lands
  - <u>Commercial Restaurant</u> which includes eateries and taverns
  - <u>Commercial Service Station</u> which includes gas stations and convenience stores located onsite
  - <u>Commercial Store</u> which includes retail establishments
- In Antrim Township, the greatest amount of commercial land is considered to be commercial-general. Various commercial land classifications are located throughout the township, mostly in the areas surrounding Greencastle Borough and in the villages.
- In general, Greencastle Borough has a more diverse mix of commercial uses than the township.

## Industrial / Warehouse

- Commercial Warehouse Because of the nature of warehouses, although they are a commercial business, they are grouped into the industrial land use classification
  - Industrial land consists of industrial services, wholesale distributors, manufacturing operations, and similar uses.
  - Industrial land covers approximately 8% of the land in the borough, and approximately 1.6% of the land in the township.

# Institutional

<u>Institutional</u> land includes schools and other public or semi-public uses such as religious institutions and health care facilities.

# Open Space and Recreation

- <u>Open Space</u> includes undeveloped land that has been designated for open space. The open space may be associated with conservation by design type development.
- <u>Recreation</u> includes land designated for recreational uses including active and passive parks and commercial recreational facilities such as golf courses.

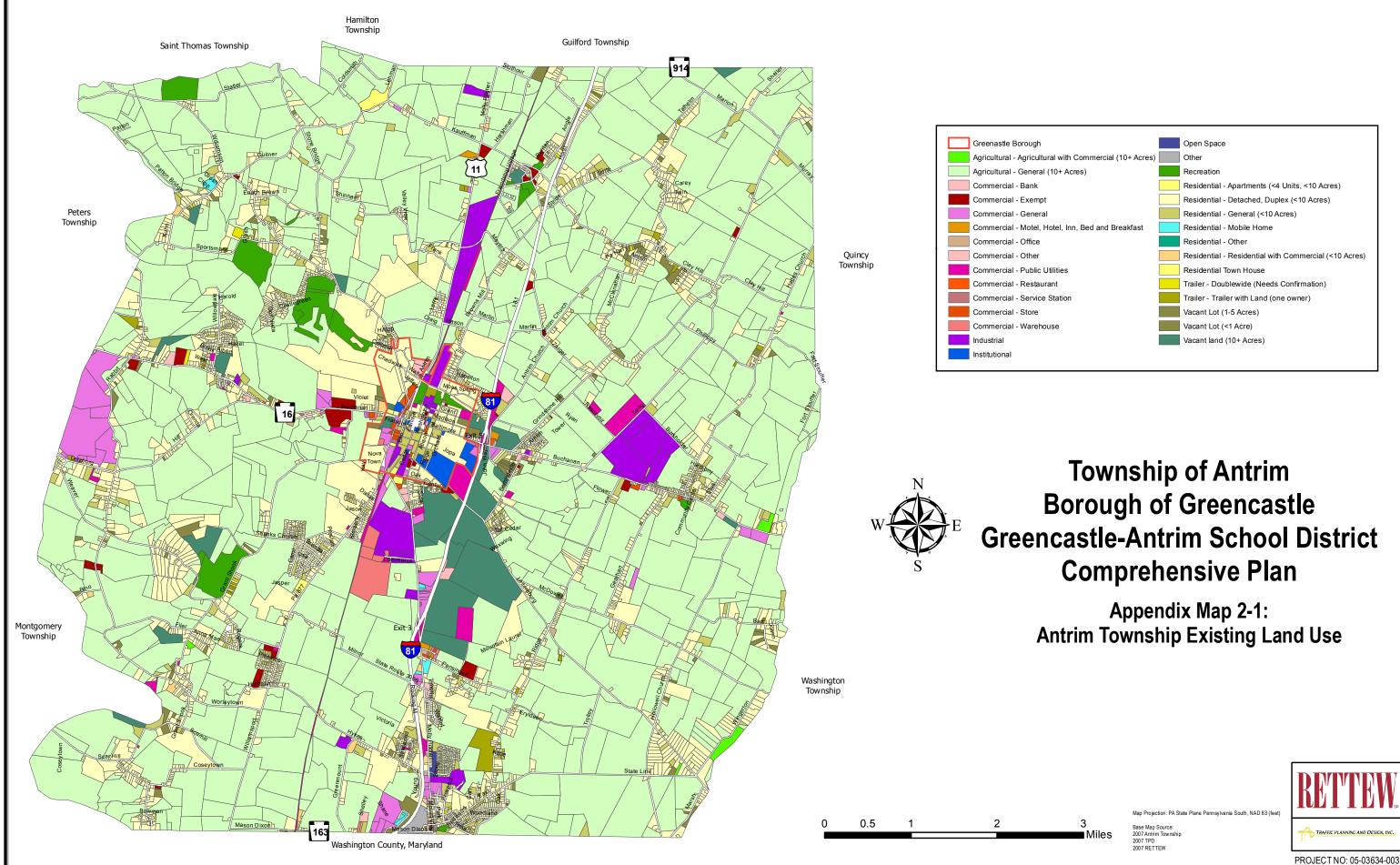
# Residential

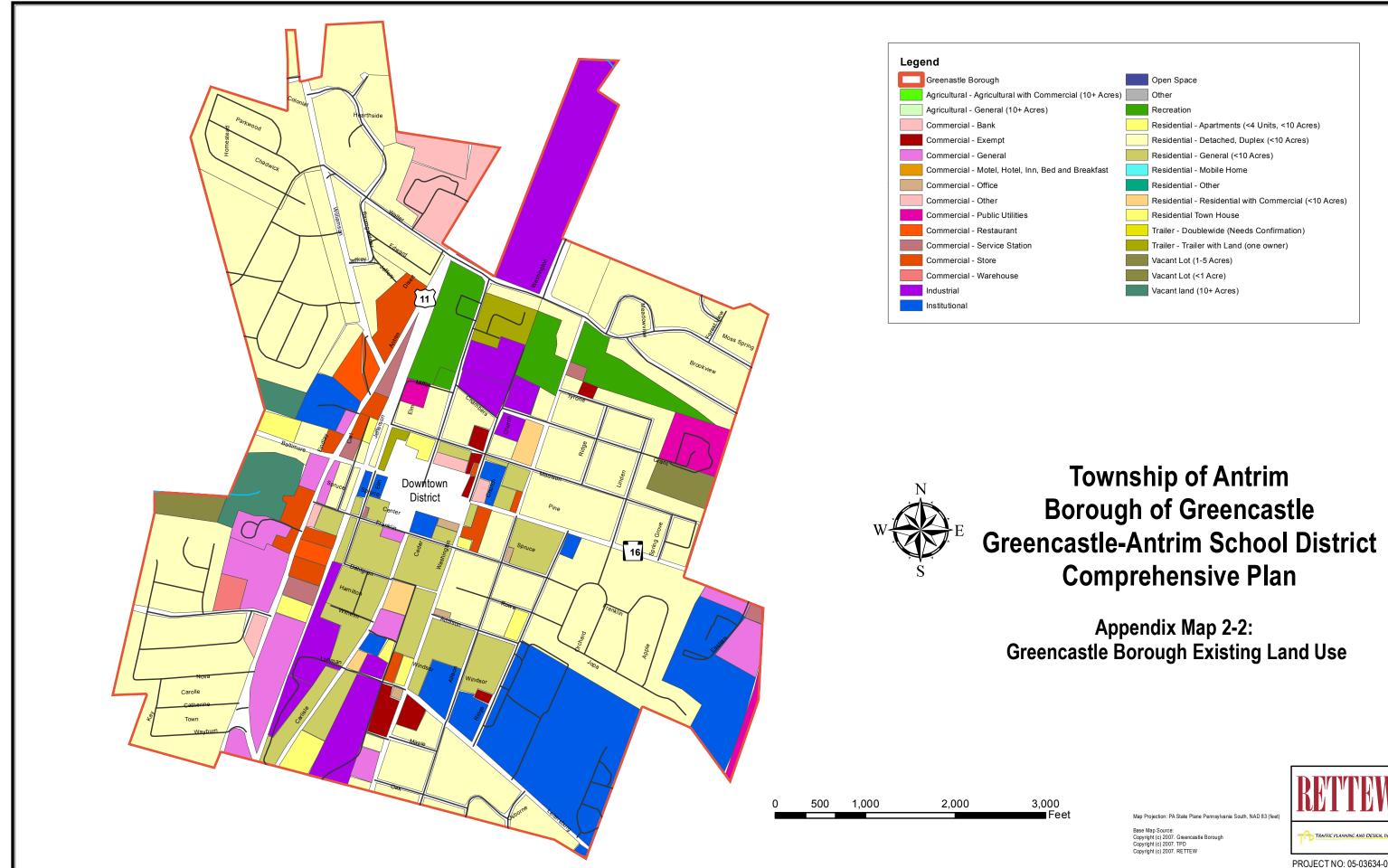
- Similar to the commercial land use classification, the residential land use classification is subdivided into categories that are more specific to the type of residential use on the property. The categories of residential land include:
  - Residential Apartments (<4 units, <10 acres)
  - <u>Residential Detached, Duplex (<10 acres)</u> includes detached dwelling units including single family detached units, and duplexes which house two families in a structure but are detached from all other structures.
  - <u>Residential General (<10 acres)</u>
  - <u>Residential Mobile Home</u> includes mobile homes or manufactured housing units either standing alone or included in a mobile home park type setting
  - <u>Residential Residential with Commercial</u> refers to structures in which a commercial business and a residence are located. These structures may be considered to be mixed use, with residential uses on upper floors and a commercial use on the first floor, or they may be residential units that have a home occupation located within them.
  - Residential Town House includes attached or semi-detached residential structures that are recognized as townhouses.
  - <u>Trailer Doublewide</u> This classification includes double wide trailers
  - Trailer Trailer with Land (one owner) includes larger lots of land with a trailer.
- Residential land is located throughout the borough. In the township, residential areas are located around the borough and in the villages; however, there are some locations in the township of scattered residential development.

# Vacant

- <u>Vacant Lot (1-5 acres)</u> this land classification is located in both the township and the borough. This land classification accounts for less than one percent of the land in the township and just over one percent of the land in the borough.
- Vacant Lot (<1 acre) this classification is only located in the township. There are approximately 80 properties in the township that are in this classification.</p>
- Vacant Land (10 + acres) accounts for approximately 2.5% of the land in the township and nearly 2% of the land in the borough.

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- Institutional and Civic Religious Institutions and Places of Worship

  - **Township of Antrim Borough of Greencastle Greencastle-Antrim School District Comprehensive Plan** Appendix Map 2-3: Greencastle Borough **Downtown District Existing Land Use**

0	100	200	400 Feet	<b>RETTEW</b>
	Base 2007	Projection: PA State Plane P Map Source: Greencastle Borough RETTEW	ennsylvania South, NAD 83 (feet)	18ATEC PLANNING AND LIFGICAL DW.
				PROJECT NO: 05-03634-003

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# Appendix 3 - Transportation

The transportation system provides access and mobility to and throughout a region. The primary mode of transportation in the Greencastle-Antrim region is motor vehicle, and other modes of transportation include walking and cycling. Mobility throughout the region is very important to the economy and lifestyles of the region.

The following transportation and circulation information is evaluated in this chapter:

# Existing Roadway Network

- Functional Classification
- Traffic Volumes
- Roadway Ownership and Conditions

# Alternative Modes of Transportation

- Public Transportation
- Airport Facilities
- Freight Rail Facilities
- Bicycle and Pedestrian Facilities

# **Existing Roadway Network**

## Functional Classification

- Streets and groups are classified according to the character of service and functionality they are intended to provide. The classification recognizes that individual roads and streets do not serve travel independently, but that most travel involves movement through a network of roads. PennDOT's functional classification system is based on the following criteria:
  - Average traffic volumes
  - Access and mobility
  - Corridor length
  - Relationship to other nearby roads
  - Truck traffic
  - Roadway design and capacity
  - On-street parking
  - Pass-through traffic
  - Posted speeds
  - Bicycle and pedestrian facilities
- Urban and rural areas have different characteristics with regard to density and types of land use, density of street and roadway networks, nature of travel patterns and the way that these elements are related. Therefore, urban and rural roadway systems are classified differently. Urban areas are those places within boundaries set by the U.S. Census Bureau.
- The functional classification categories are expressways, arterials, collectors, and local roads. The following are descriptions of each of the classifications and the roads within the Greencastle-Antrim Region that meet the respective criteria:
  - <u>Expressways</u> are designed to carry the maximum amount of traffic at high speeds by limiting the number of access points. These roadways carry interstate and regional traffic and provide the highest mobility for truck traffic. The only expressway in the region is Interstate 81.
  - <u>Major arterials</u> carry most of the trips entering and leaving an urban area as well as most of the traffic passing through the urban area and provide high mobility for truck traffic. They also accommodate travel between the central business district and outlying residential and major suburban areas. The only major arterial in the region is the portion of US-11 south of I-81 Exit 3.
  - <u>Minor arterials</u> interconnect with the principal arterials, accommodate trips of moderate length at a somewhat lower level of mobility, and provide high mobility for truck traffic. They distribute travel to smaller geographical areas than principal arterials. These types of roads place more of an emphasis on land access and connect to collector roads. The only minor arterial in the region is PA-16.

- <u>Major collectors</u> provide both land access and circulation over moderate distances, a smaller geographical area within the commercial and industrial areas, and provide moderate mobility for truck traffic. They collect traffic from the local streets and channel them to the arterial system. Major collectors in the region include US-11 north of I-81 Exit 3, Williamsport Pike, and PA-163.
- <u>Minor collectors</u> provide both land access and circulation within the residential neighborhoods and commercial and industrial areas and provide moderate mobility for truck traffic. They collect traffic from the local streets and channel them to the arterial system. Minor collectors in the region include Williamson Road, Browns Mills Road, Grindstone Hill Road, Leitersburg Road, State Line Road, Hollowell Church Road, Worleytown Road, and Washington Street.
- Local roads primarily provide access to land adjacent to the collector roads, serve travels over relatively short distances and provide for delivery truck traffic. The local road system includes all roads not classified as arterials or collector roads.
- Appendix Map 3-1 shows the functional classification of the roads in the region. The map was created by compiling information from the PennDOT functional classification of state roads.

# Roadway Ownership

Table 3-1 shows the roadway mileage and density of roadways for the municipalities in the region. The overall roadway density of the region is 3.02 linear miles of roadway per square mile. The urban nature of Greencastle Borough creates a much higher density, 20.68 linear miles of roadway per square mile, than in Antrim Township.

## Table 3-1: Roadway Ownership

Municipality		Density**		
Municipality	Local*	State*	Total	Density
Antrim Township	105.01 miles	80.30 miles	185.31 miles	2.71
Greencastle Borough	19.05 miles	5.77 miles	24.82 miles	20.68
Greencastle-Antrim Regional Area	124.06 miles	86.07 miles	210.13 miles	3.02

\* - Source: PennDOT

\*\* - Linear mile of road per square mile (Antrim Township = 68.4 square miles, Greencastle Borough = 1.2 square miles)

Local roadway ownership is 59 percent and state roadway ownership is 41 percent. This ratio may change in the future when new roads are built to serve new land developments and these roads are dedicated to the municipalities, or the state continues to transfer ownership back to the municipalities. Transferring ownership places more responsibility and greater maintenance control of the roadways with the municipalities.

## Traffic Volumes

Appendix Map 3-2 provides annual daily traffic volumes for major roads and streets in the Greencastle-Antrim Region as compiled by PennDOT. The map shows that the heaviest traffic volumes, ranging from approximately 53,000 to 63,000 vehicles daily, exist along Interstate 81. Routes 11 and 16 also carry heavy traffic volumes, ranging from 10,000 to 15,000 vehicles daily. All other roads in the region have less than 4,000 vehicles daily.

## Congestion

- In recent years, significant population increases in the Greencastle-Antrim Region have contributed to more traffic congestion. In addition, the region experiences pass-through traffic destined to other employment areas in Franklin County and the Hagerstown, Maryland metropolitan area.
- Quantifying the acceptability of delay or congestion that drivers experience is highly subjective and varies from region to region, usually according to the intensity of development in an area. Typically congestion occurs when pass-through traffic mixes with local traffic.
- Locations throughout the region that currently experience congestion during the commuter peak hours are along US-11 in the Village of State Line. The US-16/PA-11 intersection in Greencastle Borough also experiences congestion for significant periods of the day. The PA-16 corridor experiences congestion, because it serves as the main east-west corridor through the region and connects areas to the west to I-81. The I-81 interchanges at PA-163 (Exit 1), US-11 (Exit 3), and PA-16 (Exit 5) also experience significant congestion. In order for evening commuters coming from Maryland to reach their homes in

Greencastle Borough or further west, a left turn at an un-signalized location is required, and all routes involving such left turns are currently congested.

Existing traffic operations and congestion are shown on Appendix Map 3-3. The existing operations were taken from recent traffic studies completed for land development applications.

## Roadway Conditions

The majority of the roads in the region are in reasonably good condition and do not have significant safety problems. Due to the rural character of many secondary roads in the region, there are some roads with limited sight distance at intersections, narrow cartway widths, poor access management, structures located close to the edge of roadway, sharp horizontal and steep vertical curves, and poor intersection alignment.

### Bridges

- The Greencastle-Antrim region has 48 state maintained bridges and four railroad maintained bridges in the region greater than eight feet in length. There are also numerous state bridges and culverts less than eight feet in length and county and municipal maintained bridges. There are no state maintained bridges in the region with posted weight limits. There are no closed bridges in the region.
- One bridge Martin's Mill Covered Bridge is listed on the National Register of Historic Places. This bridge is currently owned by Antrim Township and is part of their park system, and the bridge is closed to vehicular traffic.
- An inventory of the existing bridges in the Greencastle-Antrim region is provided in Table 3-2.

### Table 3-2: Bridge Inventory

Feature Carried	Feature Intersected	Owner	Length (ft.)	Year Built	SD or FO	Sufficienc Rating
Kuhn Rd.	Concocheague Creek	Franklin Co.	140	1959	FO	79
Walter Ave.	Norfolk Southern RR	Greencastle Boro	125	1988		82
US 11	I-81	PennDOT	274	1960	FO	82
US 11	Trib Conococheaque Creek	PennDOT	17	1936	SD	53
US 11	Trib conococheaque creek	PennDOT	14	1954	SD	49
US 11	Trib Muddy Run	PennDOT	16	1954		72
US 11	Trib Muddy Run	PennDOT	11	1949		79
US 11	Muddy run	PennDOT	14	1949		67
US 11	Trib to Muddy Run	PennDOT	20	1997		95
PA 16	Conococheague Creek	PennDOT	192	1941		87
PA 16	Wet weather stream	PennDOT	8	1950		95
PA 16	Marsh Run	PennDOT	27	1937	SD	83
I-81	Wet weather stream	PennDOT	9	1960		70
I-81	Trib Conococneaque	PennDOT	9	1962		70
I-81	SR 2002	PennDOT	111	1963	FO	81
I-81	SR 2002	PennDOT	111	1963	FO	92
I-81 NB	Pa 16	PennDOT	139	1963		92
I-81 SB	Pa 16	PennDOT	139	1963	FO	90
I-81	Trib Muddy Run	PennDOT	12	1963		70
I-81	Trib Muddy Run	PennDOT	8	1963		70
I-81	Branch of Muddy Run	PennDOT	8	1963		70
I-81	Trib Muddy Run	PennDOT	14	1963		70
I-81	Trib Muddy Run	PennDOT	8	1963		59
PA 163	I-81	PennDOT	309	1960	SD & FO	65
SR 2001	Trib Conococheague Creek	PennDOT	11	1947		87
SR 2001	Br Muddy Run Creek	PennDOT	26	2005		98
SR 2002	Trib to Marsh Run	PennDOT	8	1926	SD	51
SR 2004	Wet weather stream	PennDOT	11	1930	FO	58

Feature Carried	Feature Intersected	Owner	Length (ft.)	Year Built	SD or FO	Sufficienc Rating
SR 2014	Marsh run	PennDOT	11	1923		85
SR 2016	Trib Muddy Creek	PennDOT	9	1925	FO	80
SR 2016	I-81	PennDOT	211	1963	SD & FO	71
SR 2025	Trib Muddy Run	PennDOT	8	1940		68
T-437; Zarger Rd	I-81	PennDOT	219	1963	FO	92
SR 3001	Trib Conococheague Creek	PennDOT	14	1982		81
SR 3001	Trib Conococheague Creek	PennDOT	18	1982		80
SR 3001	Trib Conococheague Creek	PennDOT	10	1930	SD	52
SR 3001	Trib Conococheague Creek	PennDOT	18	1954		92
SR 3002	Conococheague Creek	PennDOT	182	1973		95
SR 3002	Paradise Run	PennDOT	12	1938		78
SR 3002	Muddy Run	PennDOT	126	1957	SD	44
SR 3004	Conococheague Creek	PennDOT	147	1949		81
SR3005	Trib Conococheague Creek	PennDOT	18	2003		91
SR 3005	E br Conococheague Creek	PennDOT	193	1941		71
SR 3005	Conococheague Creek	PennDOT	8	1933	FO	66
SR 3006	T Conococheague Creek	PennDOT	24	1982		99
SR 3006	I-81	PennDOT	233	1960	SD	66
SR 3013	East br Conococheaque	PennDOT	140	1930	FO	66
T-351 (Hykes Rd)	I-81	PennDOT	217	1960	FO	85
SR 3015	Conococheague Creek	PennDOT	117	1954	SD	59

#### Source: PennDOT

SD = Structurally Deficient - Indication of bridge's overall status in terms of structural soundness and ability to service traveling public. "SD" indicates that the bridge has deterioration to one or more of its major components.

FO = Functionally Obsolete - Indication of bridge's overall status in terms of structural soundness and ability to service traveling public. "FO" indicates that the bridge has older features (for example, road widths and weight limits) compared to more recently built bridges.

Sufficiency Rating = A calculated rating indicating the bridge's sufficiency (or capability). Ratings range from 100 (entirely sufficient) to 0 (entirely insufficient or deficient).

#### Crash Data

- Reportable crashes by location during the period from 1999 to 2004. PennDOT defines a reportable crash as one in which either there is a personal injury or a vehicle requires towing from the scene.
- The following locations had the highest number of crashes for the period from 1999 to 2004:
  - Route 16 & Hill Road intersection
  - Route 11 & Route 16 intersection
  - Route 11 & Walter Avenue intersection
  - Route 16 in downtown Greencastle
  - Route 16 in the vicinity of the I-81 Exit 5 interchange
  - Route 16 & Grindstone Hill Road intersection
  - Route 16 & Hollowell Church Road intersection
  - Route 11 in the Village of State Line
  - Route 163 & I-81 North Ramps intersection

# **Alternative Modes of Transportation**

### Public Transportation

- The Greencastle-Antrim region is not currently served by any commuter bus routes or passenger rail service.
  - The nearest intercity bus terminal is located in Hagerstown, Maryland.

# Airport Facilities

There are no airports located within the Greencastle-Antrim region. The nearest airport is Hagerstown Regional Airport located in Washington County, Maryland, just south of the Pennsylvania-Maryland border. This airport has daily passenger flights and provides services for corporate and recreational aircraft.

# Freight Rail Facilities

- As shown on Appendix Map 3-1, the Greencastle-Antrim region has two active freight rail lines, one operated by Norfolk Southern and the other operated by CSX. The Norfolk Southern line (Lurgan Branch) operates parallel to the I-81 corridor from Harrisburg south into Maryland, West Virginia, and Virginia. The line is mostly grade-separated, but there are at-grade crossings south of Greencastle along Milnor Road, Hykes Road, and Mason Dixon Road (PA-163).
- The CSX line runs north-south along the eastern side of Antrim Township. The rail line runs from Chambersburg to Hagerstown, and has at-grade crossings at all roads it intersects with in the Greencastle-Antrim region, except there is a railroad overpass of Buchanan Trail (PA-16).

# Bicycle and Pedestrian Facilities

- Pedestrians are accommodated through an extensive sidewalk network along a majority of the roads and streets in the Borough of Greencastle and sporadically throughout the remainder of the region in residential subdivisions and retail centers.
- There are currently no bicycle lanes within the region, although there are wide shoulders on some rural roadways which can be used safely by bicycles.

# **Capital Improvement Projects**

There is several capital improvements currently planned for the region for which funding has been allocated for engineering and/or construction. The scheduling of these improvements is done though PennDOT via the Transportation Improvement Program (TIP) and Twelve Year Program (TYP). Every two years, PennDOT submits recommended projects for the next twelve fiscal years to the State Transportation Commission (STC) for their consideration. After a public review and comment process is completed, the STC adopts the program with a list of projects that includes a description of each project, estimated cost of the project and the time frame for phases of the project to be completed in the next twelve years. The TIP contains the projects within the first four years of the Twelve Year Program, and these projects have dedicated funding set aside.

The southern portion of Antrim Township is located within the Hagerstown Metropolitan Planning Organization (MPO) area, and projects in that area are programmed through the Hagerstown MPO rather than PennDOT.

Table 3-3 lists those highway and bridge projects in the region that are included in the 2009 Franklin County Transportation Improvement Program.

Table 3-3: Greencastle-Antrim Region Proposed Improvements on the Franklin County TIP and Hagerstown TIP
--

Project	Municipality	Type of Improvement	Year	Funding
Buchanan Trail West	Antrim Twp.	Highway Restoration	2008-2009	\$5.3 million
I-81 Exit 3 Interchange	Antrim Twp.	Interchange Improvements	2007-2011	\$404,000
I-81 Mile 0 to Mile 6	Antrim Twp.	Highway Restoration	2008	\$5.65 million
I-81 Mile 6 to Exit 20	Antrim, Guilford and Greene Twps.	Bridge Replacement and Restoration	2009-2010	\$30 million
Williamson Road Bridge	Antrim Twp.	Bridge Deck Replacement	2009-2010	\$2.3 million
Guinter Road Bridge	Antrim Twp.	Bridge Rehabilitation	2009	\$1.2 million
State Line Road	Antrim Twp.	Resurface	2010	\$401,000
Antrim Way Intersection	Greencastle Boro	Intersection Improvement	2009-2011	\$2.5 million

Sources: 2009-2020 PennDOT Twelve Year Program

2009 Transportation Improvement Program (TIP), Franklin County

2007 Transportation Improvement Program (TIP), Hagerstown MPO

# **Regional Transportation Issues**

The following transportation conditions, facilities, and capital planning and programming efforts have been identified as having transportation and land use planning implications for the Greencastle-Antrim region:

# Traffic Congestion

- The Greencastle-Antrim region experiences traffic congestion along the major corridors of US-11, PA-16, and I-81 due to the recent population growth in the area combined with services provided for I-81 through traffic. The I-81 interchanges with PA-163, US-11, and PA-16 experience significant congestion during portions of the day. A traffic signal has recently been installed at the PA-163 interchange for northbound I-81 traffic, which has helped alleviate operational problems. Improvements for Exit 3 are proposed and will be constructed in conjunction with adjacent land developments and can use federal earmark funds for a portion of the improvements. However, there are limited opportunities to improve the northbound ramps at Exit 5 due to adjacent signals on PA-16 within 200 feet in either direction.
- The intersection of US-11 and PA-16 in Greencastle Borough also experiences significant congestion, and traffic volumes are expected to increase from proposed developments west of the borough. The intersection should be widened or a grade-separated interchange concept should be explored to improve traffic operations at this location.

# Landfill Truck Traffic

Currently, truck traffic from the Mountain View Reclamation site is restricted from traveling through Greencastle Borough on PA-16 to reach I-81. Instead, the trucks must use US-11 to access I-81 at Exit 3 or via PA-914 at Exit 10. A traffic study has recently been completed for an expansion of the landfill, and contains recommendations related to enforcement of the Transportation Compliance Plan and traffic safety measures along the approach routes.

## Grindstone Hill Road Extension

Antrim Township previously proposed the extension of Grindstone Hill Road from Leitersburg Road to US-11. The extension would intersect US-11 opposite the I-81 north off-ramp, and would provide access to currently landlocked parcels along the eastern side of I-81, and potentially relieve congestion at I-81 Exit 5 by providing an alternate route for traffic to reach PA-16. A funding and implementation plan needs to be developed that identifies how the road will be constructed with state or federal funds, a public-private partnership with land developers, impact fees, or innovative funding mechanisms.

# Greencastle Borough Loop Roads

- The comprehensive plan completed in 1965 for Greencastle Borough identified a system of loop roads to alleviate congestion at the US-11/PA-16 intersection. These roadways included extensions of Walter Avenue, Nova Avenue, and Moss Spring Avenue, and the existing sections of these roadways have been designed with wider cartways to accommodate the future traffic volumes. However, the development along the majority of these roadways has been predominantly residential, with direct driveway access onto these roadways. The ability of these roadways to serve as a bypass of the US-11/PA-16 intersection will be heavily influenced by the opposition of residents living along the route.
- As of early 2007, the Walter Avenue connection to Rosebud Drive is almost complete, with a small segment still remaining. The timeframe and method for completion of the Nova Drive and Moss Spring Avenue connections has not yet been identified.

# Access Management

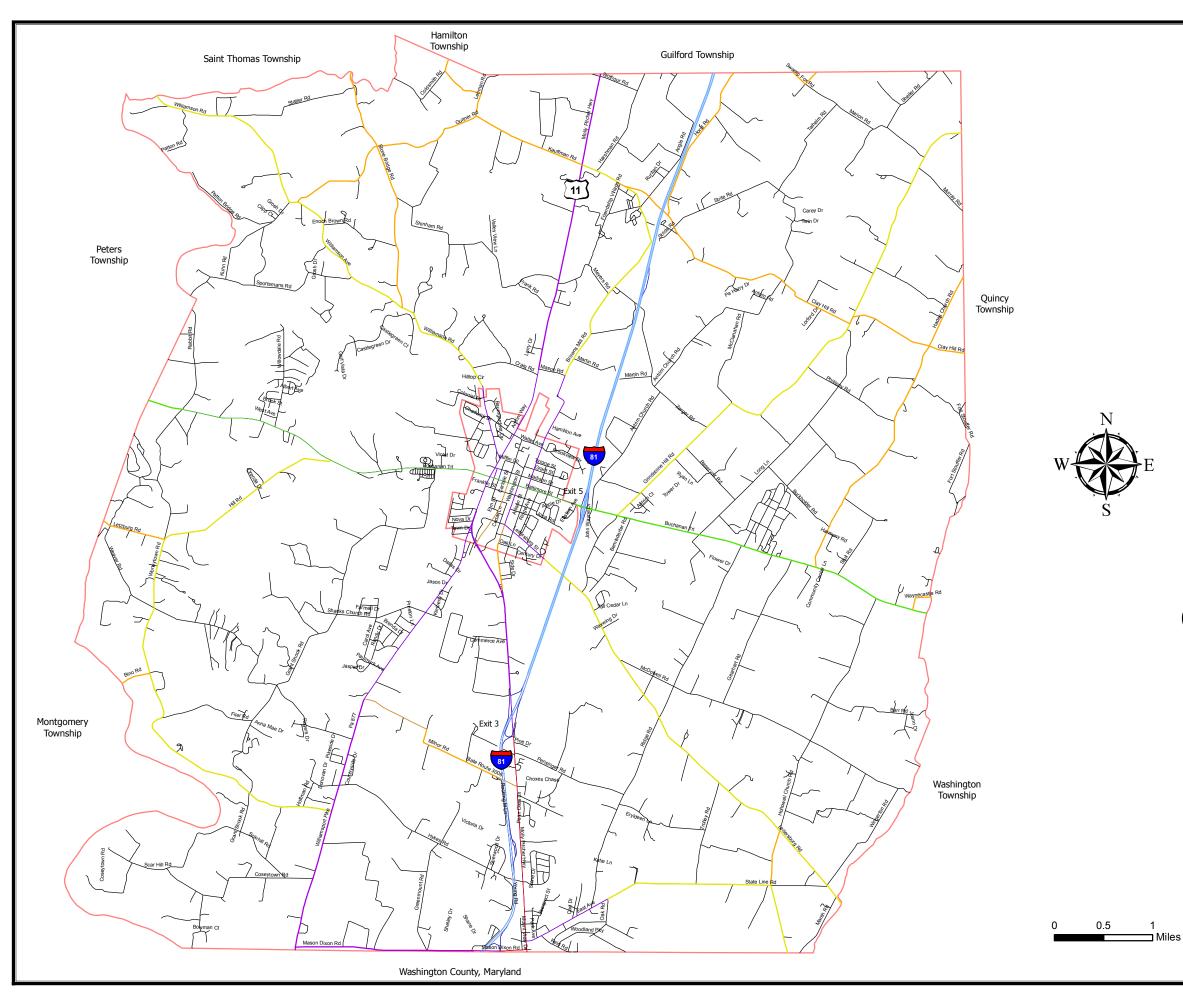
- Access management is a means of controlling the ways in which vehicles can access roadways using techniques such as limiting the number, spacing, location, and operation of driveways and intersections along collector and arterial roadways. The purpose of access management is to provide vehicular access to land uses in a manner that preserves the safety and efficiency of the roadway network. When access is not managed properly, the number of crashes often increases and congestion which can deteriorate the quality of life for a community and necessitate large capital improvement projects to improve mobility.
- Several segments of the arterial and major collector roadways in the region have been identified as having poor access design, and are characterized by properties with several closely-spaced access points or open frontage with no delineated driveway, lack of auxiliary lanes, and driveways located within the functional area of intersections. The following corridors have been identified as having poor access management:

- PA-16: Ridge Road to Greencastle Borough line
- PA-16: Greencastle Borough line to Grant Shook Road
- US-11: Mason Road to Washington Street in Greencastle Borough
- US-11: Milnor Road to Mason Dixon Road
- Williamsport Pike: US-11 to Shanks Church Road
- In addition to improving existing poor access design, it is critical to have municipal ordinances equipped with the proper design regulations that promote best access management practices. The existing municipal ordinances contain provisions that attempt to regulate the number of driveways, location and basic driveway design elements such as width, radii, sight distance, auxiliary lanes and pavement design. However, the ordinances do not include provisions for situations in which more complex access management practices may be required that affect the safety and efficiency of an entire corridor such as shared/joint access, internal access to outparcels, traffic signal spacing, frontage/service roads, and driveway spacing from interchange ramps. Other tools are also available to implement access management such as the official map and overlay districts that contain unique access management regulations for interchange areas.

### Capital Improvement Planning

In order to keep pace with the land development growth in the region, many transportation projects will be required to improve existing deficiencies and provide additional capacity for increased traffic volume. The region should develop a capital improvements plan (CIP) that identifies improvements that will be needed to accommodate the future land use. The CIP should establish priorities and identify possible funding sources for each of the projects. Sources can include the PennDOT Twelve Year Program, developer financing through the land development approval process, transportation impact fees or county, state and federal grant programs.

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# **Township of Antrim Borough of Greencastle Greencastle School District Joint Comprehensive Plan**

Map 3-1: Antrim Township **Functional Classification** 

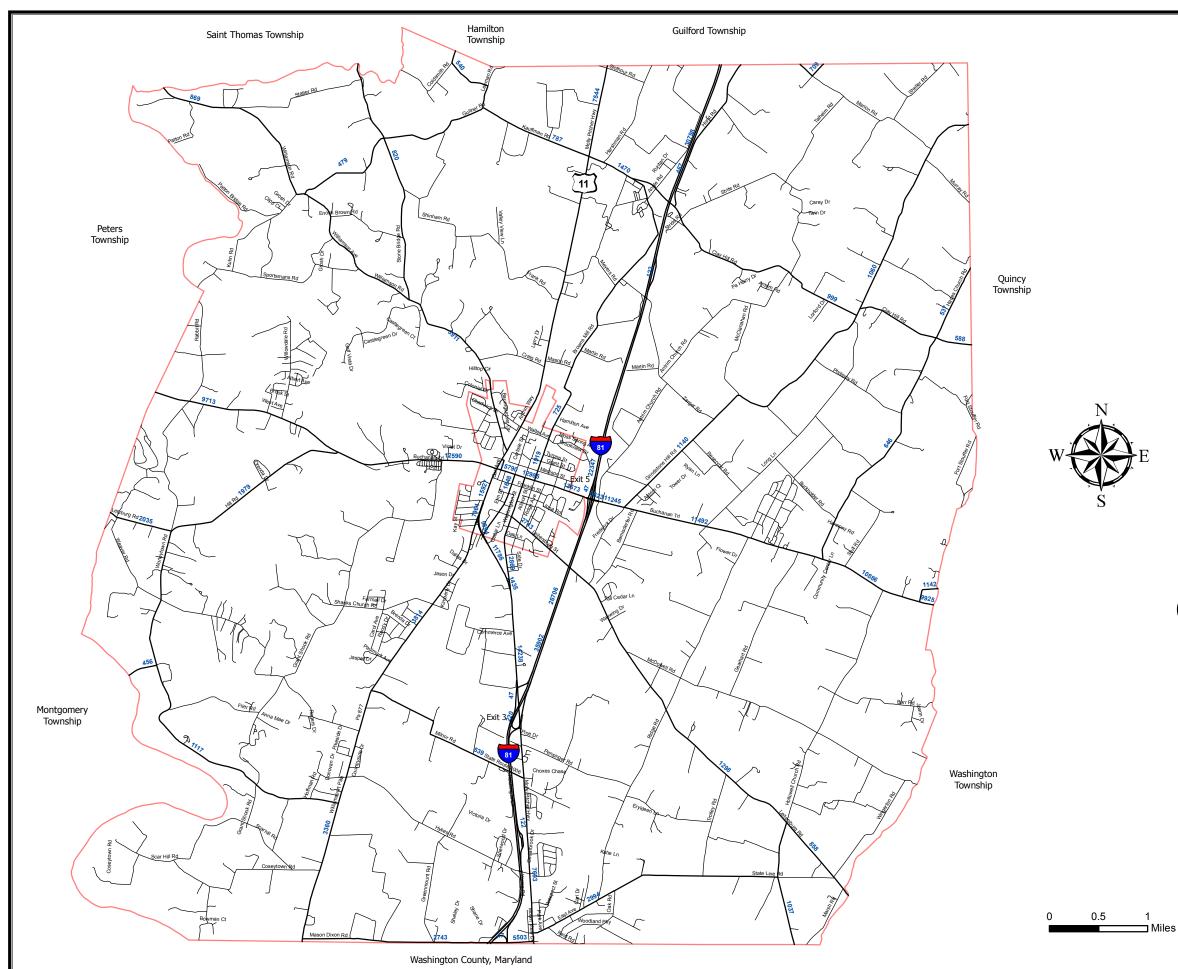
Map Projection: PA State Plane Pennsylvania South, NAD 83 (feet)

Base Map Source: Copyright (c) 2007. Antrim Township Copyright (c) 2007. TPD Copyright (c) 2007. RETTEW Associates

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**Existing Traffic Volumes** 2519 Average Annual Daily Traffic (AADT)

# Township of Antrim **Borough of Greencastle Greencastle School District** Joint Comprehensive Plan

Map 3-2: Antrim Township **Existing Traffic Volumes** 

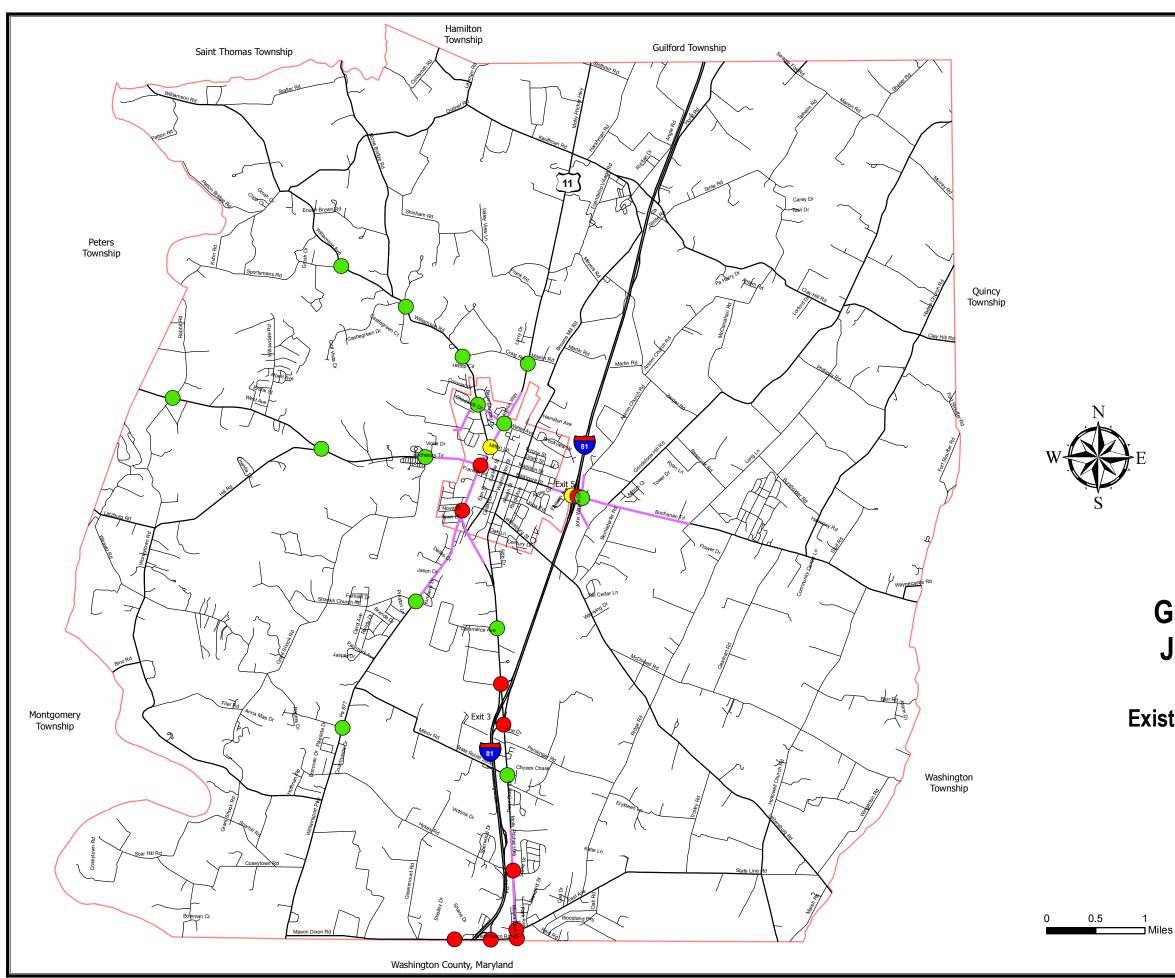
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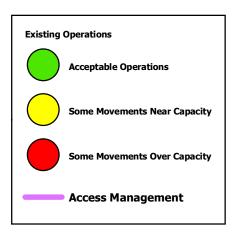
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# Township of Antrim **Borough of Greencastle Greencastle School District** Joint Comprehensive Plan

# Map 3-3: Antrim Township **Existing Traffic Operations and Congestion**

Map Projection: PA State Plane Pennsylvania South, NAD 83 (feet)

Base Map Source: Copyright (c) 2007. Antrim Township Copyright (c) 2007. TPD Copyright (c) 2007. RETTEW Associates

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# **Appendix 4 - Housing**

The quality and condition of housing are extremely important to the growth and prosperity of a community. Attractive, affordable housing that is well maintained will assure a sound tax base that will continue to appreciate in value and provide residents with one component of an environment that is conducive to a healthful and pleasing life. Where substandard or deteriorated conditions exist, public and private action is necessary to prevent the spread of these conditions and to restore these areas to a sound state. By analyzing existing and historic housing characteristics, those areas and needs of the region which require attention can be identified and recommendations for appropriate actions can be made.

# **Historic Housing Unit Construction**

# Table 4-1: Total Housing Units, 1990-2000

	1990	2000	Total Change	% Change
Pennsylvania	4,938,140	5,249,750	311,610	6.31
Franklin County	48,629	53,803	5,174	10.64
Greencastle-Antrim School District	5,266	6,346	1,080	20.51
Antrim Township	3,652	4,598	946	25.90
Greencastle Borough	1,614	1,748	134	8.30

Source: U.S. Census Bureau

# Table 4-2: Year of Housing Unit Construction, 1939-March 2000

	Built 19 March :		Built 198 1989		Built 197 1979		0 to Built 1960 to 1969		Built 1950 to 1959		Built 1940 to 1949		Built 1939 or earlier	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
Pennsy.	546,277	10.41	531,986	10.13	709,768	13.52	595,897	11.35	752,400	14.33	522,749	9.96	1,590,673	30.30
Franklin County	9,976	18.54	6,766	12.58	8,197	15.24	6,422	11.94	5,620	10.45	3,368	6.26	13,454	25.01
Greencastle- Antrim School District	1.390	21.90	887	13.98	1.162	18.31	674	10.62	564	8.89	330	5.20	1.339	21.10
Antrim Township	1,169	25.42	741	16.12	978	21.27	440	9.57	365	7.94	210	4.57	695	15.12
Greencastle Borough	221	12.64	146	8.35	184	10.53	234	13.39	199	11.38	120	6.86	644	36.84

Source: U.S. Census Bureau

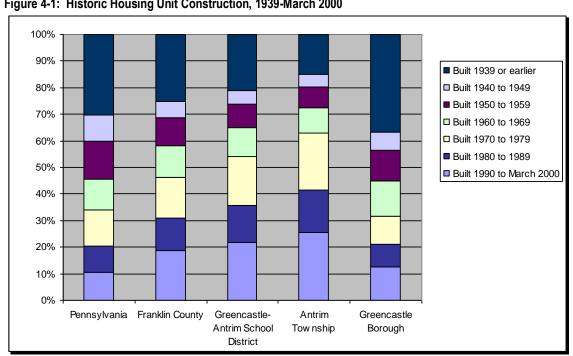
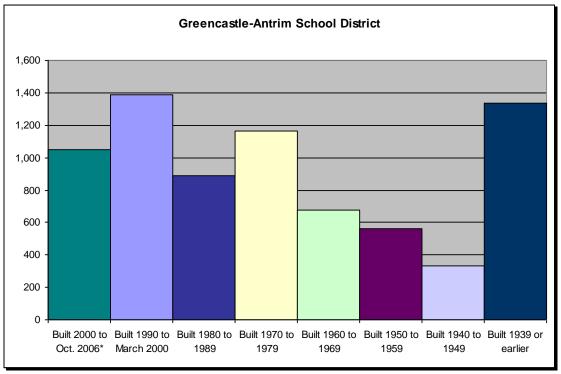


Figure 4-1: Historic Housing Unit Construction, 1939-March 2000

Source: U.S. Census Bureau

Figure 4-2: Historic Housing Unit Construction in the Greencastle-Antrim School District, 1939-March 2000



\* Based upon residential building permit data from 2000 through October 2006 Source: U.S. Census Bureau, Antrim Township, Greencastle Borough

# Pennsylvania Statistics and Trends

- Pennsylvania still contains a lot of older homes; in 2000, over 30% of the homes in the state were constructed prior to 1939.
- Next to older homes, housing units from the 1950s and the 1970s comprise the second and third largest percentages of the housing stock.

# Franklin County Statistics and Trends

- Compared to the state, Franklin County has a smaller percentage of homes that were constructed prior to 1960, about the same percentage of homes constructed in the 1960s, and a greater percentage of homes constructed since 1970.
- Although 25.01% of the homes in Franklin County were constructed prior to 1939, 18.54% of the homes in the county were constructed between 1990 and March of 2000.

# Greencastle-Antrim School District and Municipal Statistics and Trends

- Approximately 70% of the homes in the school district have been constructed since 1960.
- There are larger percentages of homes in the district constructed in the 1970s, 1980s, and 1990s than in the county or the state.
- Greencastle Borough has a larger percentage of homes constructed prior to 1939 than the county or the state, which is common with older boroughs.
- Houses that were constructed between 1990 and March 2000 account for the largest relative percentage of any decade since 1939. There were more homes constructed between 1990 and March 2000 in the township than were constructed prior to 1939.

# **Recent Residential Construction**

Building permit data from Antrim Township and Greencastle Borough were analyzed to determine recent trends in residential housing growth. Permits for new residential construction were analyzed for the years 1995 through October 2006.

## Table 4-3: Residential Building Permits, Antrim Township, 1995-Oct. 2006

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006 thru Oct.	Total
Single Family	62	92	68	70	71	68	64	126	128	153	139	98	1,139
Duplex	18	8	18	20	14	6	8	40	14	14	5	6	171
Mobile Home	21	19	16	8	10	9	10	7	9	11	6	5	131
Modular					6	5	2	2	0	1	0	0	16
Triplex					0	6	3	0	0	0	0	5	14
Quad					0	0	4	0	8	8	0	0	20
Apartment					0	0	0	4	0	0	0	0	4
Total	101	119	102	98	101	94	91	179	159	187	150	114	1,495

Source: Antrim Township

# Table 4-4: Residential Building Permits, Greencastle Borough, 1995-Oct. 2006

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006 thru Oct.	Total*
Single Family	7	6	12	16	10	11	13	27	27	25	29	11	194
Duplex	5	5	3	2	5	6	5	9	2	1	0	0	43
Mobile Home	0	1	3	0	0	1	4	0	4	2	0	0	15
Townhouse	0	0	0	0	0	0	0	0	0	0	6	1	7
Townhouse (units)											47	7	54
Apartment	0	0	0	0	0	0	0	1	0	2	0	0	3
Apartment (units)								6		10			16
Total*	12	12	18	18	15	18	22	37	33	30	35	12	262

\* The "Total" row and column reflect the total number of structures rather than the total number of units contained in a structure (in the case of apartments and townhouses).

Source: Greencastle Borough

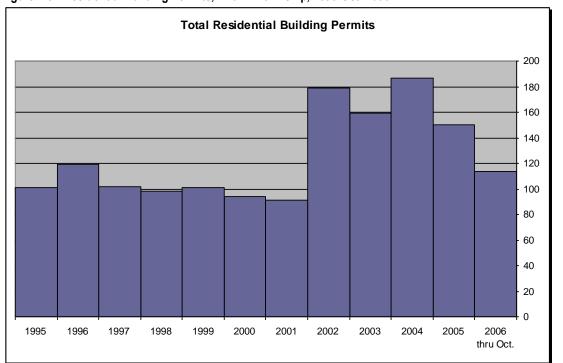
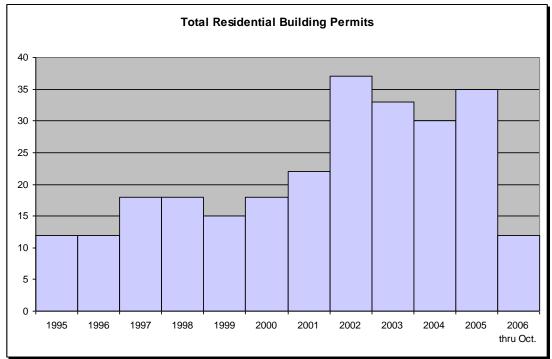


Figure 4-3: Residential Building Permits, Antrim Township, 1995-Oct. 2006

Source: Antrim Township

Figure 4-4: Residential Building Permits, Greencastle Borough, 1995-Oct. 2006



Source: Greencastle Borough

### Greencastle-Antrim School District and Municipal Statistics and Trends

- From 1995 through October of 2006, Antrim Township added 1,495 housing units to their housing stock and Greencastle Borough added 262.
- In the last ten years, the year that the most construction occurred in Greencastle Borough was 2002. The most construction occurred in Antrim Township in 2004.
- Although 2006 data have only been collected through October, it can be seen that building activity in 2006 was slower than it was in the years 2002 through 2005.
- The single family dwelling was the most common type of unit constructed in both the township and the borough.

# **Units per Structure**

This section examines the type of housing that existed in the Greencastle-Antrim School District in 2000.

### Table 4-5: Units per Structure, 2000 (1 of 2)

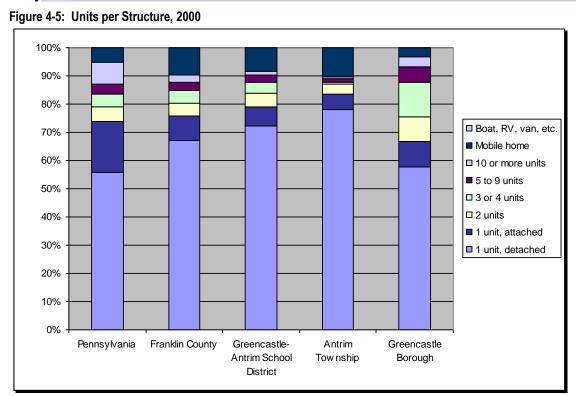
	1 unit, detached		1 unit, at	tached	2 un	its	3 or 4 units		
	Total	%	Total	%	Total	%	Total	%	
Pennsylvania	2,935,248	55.91	940,396	17.91	273,798	5.22	241,745	4.60	
Franklin County	36,177	67.24	4,635	8.61	2,345	4.36	2,500	4.65	
Greencastle-Antrim School District	4,593	72.38	419	6.60	310	4.88	245	3.86	
Antrim Township	3,584	77.95	260	5.65	159	3.46	31	0.67	
Greencastle Borough	1,009	57.72	159	9.10	151	8.64	214	12.24	

Source: U.S. Census Bureau

## Table 4-5: Units per Structure, 2000 (2 of 2)

	5 to 9 units		10 or mo	re units	Mobile	home	Boat, RV, van, etc.		
	Total	%	Total	%	Total	%	Total	%	
Pennsylvania	179,909	3.43	415,405	7.91	258,551	4.93	4,698	0.09	
Franklin County	1,496	2.78	1,381	2.57	5,268	9.79	1	0.00	
Greencastle-Antrim School District	157	2.47	84	1.32	538	8.48	0	0.00	
Antrim Township	61	1.33	24	0.52	479	10.42	0	0.00	
Greencastle Borough	96	5.49	60	3.43	59	3.38	0	0.00	

Source: U.S. Census Bureau



Source: U.S. Census Bureau

## Pennsylvania Statistics and Trends

- Single family detached housing is the dominant housing type in the state, followed by single family attached housing units.
- Multi-family housing units account for approximately 20% of the housing stock in the state.
- Mobile homes account for nearly 5% of the housing stock in the state.

# Franklin County Statistics and Trends

- The percentage of single family homes in Franklin County is slightly higher, but comparable to the percentage of single family homes in the state. In Franklin County, there is a greater percentage of single family detached homes and a lesser percentage of single family attached homes than the state.
- There are more mobile homes in the county than in the state and mobile homes in Franklin County account for nearly 10% of the housing stock.

## Greencastle-Antrim School District and Municipal Statistics and Trends

- In 2000, nearly 80% of the housing stock in Antrim Township was in the form of single family dwellings, with 72.38% being detached homes.
- There is a lower percentage of mobile homes in the school district than in the county, but a higher percentage than the state. Antrim Township has a higher percentage of mobile homes than both the county and the state and Greencastle Borough has a lower percentage than both the county and the state.
- Greencastle Borough had a higher percentage of multi-family housing than both the county and the state.
- As a whole, the school district contains fewer multi-family housing opportunities than the county and the state.

# **Tenure and Vacancy Statistics and Trends**

Tenure refers to the distinction between owner occupied and renter occupied housing units. Although it is important to provide for rental properties, a sense of pride is instilled with home ownership and often encourages better maintenance of the property. Blighted conditions and uninhabitable structures often result from absentee landlords, careless tenants, or outright neglect of a property.

The U.S. Census states that a housing unit is vacant, "if no one is living in it at the time of enumeration, unless its occupants are only temporarily absent. Units temporarily occupied at the time of enumeration entirely by people who have a usual residence elsewhere are also classified as vacant. Vacancy status is determined by the terms under which the unit may be occupied, e.g. for rent, for sale, or for seasonal use only." Therefore, those units which are listed as vacant for other reasons are all other vacant units which cannot be considered as seasonal housing.

Occupancy and vacancy rates are key indicators of the health of a community's housing market and can have an affect on local economic stability. A high occupancy rate can be indicative of limited housing availability in a community and an inability to absorb new residents moving into a community. A sudden growth of a single company or a new industry could conceivably require the development of new homes or increase the travel time for workers, thus adding to commuting costs and stress on the transportation system. Conversely, a high vacancy rate can be an indicator of too many units which can lead to deflated prices and lower demand.

Generally, a vacancy rate between 4% and 6% is considered a healthy rate. Below 4% is an indicator of too few housing units, which may lead to inflated prices, higher demand for new housing and increased development potential; whereas, a vacancy rate of greater than 6% is an indicator of too many units, which may lead to deflated prices and lower demand.

It is important to remember that the vacancy rate for an area is constantly changing as new units are constructed, units come on the market, and units are sold. Homes that are considered vacant for recreational, seasonal, or occasional use may also cloud the true picture. The vacancy rates that are collected by the U.S. Census represent the status of homes in the municipality at a single point in time.

## Table 4-6: Tenure and Vacancy Status of Housing Units, 2000

		Pennsylvania	Franklin County	Greencastle- Antrim School District	Antrim Township	Greencastle Borough
Total Housing	g Units	5,249,750	53,803	6,346	4,598	1,748
Occupied Units		4,777,003	50,633	6,133	4,472	1,66 <sup>-</sup>
	% of Total Units	90.99	94.11	96.64	97.26	95.02
Owne	r Occupied	3,406,337	37,458	4,754	3,769	985
	% of Occupied Units	71.31	73.98	77.52	84.28	59.3
	% of Total Units	64.89	69.62	74.91	81.97	56.3
Renter Occupied Units		1,370,666	13,175	1,379	703	67
	% of Occupied Units	28.69	26.02	22.48	15.72	40.7
	% of Total Units	26.11	24.49	21.73	15.29	38.6
Vacant Units		472,747	3,170	213	126	8
	% of Total Units	9.01	5.89	3.36	2.74	4.9
Vacan	t for Seasonal Use	148,230	572	17	6	1
	% of Vacant Units	31.36	18.04	7.98	4.76	12.6
	% of Total Units	2.82	1.06	0.27	0.13	0.6
Vacan	t for Other Reasons	324,517	2,598	196	120	7
	% of Vacant Units	68.64	81.96	92.02	95.24	87.3
	% of Total Units	6.18	4.83	3.09	2.61	4.3

# Pennsylvania Statistics and Trends

- In 2000, 9.01% of all housing units in Pennsylvania were considered to be vacant; however, 2.82% of the 9.01% were considered to be vacant for seasonal, recreational or occasional use.
- Owner occupied housing units represented the greatest share of the housing stock in Pennsylvania. In 2000; 64.89% of the housing units in the state were owner occupied and 26.11% were renter occupied.

# Franklin County Statistics and Trends

- Franklin County had a 5.89% vacancy rate in 2000. Of this 5.89%, 1.06% of the vacant units were considered to be vacant for seasonal, recreational, or occasional use.
- Franklin County had a slightly higher percentage of owner occupied units than the state and a slightly lower percentage of renter occupied units than the state.

# Greencastle-Antrim School District and Municipal Statistics and Trends

- In 2000, the Greencastle-Antrim School District had a low vacancy rate. Of all of the units in the district, only 3.36% were considered to be vacant and only 3.09% were considered to be vacant for reasons other than for seasonal use. Although this vacancy rate is slightly lower than the desired 4%-6% range, it is not considered "dangerously low."
- Seasonal housing does not have a heavy influence on the vacancy rate in the school district. Seasonal units account for less than one percent of the total units in both Antrim Township and Greencastle Borough.
- The school district had a higher percentage of owner occupied units than the county and the state and a lower percentage of renter occupied units than the county and the state.
- Antrim Township had a very low vacancy rate, 2.74%. This low vacancy rate may indicate a high demand for housing in the area, a limited housing availability, and can be a warning of inflated prices in the future.
- In 2000, Greencastle Borough had a vacancy rate of 4.98% which is considered healthy.
- There is a much greater percentage of renter occupied housing in Greencastle Borough than in Antrim Township. Although the township has nearly three times as many housing units as the borough, it only contained 27 more renter occupied units than the borough in 2000. A large concentration of rental units are often found in the older boroughs across Pennsylvania and often come as a result of the conversion of single family dwellings into multiple apartment units. Renter occupied housing accounts for nearly 40% of the housing units in the borough. In Antrim Township, renter occupied housing accounts for just over 15% of the total housing stock.

# Median Gross Rent

This section will analyze the median gross rent of the Greencastle-Antrim area and its change over time, both in absolute terms and when adjusted for inflation. The median represents the middle value (if the total number of values is an odd number) or the average of two middle values (if the total number of values is an even number) in an ordered list of data values. The median divides the total frequency distribution (total list of values) into two equal parts: one-half of the cases fall below the median and one-half of the cases exceed the median. A median value was not available at the school district level.

#### 1990 1990 2000 % Change 2000 % Change Adjusted\* Pennsylvania 404 31.44 541 531 -1.91 531 32.27 461 455 -1.29 Franklin County 344 455 Antrim Township 348 558 60.34 466 558 19.66 **Greencastle Borough** 335 458 36.72 449 458 2.03

## Table 4-7: Median Gross Rent, 1990-2000

Source: U.S. Census Bureau

## Pennsylvania Statistics and Trends

The median gross rent in Pennsylvania increased from \$404 in 1990 to \$531 in 2000. However, when these values are adjusted for inflation, it can be seen that the median value of gross rents actually decreased between 1990 and 2000 by 1.91%.

# Franklin County Statistics and Trends

- Similar to the state trend, the median gross rent in Franklin County increased between 1990 and 2000, but when these values are adjusted for inflation, the result was a decrease.
- When considering inflation, the decrease in rental values was 1.29%, which was a smaller decrease than that which occurred in the state.

# Greencastle-Antrim School District and Municipal Statistics and Trends

- Unlike the county and the state, the median gross rent, when adjusted for inflation, increased in both Antrim Township and Greencastle Borough between 1990 and 2000.
- Antrim Township saw an increase greater than \$200, which represents an increase of over 60%. When adjusted for inflation, this increase represents almost 20%, which is a lot considering that the state and county median gross rents actually decreased when adjusted for inflation.
- The median gross rent in Greencastle Borough also increased before and after adjustments for inflation.
- In 2000, the median gross rent in Greencastle Borough was higher than the county median gross rent but lower than the state median value. The median gross rent in Antrim Township was higher than both the county and the state.

# **Median Value of Housing**

# Table 4-8: Median Value of Housing, 1990-2000

	1990	2000	% Change	1990 Adjusted*	2000	% Change
Pennsylvania	69,100	97,000	40.38	92,594	97,000	4.76
Franklin County	70,400	97,800	38.92	94,336	97,800	3.67
Antrim Township	75,600	107,200	41.80	101,304	107,200	5.82
Greencastle Borough	76,700	108,800	41.85	102,778	108,800	5.86

Source: U.S. Census Bureau

# Pennsylvania Statistics and Trends

The median value of housing in Pennsylvania increased by 40.38% between 1990 and 2000. When adjusted for inflation, the median value still increased by 4.76%.

# Franklin County Statistics and Trends

The median value of housing in Franklin County was slightly higher than the state median value in 1990 and 2000, although the percentage increase in the value of housing was lower in the county than the state.

# Greencastle-Antrim School District and Municipal Statistics and Trends

- The median values of housing in both Antrim Township and Greencastle Borough were higher than the state and county median values in both 1990 and 2000.
- The percentage increase in the value of housing between 1990 and 2000 was slightly higher in Greencastle Borough than in Antrim Township, but both percentage increases were greater than the state and county increases.
- The median value of housing was greater in Greencastle Borough than in Antrim Township in both 1990 and 2000.

# Value of Housing

Examining the value of housing in conjunction with household income can help to determine if housing in the area is affordable to the people who live there. The type of housing that is considered affordable for both renters and homeowners depends on many factors including the age, quality, size, location and availability of the housing stock in an area. Typically newer housing units which are larger and offer more amenities such as central heat and air, multiple bathrooms and bedrooms, larger kitchens and garages, and family rooms, and are located in areas with high owner occupancy rates or in rapidly growing areas, tend to have higher values than smaller, older housing units lacking many new amenities in and those located in areas with a greater concentration of rental units and/or higher vacancy rates. This is not always the case however, as well maintained historic homes and homes located in an historic area, exhibit value added qualities.

# Table 4-9: Value of Housing, 2000 (1 of 2)

	Less than \$50,000		\$50,000 to \$99,999		\$100,000 to \$149,999		\$150,000 to \$199,999		\$200,000 to \$249,999	
	Total	%	Total	%	Total	%	Total	%	Total	%
Pennsylvania	435,193	15.06	1,079,698	37.37	703,093	24.33	344,172	11.91	138,295	4.79
Franklin County	1,272	4.29	14,533	48.98	9,319	31.40	2,862	9.64	907	3.06
Greencastle- Antrim School										
District	49	1.25	1,692	43.16	1,489	37.98	549	14.01	67	1.71
Antrim Township	38	1.25	1,311	43.25	1,133	37.38	460	15.18	54	1.78
Greencastle Borough	11	1.24	381	42.86	356	40.04	89	10.01	13	1.46

Source: U.S. Census Bureau

# Table 4-9: Value of Housing, 2000 (2 of 2)

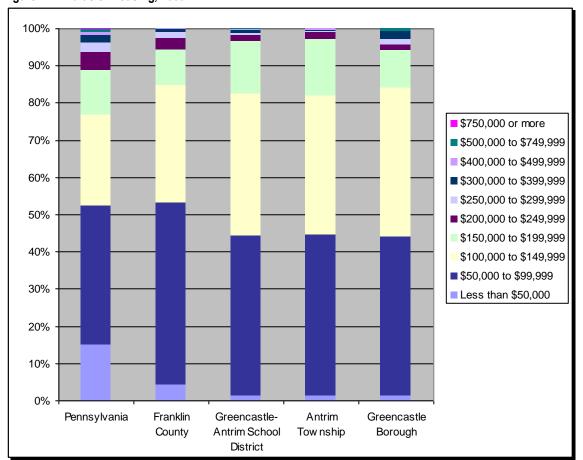
	\$250,000 to \$299,999		\$300,000 to \$399,999		\$400,000 to \$499,999		\$500,000 to \$749,999		\$750,000 or more	
	Total	%	Total	%	Total	%	Total	%	Total	%
Pennsylvania	76,517	2.65	61,608	2.13	22,817	0.79	18,113	0.63	9,978	0.35
Franklin County	423	1.43	282	0.95	53	0.18	15	0.05	8	0.03
Greencastle-Antrim School District	23	0.59	27	0.69	18	0.46	6	0.15	0	0.00
Antrim Township	10	0.33	7	0.23	18	0.59	0	0.00	0	0.00
Greencastle Borough	13	1.46	20	2.25	0	0.00	6	0.67	0	0.00

Source: U.S. Census Bureau

Figure 4-6: Value of Housing, 1990 100% 90% 80% ■ \$500,000 or more 70% \$400,000 to \$499,999 ■ \$300,000 to \$399,999 60% \$250,000 to \$299,999 ■ \$200,000 to \$249,999 50% \$150,000 to \$199,999 40% \$100,000 to \$149,999 ■ \$50,000 to \$99,999 30% Less than \$50,000 20% 10% 0% Pennsylvania Franklin Greencastle-Antrim Greencastle County Antrim School Tow nship Borough District

Source: U.S. Census Bureau

Figure 4-7: Value of Housing, 2000



Source: U.S. Census Bureau

# Pennsylvania Statistics and Trends

In 1990 and 2000, the majority of housing units were valued between \$50,000 and \$99,999.

#### Franklin County Statistics and Trends

- In Franklin County, there are a greater percentage of homes valued at moderate prices than in the state, and lower percentages of very low and very high priced housing units.
- The percentage of homes valued at over \$100,000 increased between 1990 and 2000 and the percentage of homes valued at less than \$100,000 decreased.
- Nearly 50% of the housing stock in Franklin County was valued at \$50,000 to \$99,999 in 2000.

# Greencastle-Antrim School District and Municipal Statistics and Trends

- Antrim Township and Greencastle Borough had similar percentages of homes valued at less than \$150,000 in 2000. Beyond this value, Antrim Township had a higher percentage of homes valued between \$150,000 and \$250,000 and Greencastle Borough had a higher percentage of homes valued at \$250,000 or above.
- There are fewer very high or very low valued homes in the school district than in the county and the state.

# Average Household Size

Trends in average household size show a decrease across the state as families are having less children and the number of older people living alone is increasing. Household sizes tend to be the largest in more rural areas and in farming communities where additional hands are needed to help with farming duties. Larger household sizes are also characteristic of impoverished urban areas.

# Table 4-10: Average Household Size, 1990 - 2000

	1990 Average Household Size	2000 Average Household Size
Pennsylvania	2.64	2.48
Franklin County	2.65	2.49
Antrim Township	2.88	2.79
Greencastle Borough	2.30	2.24

Source: U.S. Census Bureau

## Pennsylvania Statistics and Trends

The average household size decreased in the state from 2.64 in 1990 to 2.48 in 2000.

## Franklin County Statistics and Trends

- The average household size in Franklin County was slightly higher than Pennsylvania in 1990 and 2000.
- The average household size in Franklin County decreased from 2.65 in 1990 to 2.49 in 2000.

# Greencastle-Antrim Municipal Statistics and Trends

- The average household size decreased in both Antrim Township and Greencastle Borough between 1990 and 2000.
- The average household size in Antrim Township was much higher than the county and state average in both 1990 and 2000 and the decrease in household size was smaller than the county and state decreases. In 2000, the average household size in Antrim Township was 2.79, compared to the Franklin County average household size of 2.49 and the Pennsylvania average of 2.48.
- Greencastle Borough had a much lower household size than the county or the state in both 1990 and 2000. Although the average household size decreased in the borough, the decrease was less than that of the county or the state.
- In Greencastle Borough, the average household size decreased from 2.30 in 1990 to 2.24 in 2000.

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# **Appendix 5 - Community Facilities and Utilities**

Numerous community and public services and facilities meet the daily or specialized needs of the residents of the Greencastle-Antrim area. The need for these services, and the degree to which they can be provided, depend on several factors including the types and density of development in the community, the composition and distribution of the population, and the financial resources that are available.

The purpose of this planning element is to discuss the physical characteristics and functional adequacy of the Greencastle-Antrim area's existing community and public services, facilities, and utilities. The ability of the existing facilities to meet present and anticipated future needs of the community will be evaluated based upon the population and housing projections, and other factors. The adequacy and availability of these services and facilities are extremely important to all area residents since they reflect the quality, convenience, and general character of the community as a place to live.

# **Public Schools**

The Pennsylvania General Assembly is charged by the State Constitution to provide "for the maintenance and support of a thorough and efficient system of public education to serve the needs of the Commonwealth." School Boards are provided broad authority by the Pennsylvania School Code to establish, equip, furnish, and maintain the public schools in the district. To support these activities, school boards are provided authority to levy taxes, borrow funds, obtain grants, and expend funds as outlined in the Pennsylvania School Code and other state and federal laws.

- The Greencastle-Antrim School District provides public education for students of Greencastle Borough and Antrim Township, and operates with a purpose to, "Create and provide opportunities for students to become lifelong learners and productive citizens." The district covers 72 square miles and provides transportation for over 90% of the students.
- The district was created in 1965 when the schools of Greencastle Borough and Antrim Township came together. The district now maintains four schools, all of which are located on the 120 acre campus bordered by Ridge Avenue and Leitersburg Street. Existing enrollment and building capacity information is shown in Table 5-1.

Building	Grade Alignment	2005-2006 Enrollment	PDE building capacity	District building capacity	Year Constructed	Last Renovation
Primary School	K-2	621	925	680	1995-1996	2001
Elementary School	3-5	645	725	675	1979	2001
Middle School	6-8	660	730	730	1967	1996
High School	9-12	922	949	949	1959	1993-1994

# Table 5-1: Enrollment and Capacity of Greencastle-Antrim School District Facilities

Source: Greencastle-Antrim School District Feasibility Study, 2006

# Enrollment Projections

- The Greencastle-Antrim School District, in conjunction with El Associates, completed a feasibility study in May of 2006 to analyze the district's current and future facility needs and expenditures. The feasibility study compared building capacity with projected student enrollment. Several enrollment projections were utilized, including the Pennsylvania Department of Education (PDE) projection, and others that took into consideration housing construction data. All of the other methods utilized were higher than the PDE projection. The highest projected enrollments indicate that the existing facilities will reach full capacity in the 2007-2008 school year, and will exceed capacity by approximately 150 students by the 2008-2009 school year.
- The PDE updated its enrollment projections in August of 2007, based on data from the 2006-2007 school year. Based on these projections, the district will exceed enrollment capacity in the 2012-2013 school year.

## Programs and Alternative Education Opportunities within the Greencastle-Antrim School District

The Greencastle-Antrim School District offers several programs and alternative education opportunities for students in the district. A brief description of these programs and alternative education opportunities follows, and more information can be obtained by contacting the Greencastle-Antrim School District Administration Central Office.

## Tayamentasachta Environmental Center

- The school district owns and maintains the Tayamentasachta Environmental Center. The primary goal of the center is to educate the students of the Greencastle-Antrim School District on various aspects of ecological responsibility through environmental education and interpretive programming.<sup>1</sup> The grounds are open to the public seven days a week, from dusk till dawn. Community programs and workshops are scheduled throughout the year and private group reservations are available.
- Tayamentasachta is a Delaware Indian word that means "never ending waters".
- The center offers diverse opportunities including a wood lot, old fields, experimental farming, tree and wildlife areas, a black walnut grove, and an apple orchard, among other things. The property is located on a 35 acre farm and is listed on the National Register of Historic Places.

## First Steps to Learning

- First Steps to Learning is a program for parents of children from birth to kindergarten and is designed to provide parents with information on language development and early literacy skills.
- Programs are held in the fall and spring at the Greencastle-Antrim Primary School and are open to all families in the school district. There is no cost to participate and all materials, children's books, parent resources, and refreshments are provided by the Greencastle-Antrim School District.

#### Blended Schools

- Greencastle-Antrim's Blended Schools Program provides an opportunity for children to take self paced, online courses that are created and guided by teachers and aligned with Pennsylvania State Standards.
- It provides flexibility in that students are able to take classes at home or at school. Online courses provide flexibility in that students are able to learn anytime and anywhere an internet connection is available. Classes taught at school offer social interaction opportunities with peers. Parents may choose to enroll their children in a combination of at-home and at-school courses, or only enroll their children in at-home courses.
- Students will earn a Greencastle-Antrim High School Diploma upon successful completion of all required credits.

# NASA Explorer School

- The Greencastle-Antrim Middle School and High School were designated as NASA Explorer Schools in 2004. This strategic initiative supports the incorporation of NASA material into school science and math programs. Teams composed of teachers and a school administrator develop and implement a three-year action plan to address local challenges in science, technology and mathematics education.<sup>2</sup>
- The program offers summer professional development workshops for teachers and school administrators; research based development during the school year; student program opportunities that provide active participation in research, problem solving, and design; grants for the purchase of technology tools; and family involvement in education.

# Community Service

All high school students are required to complete 30 hours of community service prior to graduation. Students are
evaluated by the contact person at the non-profit organization for which they are volunteering, and are required to give
an oral, power-point presentation in front of an audience, and write a five paragraph essay.

<sup>1</sup> Greencastle-Antrim Chamber of Commerce

#### <sup>2</sup> NASA Explorer Schools

# **Private Schools**

In addition to the Greencastle-Antrim School District, education in Greencastle Borough and Antrim Township is also provided by several area private schools. In addition to the private schools in Franklin County that are listed in Table 5-2, there are other private schools that are located in Hagerstown, Maryland and nearby communities.

School	Location	Denomination	2005-2006 Elementary Enrollment (K-8)	2005-2006 Secondary Enrollment (9-12)
Anchor Christian Day School	Shippensburg, PA	Mennonite	46	30
Antrim Mennonite School	Chambersburg, PA	Mennonite	21	13
Clearfield Parochial School	Shippensburg, PA	Amish	22	0
Conococheague Amish School	Willow Hill, PA	Amish	28	6
Corpus Christi School	Chambersburg, PA	Roman Catholic	273	0
Culbertson Christian Day School	Chambersburg, PA	Mennonite	35	6
Cumberland Valley Christian School	Chambersburg, PA	Other Christian	205	165
Emmanuel Christian School	Chambersburg, PA	Mennonite	53	6
Faith Valley Christian School	Fayetteville, PA	Other Christian	12	13
Highfield Christian Academy	Blue Ridge Summit, PA	Other Christian	8	8
Living Word Academy	Blue Ridge Summit, PA	Other Christian	15	5
Magic Years Child Care	Chambersburg, PA	N/A	14	0
Maple Grove Amish School	Dry Run, PA	Amish	27	3
McClays Mill Amish School	Newburg, PA	Amish	23	0
Mercersburg Academy	Mercersburg, PA	N/A	0	442
Montessori Academy of Chambersburg	Chambersburg, PA	N/A	87	0
Mountain View Amish School	Spring Run, PA	Amish	23	3
Mowersville Christian Academy	Newburg, PA	Brethren	26	20
Mt. Cove Amish Special School	Spring Run, PA	Amish	0	1
Noahs Ark Christian Child Care Center	Waynesboro, PA	Methodist	10	0
Otterbein School	Newburg, PA	Amish	19	0
Path Valley Christian School	Doylesburg, PA	Other Christian	14	4
Providence School	Waynesboro, PA	Other Christian	36	0
Providence School Oak Hill Building	Waynesboro, PA	Brethren	45	0
Shady Grove Mennonite School	Greencastle, PA	Mennonite	101	43
Shalom Christian Academy	Chambersburg, PA	Other Christian	265	149
St. Andrews School	Waynesboro, PA	Roman Catholic	144	0
Stoney Creek Parochial School	Orrstown, PA	Amish	3	5
Sunset Amish School	Newburg, PA	Amish	7	1
Sweetwater Ridge School	Dry Run, PA	Amish	32	3
Willow Hill Parochial School	Willow Hill, PA	Amish	27	0

## Table 5-2: Private School Enrollments in Franklin County for the 2005-2006 School Year

Source: Pennsylvania Department of Education

# **Colleges and Universities**

- Several colleges and universities are located in proximity to the Greencastle-Antrim Area. Colleges and Universities within 30 miles of Greencastle include:
  - Dickinson College
  - Frederick Community College
  - Gettysburg College
  - Hagerstown Business College
  - Hagerstown Community College
  - Mount Saint Mary's College

- Penn State Dickinson School of Lay
- Penn State Mont Alto Chambersburg Center
- Shepherd College
- Shippensburg University of Pennsylvania
- Wilson College

# Parks and Recreation

Residents of Greencastle Borough and Antrim Township have access to a vast array of recreational opportunities through public park facilities, programs, sports leagues, community events, and private recreation providers.

#### Public Parks, Recreation Facilities, and Historical Monuments

## Jerome R. King Playground

- The Jerome R. King Playground is the only public recreational facility located in Greencastle Borough. It is located on North Carlisle Street and is totally funded by contributions and is operated by a volunteer board.
- History
  - The playground was established in 1922 when David D. King made available \$5,000.00 for the establishment of a park to memorialize his brother. A five acre lot was purchased with Mr. King's donation and community support and the playground was constructed in time for Old Home Week in 1923. The Greencastle Lion's Club provided the initial lighting for the playground and shelter.
  - In 1941, Jessie McLanahan Nelson donated a wooded plot, which became a picnic area with a rustic pavilion and band stand that serves as a memorial to veterans from the Greencastle-Antrim area.
  - In 1962, lands to the north of the original playground were purchased by two women as memorials to their husbands.
  - The last acquisition occurred in 1973 when the area adjacent to the railroad bridge along North Carlisle Street was
    purchased from the Penn Central Corporation through public contributions and a grant from borough council.
  - The park now occupies 15 acres and contains picnic facilities, play areas, tennis courts, volley ball courts, basketball courts, a softball field, baseball field and bandstand. The Jerome R. King Playground is the site of open air concerts in the band shell, family reunions, and community events.
- Facilities and Events
  - Barkdoll Field, the baseball field, offers a grandstand for spectators and serves as the home field for the Greencastle-Antrim High School Blue Devil varsity baseball, American Legion Post 373, and the Blue Ridge Adult League Greencastle Athletics.
  - Fun Day is an annual summer event that is held, free of charge, for children in pre-school through middle school. The event includes games, pony rides, a magic show, moon bounce, a watermelon party and other refreshments.
- Funding
  - Funding in the form of donations for the playground is received from residents, businesses, and community
    organizations.
  - An annual fund drive is held in April and continues throughout the year.

# Antrim Township Community Park

Antrim Township Park is located near Martin's Mill Covered Bridge. The park has hiking trails, a biking path, a wheelchair accessible path, a playground, and a gazebo available for use. Initial construction of the park began in 2002 with a driveway, multipurpose field, and parking lot. Restrooms, a pavilion, and additional parking lots and fields were added by 2004.

- The third phase of construction for the Antrim Township Community Park is expected to be completed in 2007-2008 and will include four ball fields, an amphitheater, and parking and roads.
  - The ball fields will be used for Little League or softball games. A full baseball field is proposed for the fourth phase of construction.
  - Parking and new roads will be the most costly improvements expected to occur in the third phase.
  - The amphitheater will be a hollow shell to be used for community events or concerts.
  - Other amenities to be constructed during the third phase include a swing set, swings for adults, and a possible disc golf course.

## Tayamentasachta Environmental Center

Tayamentasachta is owned by the Greencastle-Antrim School District and is open to the public daily from dusk until dawn. More information about Tayamentasachta is included in the previous discussion on the Greencastle-Antrim School District.

## Enoch Brown Park

- Antrim Township Authority took control of Enoch Brown Park in 1990. The park now features a picnic area, pavilion, and trails.
- A monument has been erected to honor the memory of School Master Enoch Brown and eleven of his students that were massacred by Indians on July 26, 1764.

## Corporal Rihl Monument

- Corporal William H. Rihl of Philadelphia was a member of the 1<sup>st</sup> New York cavalry regiment. On June 22, 1863, Rihl's company with forty-three men made a dash on Jenkin's advance scouting party and drove them back to the main command. M.S. Cafferty and Corporal Rihl were struck down in a volley from a body of Confederate infantry lying in a wheat field south of the Fleming house. The result was the wounding of Cafferty in the leg and the death of Rihl, the first Union soldier killed north of the Mason Dixon line.
- On June 22, 1886, the body of Corporal Rihl was removed from the Lutheran cemetery and buried at the site where he had been killed. Members of the Greencastle Post of the Grand Army of the Republic carried out this project and later were responsible for raising money that resulted in the erection of the monument that now marks the final resting place of this soldier.

## State Parks

- Cowan's Gap State Park is a 1,085 acre state park located in Fulton and Franklin Counties, between Chambersburg and McConnellsburg. The park offers fishing, picnicking, hunting, hiking, swimming, boating, camping, cabins, group tenting, and winter activities. Winter activities available include ice fishing, ice skating, and cross-country skiing. Environmental educational programs are also offered from April through November.
- Caledonia State Park is a 1,125 acre park located in Franklin and Adams Counties, about 30 minutes from Greencastle. The park offers camping, organized group tenting, picnicking, modern cabins, fishing, hiking, swimming, golf, hunting and firearms, totem pole playhouse and environmental education programs.
- Buchanan's Birthplace State Park is an 18.5 acre state park nestled in a gap of Tuscarora Mountain in Franklin County. A stone pyramid surrounded by coniferous trees stands on the site of the cabin where the 15<sup>th</sup> president of the United States was born. Recreational opportunities at the park include hiking, fishing, and picnicking.

## **Private Recreation Facilities**

- Several private and commercial recreation opportunities exist within or in proximity to the Greencastle-Antrim area. Among the facilities are:
  - Moss Spring Swim Club
  - Baseball-Softball Association Complex
  - Waynesboro Country Club
  - Greencastle Sportsmen's Association
  - Chambersburg Rod and Gun Club

- Waynesboro Rod and Gun Club
- Greencastle Greens
- Whitetail Golf
- Whitetail Ski Resort

## **Community Events**

### Old Home Week

- Old Home Week is a tradition that dates to 1901 when Philip Baer wrote to the local newspapers suggesting that an Old Boys Reunion be held in August of 1902 for the "Old Boys" of Greencastle. He later suggested a program for the event, which included a chicken dinner at Town Hall and a picnic at Sandy Hollow. Between 50 and 60 "Old Boys" arrived for the event. It was so successful that they decided to hold it in three years and bring their wives. It was then that the custom of the Triennial was established and "Old Boys' Reunion" became known as "Old Home Week" and men and women from Greencastle Borough and Antrim Township were invited.
- The 36<sup>th</sup> Triennial celebration of Old Home Week will be held from August 4-11, 2007. Festivities include class reunions, fireworks, a dog show, parades, a pageant about the community's past, concerts, and much more.

# Heritage Christmas

- Heritage Christmas occurs every year in Greencastle, starting on the Friday before Thanksgiving with a Tree Lighting Ceremony. The Christmas Parade occurs the following morning.
- Events are scheduled throughout the holiday season and include home tours, horse and buggy rides, and a door decorating contest.
- Downtown businesses decorate for the season and non-profit organizations and churches sell Christmas trees and seasonal greens and refreshments.

## Apple Festival and Engine Show

The Apple Festival is hosted and sponsored by Tayamentasachta and is held the second Saturday of October every year. Activities include demonstrations on making apple butter, apple cider, apple dumplings, and early American crafts. Other festivities include, but are not limited to hay rides, music, and antique engine displays.

## Carnival

The Rescue Hose Company sponsors a week long carnival in July held at the Special Events Center on South Washington Street.

#### Sidewalk Sales Day

Sidewalk Sales Day is an annual two-day event that is sponsored by the Greencastle-Antrim Merchants Association and features craft and food vendors.

#### Other Events

Other events include a Halloween Party for children hosted by the Greencastle-Antrim Women's Club, and the Minstrel Show at the high school, sponsored by the Rescue Hose Company.

# **Community Organizations**

There are various volunteer civic and community organizations that enhance the quality of life for residents in the Greencastle-Antrim area. Among these organizations are:

- Boy Scout Troop 99
- 4-H Club
- Girl Scouts
- Greencastle-Antrim Baseball/Softball Association
- Greencastle-Antrim Chamber of Commerce
- Greencastle-Antrim Merchant's Association
- Greencastle-Antrim AYSO
- Jr. Firefighters (16 and 17 year olds)
- Leos Club

- Midget Football and Cheerleading
- American Business Women's Association
- Friends of the Library
- Greencastle-Antrim Community Band
- Greencastle-Antrim Lions and Lioness Clubs
- Greencastle-Antrim Newcomers Club
- Greencastle Area Arts Council
- Greencastle Exchange Club
- Greencastle Garden Club

VFW

AARP

American Legion

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- - Greencastle Rotary Club
- Greencastle Sportsman's Association
- Greencastle Women's Club
- Greencastle Women's Fellowship

# Library

- The Lilian S. Besore Memorial Free Library is part of the Franklin County Library System and serves residents of Greencastle Borough and Antrim Township. The library offers public access internet terminals, youth programs, summer reading programs, adult book discussions, a photocopier, fax machine, local history collection, home schooling resources, AccessPA interlibrary loan, disabilities collection, large print collection, audiobooks, and a video collection. The library holds as its motto, "A Friendly Library in a Friendly Town."
- The library collection contains 35,777 items and there are approximately 4,126 adults and 2,021 youth with library cards. Free membership is available to all residents of Franklin County. Paid membership is available to out-of-state and out-of-county patrons.
- The Calvin S. Besore Trust formed the library in 1963 in memory of his mother Lilian S. Besore. The library was expanded in 1972 and again in 1989.
- A "Friends of the Library" group was formed in 1970 and encourages donations and volunteerism to support the library. Friends of the Library is an active group of people in the community who raise funds for the library through an annual campaign. Increased awareness of this program and increased involvement in the committee work needed to grow this program are necessary. Government funding allows the library to offer basic services, but community donations enable the library to provide extra services for its members.
- Volunteers also assist with the operation of the library, namely students and youth in their fulfillment of required community service hours for school or scout badges. There are also senior citizens who assist with some tasks and occasional volunteers who help with special projects such as inventory and children's programming, including the Summer Reading Program.
  - Children's Programming is an important aspect of the Library's services. There are weekly story times for toddlers and preschoolers, as well as a 6-week Summer Reading Program.
- The Lilian S. Besore Memorial Board of Directors is responsible for the building that the library is housed in and the historical materials that have been donated to the library. The Board was formed to ensure that when the Library became a part of the Franklin County Library System, the historical materials that had been donated to the library remained at the library in Greencastle.
  - Currently, the entire building is not ADA accessible. The Board is looking into a way to offer all of the services on one level. The current library building only has street-level access to the lower level of the library on the exterior of the building. Once inside, the lower level, and a heavily used meeting room are only accessible by stairs. The Board is looking into the possibility of adding another room onto the building. It would like to avoid the fees that are associated with installing and maintaining an elevator, if possible.
  - The Board operates off of funds that are held in the Besore Trust Fund, but receives no income.
  - The Board is also concerned with keeping technology up to date in the library and being able to offer its members enough computers that are connected through an effective and efficient network of wiring.
  - Pertaining to the historical materials that the Board is responsible for, the Board is trying to redefine its role and mission as a library, and the way it compares with the Allison-Antrim Museum. The museum was established after the library, and now contains many historical materials of the Greencastle-Antrim area. The Library Board is looking into whether or not the library is duplicating the services of the museum, and if the library should continue to accept donations in the form of historical materials.
    - In conjunction with the historical materials that are kept at the library, the library also maintains genealogical research materials.
- The library is open from 9:00 a.m. to 8:00 p.m. on Monday, Tuesday, and Thursday; from 9:00 a.m. to 5:00 p.m. on Wednesday; and from 9:00 a.m. to 1:00 p.m. on Saturday. The library is closed on Sunday.
- The Lilian S. Besore Memorial Free Library is located at 305 E. Baltimore Street, Greencastle, PA 17225.
- The Greencastle-Antrim School District also has its school facilities that are accessible to students during school hours for project related research and personal use.

- The Middle School Library has over 11,000 book titles in its collection. Regular books circulate for a two-week time period and reference books are available for overnight usage. Fines are \$0.10 for regular books and videos and \$0.25 for reference books.
- The High School Library provides students with access to information in a variety of formats. The library is open from 7:30 a.m. 3:30 p.m. on school days. WebCollection Plus allows 24-hour remote access to the high school library collection. The library also maintains a website that has links to colleges, resources, book websites, search engines, and contains instructional material, such as directions for creating a bibliography.

# **Allison-Antrim Museum**

- The Allison-Antrim Museum, Inc. (AAMI) is named for John Allison, the founder of Greencastle, and the surrounding Antrim Township. The museum is located at 365 South Ridge Avenue in Greencastle and is open the Second Sunday of each month, one Thursday of each month, and other times by appointment. The museum provides a home for the artifacts, treasures, and history of Greencastle-Antrim.
- Allison-Antrim Museum, Inc. was founded in June of 1994 and a building for the museum was acquired in April of 1998. The museum highlights the area's Scotch-Irish history.
- Collections at the museum include Signatures, Walter Washington Smith paintings, Baer's piano, Clover Header, Carl's Drug Store, First Telephone, and a Baggage Cart. The museum also hosts special exhibits each year and a history of the area is posted on its website.
- The AAMI is also undertaking the Barn Project, which involves the construction of a facility which will house climate controlled storage, curatorial and conservation areas, meeting and workshop areas, and additional exhibit space.
- Membership dues and donations help to pay for annual overhead costs and support monthly speaker series, the Reminiscing Series of videotaped oral histories of the Greencastle-Antrim area, monthly exhibits, maintenance of the museum's website, and publication of the Allison-Antrim Annals.

# **Churches and Faith Based Organizations**

- There are several churches and faith based organizations in the Greencastle-Antrim area, representing various denominations. Such organizations include:
  - Antrim Assembly of God
  - Antrim Brethren in Christ Church
  - Berean Bible Fellowship
  - Bethel AME Church
  - Brandt's Church of the Brethren
  - Calvary Bible Church
  - Calvary Chapel of the Cumberland Valley
  - Cedar Grove Mennonite Church
  - Church of God
  - Church of God at Mercersburg
  - Church of the Brethren
  - Conococheague Grace Brethren
  - Cornerstone Church of Christ
  - Ebenezer (Guitners) United Brethren in Christ Church
  - Sevangelical Lutheran Church
  - First Church of God
  - First Pentecostal Assembly of God
  - First Assembly of God Church

- First United Methodist Church
- Grace Bible Church
- Grace United Church of Christ
- Greencastle Baptist Church
- Greencastle Bible Church
- Greencastle Church of the Brethren
- Greencastle Foursquare Church
- Greencastle Presbyterian Church
- Heidelberg United Church of Christ
- Hollowell Brethren in Christ Church
- Living Hope Community Church
- Locust Level Full Gospel
- Macedonia United Brethren Church
- Marion First United Methodist Church
- Marion Mennonite Church
- Montgomery Brethren in Christ Church
- Mount Calvary Tabernacle
- Otterbein United Brethren Church
- Pleasant Hill United Brethren in Christ Church

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  - Praise Chapel Christian Fellowship
- Praying Time Ministries, Church of God in Christ
- River of Life Ministries
- Salem Ridge Mennonite Church
- Shank's Church of the Brethren
- St. Catherine's Eastern Orthodox
- St. Luke the Evangelist Mission

- St. Mark the Evangelist
- St. Mary's Episcopal
- St. Stephen's United Church of Christ
- State Line United Methodist Church
- Trinity Evangelical Lutheran Church
- Trinity United Church of Christ
- Upton Full Gospel Church

# Police Protection

#### Pennsylvania State Police

- Police protection in Antrim Township is handled by the Pennsylvania State Police. Troop H serves residents of the township from their Chambersburg barracks. The Chambersburg Station is located at:
  - 679 Franklin Farms Lane Chambersburg, PA 17201 Non emergency phone: 717-264-5161 Emergency phone: 911

## Greencastle Police Department

- The Greencastle Police Department serves the residents of the Borough of Greencastle. The department currently employs one police secretary, two full-time officers, and eight part-time officers. The department is under the direction of the police chief, who reports to the mayor. The department currently has two marked cars.
- The Greencastle Police Department is located at:

60 North Washington Street Greencastle, PA 17225 Non emergency phone: 717-597-2161 Emergency phone: 911 Police secretary: 717-597-9506 Fax: 717-597-1022 Email: police@greencastleborough.com

- Programs and services offered through the police department include fingerprinting, drug investigations, child safety seat inspections, and group tours of the station.
- Needs of the department include additional staffing and better representation in the community.

# **Fire and Emergency Services**

#### The Rescue Hose Company

- The Rescue Hose Company in Greencastle provides fire and basic life support services to residents of Antrim Township and Greencastle Borough. Mutual aid is received from a number of nearby companies including Mercersburg Montgomery Peters and Warren Fire Company; St. Thomas Fire and Rescue; Marion Fire Company; New Franklin Fire Department; Waynesboro Fire Department; and Maugansville Fire Company and Long Meadow Fire Company in Washington County, Maryland. The EMS portion of the Rescue Hose Company provides basic life support services. Advanced life support services are mainly provided by Waynesboro, Chambersburg, and Maugansville. An advanced life support division of Waynesboro Ambulance #203 is stationed and operates out of the Rescue Hose Fire Company in Greencastle.
- In 2006, the Rescue Hose Company responded to 627 fire and rescue calls and 1,034 EMS calls. The company is comprised of approximately 30-40 volunteers acting as responders, and an additional 15 volunteers who take on auxiliary duties, such as the fire police. The Company contracts with West Shore EMS for individuals to provide ambulance and EMS services. The contract provides for two people Monday through Friday from 6:00 a.m. 4:00 p.m.; one person overnight from Monday

through Thursday; and one person during the day on the weekends. Response time on calls from Greencastle-Antrim ranges from three minutes to ten minutes.

Apparatus of the fire company includes:

- 2000 KME Engine with a 1,500 GPM pump and a 1,000 gallon water tank
- 1995 KME Engine with a 1,500 GPM pump and a 750 gallon water tank
- 1987 Suptphen Engine-Tanker with a 1,500 GPM pump and a 2,400 gallon water tank
- 1990 Simon Duplex Squad vehicle with an 18' rescue body and hurst rescue system
- 1982 Ford Pick Up Truck Brush vehicle
- 1994 Chevy Suburban (car)
- 2000 Ford F-350 Super Duty Road Rescue ambulance
- 2003 Ford F-350 Super Duty Road Rescue ambulance
- 1995 Chevy Utility Vehicle
- In addition to the above listed apparatus, the company is replacing a 1989 Ford E350 Econoline Road Rescue with a 2006 model. There are also plans to replace the car which serves as the duty vehicle in 2006. It is estimated that the Rescue Squad vehicle will need to be replaced within the next 18 months.
- Manpower is considered to be adequate for the majority of incidents that the Company responds to. When responding to more involved calls and those which require a longer amount of time, there is sometimes a need for additional volunteers.
- The Rescue Hose Company moved to its current location in 1998. This facility is considered to be adequate, but depending on the degree of development which is seen in the future, there may be a need for a substation at a future point in time.
- Funding for the Fire and EMS portions of the Rescue Hose Company comes from donations, financial assistance from Antrim Township and Greencastle Borough; and various fundraisers that are held throughout the year such as weekly bingo, a summer carnival, and other special fundraisers. The company also receives limited funds, funneled through the state, from any out of state insurance companies which supply insurance to residents in the township or borough.
- Residential households and businesses in the township and borough also have the option of becoming a member of the Ambulance Club, which acts as an insurance policy. In the event that the club member would require ambulance service, any fees beyond those that are covered by the member's insurance company are waived. Cost for Ambulance Club household membership for 2006 was \$30.00. Business and organization memberships start at \$100.00 for up to fifty employees or members. The monies received from the club also help to fund new equipment, offer continuing education opportunities to volunteers, and continue to provide professional service to the community.<sup>3</sup>

# Healthcare

#### Summit Health

Summit Health is the non-profit entity that administers the Chambersburg Hospital, Waynesboro Hospital, Antrim Family Medicine, and Greencastle Health Services.

#### Chambersburg Hospital

- Chambersburg Hospital is the area's largest general and acute care community hospital, and houses 248 beds. Chambersburg Hospital is accredited by the Joint Commission on Health Care Accreditation of Health Care Organizations (JCHCA) and is accredited by the American College of Surgeons (ACOS).
- Services offered at the Chambersburg Hospital include:
  - Bariatric (Gastric Bypass Surgery)
  - Behavioral health
  - Cancer
  - Cardiology
  - Community health and education programs
  - Critical care
  - Diabetes education and management
  - Emergency care

- Fitness
- Inpatient medical-surgical and pediatric
- Laboratory
- Neurodiagnostic services/sleep lab
- Nutrition
- Occupational medicine
- Orthopedic
- Pain management

<sup>&</sup>lt;sup>3</sup> Information regarding the Rescue Hose Company was obtained through the Rescue Hose Company website and through a telephone interview with Rescue Hose Company personnel.

- Physical medicine and rehabilitation
- Radiology and diagnostic imaging
- Respiratory care

# Waynesboro Hospital

- Waynesboro Hospital is a 64-bed, non-profit, general and acute care community hospital accredited by JCAHO.
- Services include:
  - Birthing
  - Cancer
  - Cardiology
  - Community health and education programs
  - Diabetes education and management
  - Emergency care
  - Gastroenterology
  - Inpatient medical-surgical, Sub-acute, and pediatric

- Surgical
- Women's health
- Laboratory
- Nutrition
- Orthopedic
- Physical medicine
- Radiology and diagnostic imaging
- Rehabilitation and sports medicine
- Respiratory care
- Surgical

# Antrim Family Medicine

- Antrim Family Medicine provides comprehensive family medical care and is located at:
  - John L. Grove Medical Center 50 Eastern Avenue, Suite 144 Greencastle, PA 17225

## Greencastle Health Services

Greencastle Health Services offers general radiology, mammography, physical therapy, and occupational therapy. The facility is located at the John L. Grove Medical Center, Suite 145.

#### Other Health Care Services

Other health care and specialized care opportunities are available in the Greencastle-Antrim area including five dentists, an eye care facility, and chiropractic services.

# **Senior Services**

#### Greencastle Senior Center

- The Greencastle Senior Center is open Monday through Friday from 8:00 a.m. to 4:30 p.m. and offers a variety of arts and crafts, games, exercise classes, and activities for seniors in the Greencastle Antrim area. The center is located at:
  - 10615 Antrim Church Road Greencastle, PA 17225 Phone: 717-597-2020 Fax: 717-597-2590

#### Franklin County In-Home Services

- Franklin County In-Home Services serves Franklin County residents through a contract with the Franklin County Area Agency on Aging. Private contracts are also available. In-home services include:
  - Personal care
  - Personal assistance services
  - Home support

# Franklin County Integrated Transportation System (FCITS)

FCITS is a shared ride demand responsive transportation program. Funding is made available through the Pennsylvania Lottery, as administered by the Pennsylvania Department of Transportation, the Department of Welfare, cooperating

- agencies, and fares. Transportation services are available to senior citizens, medical assistance clients, and the general public.
- Transportation service is provided to persons 60 years of age and older to medical appointments (including pharmacies), agency appointments, senior centers, beauty shops, banks, and grocery stores.
- Transportation service is provided Monday through Friday from 9:00 a.m. to 5:00 p.m.
- One-way fares for senior citizens are \$1.50, but seniors may be eligible for no-cost transportation and are encouraged to contact the Franklin County Office of Aging.

# Water Supply

## Antrim Township

- The Antrim Township Municipal Authority is committed to providing a dependable, quality supply of drinking water to the residents it serves in Antrim Township. Water sources in the township are from two wells, one is located at the intersection of Hykes Road and Sherwood Drive and the other is at the pumping building on Sherwood Drive. Both wells are under the direct influence of surface water.
- Public Water facilities in Antrim Township are limited. Antrim Township Municipal Authority (ATMA) currently serves an area in the south-central portion of the township. Current plans include an increase in the water service area.
- Currently, Pennsylvania Department of Environmental Protection has permitted Antrim Township Municipal Authority to treat 160,000 gallons of water per day and pump 850,000 gallons of water per day. While the current treatment capacities are limited, the township has plans to expand water treatment capacity from 160,000 gallons/day to 850,000 gallons/day.
- The township requires that both public and private water service providers must build their facilities to the township's specifications and must expand at the developer's expense. Currently, there are three (3) private, publicly-owned water facilities within the township:
  - State Line Mobile Home Park
  - Greencastle Greens
  - Mobile Home Park located north of State Line
- Tapping into the public water supply is awarded on a first-come, first-serve basis. Those immediately outside of the water service area are excluded from receiving public water from the township; however, if a portion of a tract of land falls within the water service area, the tract of land may be allowed to tap into the public water system.
- A Source Water Assessment completed in 2005 by the Pennsylvania Department of Environmental Protection found that the sources have little risk of significant contamination.
- As water travels over the surface of the land or through the ground, it can dissolve naturally-occurring minerals, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:
  - Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
  - Inorganic contaminants, such as salts and minerals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
  - Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
  - Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and
  - Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- In order to ensure that tap water is safe to drink, EPA and DEP prescribe regulations which limit the amount of certain contaminants in water provided by public water systems.<sup>4</sup> The public water supply in Antrim Township is routinely monitored for contaminants to ensure high quality drinking water. Testing in 2005 revealed that the system had no violations, although some constituents have been detected.

<sup>4</sup> Antrim Township 2005 Annual Drinking Water Quality Report

# Greencastle Borough

- The Greencastle Area Franklin County Water Authority (GCFCWA) provides public water service to approximately 4,600 people in Greencastle Borough and Antrim Township.
  - In 2005, the authority dispensed approximately 232,000 gallons per day. The peak day of service in 2005 was June 29; water use peaked at 972,000 gallons on this day.
  - The Authority provides water to 1,551 residences in Greencastle Borough and 333 residences in Antrim Township. There are also commercial and industrial uses that are served in the township and borough and institutional uses that are served in the borough.
- Water sources for residents of Greencastle Borough include Moss Spring, three Eshelman-Spangler Springs and Ebberts Spring. Two wells, located on the Authority's farm on Long Land are used for additional water supply during dry periods.
  - A source water assessment of the water sources which supply water to the Moss Spring Filtration Plant was completed in 2003 by the Pennsylvania Department of Environmental Protection. The assessment found that the water sources are potentially most susceptible to road deicing materials, accidental spills along roads, various chemicals and processes, metal working and cleaning, microorganisms, nitrogen and phosphorus from manure, inks and dyes used in the printing process, cleaning solutions, and leaks in underground storage tanks. Overall, the watershed has moderate risk of significant contamination.
  - The drinking water for residents within the Greencastle public water service area meets federal and state requirements. In January of 2004, the Pennsylvania Department of Environmental Protection performed a Filter Plant Evaluation of the Moss Spring Water Treatment Plant. The plant received a commendable rating from DEP, which is the highest rating possible. The water treatment plant is within the top three plants in the state of Pennsylvania that have had Filter Plant Evaluations of their operations by the Pennsylvania Department of Environmental Protection.

# Sewage Disposal

- Antrim Township
  - Currently, the Antrim Township Municipal Authority treats between 675,000 and 750,000 gallons/day of wastewater. Additionally, the Municipal Authority is permitted by DEP to treat up to 1.2 million gallons/day. Generally, sewer service is located within the central portions of the township, including the southwestern section which is served because of drainage basin issues.
  - Sewer hook-up is on a first-come, first-serve basis for those within the sewer service area. Hook-ups for those outside the sewer service area are awarded on a limited basis.
    - Within the township, there are two (2) private sewer systems currently in operation:
    - Grosh
    - Gibble's Potato Chips

# Greencastle Borough

- Currently, all of Greencastle Borough is serviced by the Greencastle Wastewater Treatment Plant. In addition, approximately 100 customers in Antrim Township are served by Greencastle's sewer service as part of an Intermunicipal Agreement between the borough and the township.
- The Greencastle Wastewater Treatment Plant was upgraded in capacity in 2004. The sewer system incorporates four (4) lift stations that have been upgraded within the last two (2) years.
- While there are no issues with the current collection systems, the borough's sewer service is experiencing issues with Inflow and Infiltration (I&I).
- As it is completely served by sewer, the borough currently has no plans for an Act 537 update.

# Solid Waste Disposal

- Antrim Township residents have the option of contracting with a private hauler for solid waste disposal, or disposing of their trash free of charge at the Mountain View Reclamation, located at 9446 Letzburg Road, on Saturday mornings, from 7:00 a.m. to 11:00 a.m. Each resident may dispose of a maximum of four thirty-gallon bags of household waste, furniture, or non-freon containing appliances.
- Curbside waste disposal in Greencastle Borough is handled by privately contracted haulers. Residents of Greencastle Borough either have their trash collected by Waste Management or by IESI. They may also take their garbage to the Mountain View Reclamation Landfill for free disposal.
- The Mountain View Reclamation Landfill is owned and operated by Waste Management and is located in Antrim Township and Montgomery Township. The company has proposed adding an additional 83 acres to its facility and increasing the disposal rates from 1,500 tons per day to 1,800 tons per day. DEP will hold a formal public hearing on the application in 2007. The permitting process is expected to continue through 2009, but if approved, the majority of the expansion is expected to occur in Montgomery Township.
  - The current landfill is 120 acres and current permitted disposal operations take the life of the landfill out to 2010. If the expansion is approved, the life of the landfill would be extended to 2030. The landfill began operation in the 1970s.
  - DEP performs regular site inspections of the landfill. Waste Management was cited for a violation in July 2005 for air quality and failing to prevent visible emissions from entering the atmosphere. The violation was corrected in August of 2005.
  - The landfill is lined and has an advanced linear system. It is economically beneficial to the region through the provisions of jobs and trash tipping fees. Approximately 18 people are employed at the landfill.
  - Ingenco Distributed Energy harvests methane gas produced by the Mountain View Reclamation Landfill. The landfill annually produces methane gas equivalent in energy content to 7.5 million gallons of fuel oil. The project started in 2003.
  - Residents of Greencastle Borough and Antrim Township may bring their household waste to the Mountain View Reclamation Landfill for no fee. If residents of the borough or township choose to contract trash collection with Waste Management, it is taken to the Mountain View Reclamation Landfill. If they choose to contract with IESI, their trash is taken to a landfill in Scotland, Pennsylvania.
  - Mountain View Reclamation Landfill also has a host agreement with Antrim and Montgomery Townships to preserve disposal space for waste coming from these two townships.

# **Recycling Programs**

# Greencastle Borough

- The recycling program in Greencastle Borough began in 1992 and is mandatory for residents and commercial and business establishments in the borough. Recyclables include clear and colored glass, aluminum cans, metal cans, plastic bottles, and newspaper. Commercial and business establishments are also required to recycle cardboard and office paper.
- One 20-gallon recycling container and lid is available free of charge for each housing unit. If the resident moves, the container remains with the property. Additional containers may be purchased for \$8.00 each.
- Residents with subscription pick up service will have their recyclables collected every other week. All others can take their recyclables to an approved recycling center.

# Antrim Township

- Residents of Antrim Township who have a refuse hauler collect trash at their home may also have recyclable materials collected by purchasing a recycling container at the Antrim Township Municipal Building for \$9.50.
- Recyclable materials may also be taken to the Recycling Center any Saturday from 10:00 a.m. until 2:00 p.m. There is no charge for this service. Recyclable materials included clear and colored glass, plastics, aluminum and metal cans and newsprint. The Recycle Center is located just south of the Antrim Township Municipal Building along Antrim Church Road, parallel to Interstate-81.

# **Appendix 6 - Natural and Historic Features**

The natural environment plays a critical role in our community. Natural features such as steep slopes, floodplains, and groundwater flows shape the way in which a community develops. They can also provide us with many advantages, from prime agricultural soils to ideal landscapes for recreation. Between these two roles, the environment plays an important role in the decision-making process, and the process of developing a vision for how to mitigate potential harm while taking full advantage of the natural world.

While it's impossible to address every impact the natural world has in our daily lives, in the Greencastle-Antrim region, there is one particular element that has played a role that's more pronounced than anything else. That element is geology, and the physiographic provinces it has created. The unique nature of our geology has shaped the way we work and play, how we get our water, and how we build our homes. As such, it seems like the appropriate place to start our discussion on the natural and cultural landscape of the region.

# Geology

The Greencastle-Antrim region rests on sedimentary rock and in many parts of our commonwealth this creates a uniform landscape of one form or another; however, this is not the case here. This distinction is largely due to the different physical properties of shale and limestone. The region's geologic formations are graphically shown on Appendix Map 6-1.

Landscape, soils, vegetation, stream flows, and topography fall into two distinct regions. The first of these regions, the Great Valley Shale Province, occupies the western third of Antrim Township. In this region, the bedrock is dominated by shale and graywacke ("dirty" sandstone), with small, intermittent folds of argillaceous (clay containing) limestone. To the east, encompassing Greencastle Borough and the remainder of Antrim Township is the second region, the Great Valley Limestone Province. This portion of the region is underpinned almost exclusively by carbonate rock, the bulk of which is limestone. Small formations of dolomite, another carbonate rock, can be found abutting the Great Valley Shale Province, and a ridge of calcareous (calcium- or limestone-rich) shale is located along Antrim Township's eastern border.

As is the case with all sedimentary rocks, these formations developed through the deposition of material, subject to mild pressure, over the course of time. The shales and graywackes formed from a variety of organic materials, silicone crystals (sand and quartz), and compressed clays, while the limestones and dolomites formed from calcium (limestone) and magnesium (dolomite) deposits that had bonded chemically with carbonate, hence the term "carbonate rock". The hard, insoluble nature of the materials in shale and graywacke caused these rocks to form in distinct layers. The carbonate rock formed with much more block-like layers, due to the ability of deposits to dissolve into and bond with one another. It is the presence of these layers in shales, and the solubility of carbonate rock, that form the basis of these distinctions.

Shale and graywacke weather by the layers that comprise them. This process starts with a weakness on a surface layer caused by a number of factors; however, water is generally the catalyst in the region. Along small, initial weaknesses, surface water gradually cuts into the rock, carving channels and valleys. These flows would eventually encounter other flows, forming a characteristic dendritic (tree-like) pattern. As these streams cut deeper, the layers within the rock supported the valleys. These layers were also resistant to new flows creating channels, creating ridges between the flows. The strength of the rock encouraged deeper cutting within the valleys, rather than uniform weathering across the landscape. This is the process that formed the ridges and valleys we see today.

Southern Franklin County's carbonate rock took place under the ground rather than on its surface and water is the principle force affecting changes in this landscape. The calcium and magnesium carbonates that comprise limestone and dolomite dissolve readily in even the mildest acids. Carbon dioxide, dissolved in water, is just such an acid, and over time, ate into the rock. Small solution channels formed throughout the stone, merging to form cavernous expanses and underground streams. As time passed, these water flows dissolved the supports of the rock above, forming sinkholes and surface subsidence. The ultimate outcome of this progression was a lumpy, rolling terrain, with reduced surface water flows.

Terrain is the first indication of these distinctions, as shown in Appendix Map 6-2 Topography. The western portions of the region are marked by numerous, steep, stream valleys, with ascending ridgelines. This terrain is the most rugged in the region, as well as the

most limiting for development. In contrast, the eastern two-thirds of Antrim Township and all of Greencastle Borough sit upon rolling hills with only mild topographic variation. This landscape, however, includes carbonate bedrock and with it the risk of sinkhole formation.

# Groundwater

Given the different ways in which water has formed the natural environment of the region, it is not surprising that bedrock continues to play a substantial role in water considerations. Outside of Greencastle Borough, the majority of residents acquire their water from ground sources. In both regions, most wells are shallow, 200 feet or less.

The depth of aquifers is an indication of where water has pooled, but what it does not tell, is just how much is there. Within carbonate rock, rain percolates rapidly through the soil where solution channels carry it directly into the water table. Very little precipitation flows as surface water. On harder sedimentary rocks surface water remains much longer as it percolates through various layers. This process can take days, weeks, or even centuries, and is limited by the fact that less water actually makes its way into the ground in the first place.

In shale and graywacke, more water is directed towards the surface which increases the potential for loss to evaporation. The absence of solution channels and caverns also means there is less capacity to store water. In areas such as Pennsylvania, were prolonged droughts are rare, wells don't typically run dry frequently, though these areas may be prone to discoloration and foul tastes during prolonged drought periods. This results from percolation through layers of rock increasing the water's likelihood of picking up certain mineral deposits such as iron, especially during low flows. This isn't all that bad, since the bedrock can also serve to eliminate pollutants by filtering it as it works its way downward.

Limestone and dolomite generally offer high yields year-round due to their vast underground storage capacity. This trait makes these areas far less complicated when planning for groundwater consumption. However, they too have their limitations. The most prevalent problem with wells drawing from carbonate rock is extremely hard water, laden with calcium deposits. This is a condition that can be treated, though, depending upon the scale of the problem, treatment can be expensive. Their fast absorption of water also makes them prone to contaminants, particularly bacteria and nitrates, exacerbated in agricultural areas. With minimal filtration from bedrock, the one mitigating factor is the sheer volume of water can dilute pollutants. The porous nature of these rocks can also be a conduit for radon.

# Surface Water

Even in porous carbonate rock landscapes, water flows at the surface. This is especially true during flooding, heavy downpours, and other hydrological events such as snow melts, not to mention the streams that are present year-round. The ability of water to be conveyed through soil is a key element of flood management and soil conservation. Fortunately, nearly all of the soils in the Greencastle-Antrim region facilitate this movement, largely due to their formation from the corresponding bedrock. Appendix Map 6-3 displays soil drainage properties in the Greencastle-Antrim region.

As important as the ability of a soil to move water is the soil depth before reaching bedrock. The harder bedrock and steeper topography found in the Great Valley Shale Province create conditions with soils depths nearly three feet shallower than in the Great Valley Limestone Province. With this reduced depth, soils in the western third of the region are more susceptible to certain problems. The primary obstacle is that shallower soils have less capacity to absorb and hold water than deeper soils. The second is that while lower water capacity may limit frost action, these soils are still very prone to temperature fluctuations.

The climate of the region is temperate, with seasonal fluctuations that affect the way soils interact with water. Average daily extreme temperatures range from lows of 6° in January, to highs of 98° in July. Record lows have fallen to -13° and highs up to 107°. This diverse temperature spectrum can cause a great deal of change in seasonal soil characteristics. Changes throughout the year also occur with precipitation. The region generally receives 41.5 inches of rainfall (and rainfall equivalent as snow) in a given year. This ranges from dry months such as February with average precipitation of only 2.3 inches, to the high months of May through August, where over 4 inches typically fall each month. The variety of precipitation also has impacts, such as March rains, typically amounting

3.8 inches, which melt snow and ice packs, or summer thunderstorms that deposit large amounts of rainfall at once. Combined, these temperature and rainfall variations increase the likelihood of soil runoff. Both the severity and duration of these events are much more likely in the western portions of the region than in the eastern two-thirds. These same qualities impact a soil's ability to handle on-lot septic systems, again, showing the greatest limitations in the Great Valley Shale Province. Appendix Map 6-4 displays the suitability of the soils in the Greencastle-Antrim region to accommodate an on-lot disposal system.

Water flowing on the surface as streams, or through the surface as wetlands and hydric (wet) areas, are the key conduits for moving excess water that the soil is either unable to absorb, or that expels via springs. The movement of water through bedrock, rather than soil, in the carbonate areas means the landscape has far fewer of these streams, or more accurately, channels these streams underwater. It's in the shale areas that surface water takes a more prominent role, and the numerous flows across the landscape are a testament to this. Appendix Map 6-5 shows watersheds and streams in the Greencastle-Antrim region.

Hydrologic features such as wetlands, hydric soils, and floodplains are the natural environment's way of responding to saturation. In doing so, they provide a varied habitat for wildlife, prevent broader flooding, limit erosion, and filter water before it reaches surface streams. At the same time, they are not viable for development. This makes them ideal areas for natural consideration, both for the unique benefits they provide and the severe limitations they possess. Appendix Map 6-6 shows hydric soils and appendix Map 6-7 shows hydrologic constraints in the region.

Bridging these areas and drier terrain are riparian (river) corridors. In their natural, forested state, vegetative matter plays a critical role in filtering out contaminants. The area directly adjacent to the stream is of key importance here, where vegetation can intercept water from throughout the watershed before it enters the channel. Here, plants also stabilize the banks, preventing erosion.

When vegetation is removed from these corridors, streams are prone to a number of problems. The immediate impact from a loss of vegetation is thermal pollution during warmer months, where shade has been removed. As the roots of the plants decompose, bank erosion follows, and flood events become more frequent and severe. More nutrients enter the water. As nutrients and sediment increase, the amount of oxygen dissolved in the water diminishes, and sensitive organisms will cease to reproduce or die. At this point, the stream has become eutrophic (overloaded with nutrients). In this environment, a number of harmful bacteria can thrive, creating a risk to livestock and downstream water supplies.

Vegetated wetlands are the most beneficial and serve to filter water, and regulate flow after rain. Other vegetated areas follow, and are also very effective at stabilizing ground and absorbing nutrients. After this, uses such as residential property and orchards occupy a moderate use, generally promoting bank stability, but contributing nutrients from fertilizer and septic systems. Finally, low quality uses, such as parking and confined animal operations fuel erosion and add nutrients directly to the stream. Unfortunately, nearly 80% of riparian areas are in lower quality land uses. As shown in Appendix Map 6-8, forested areas are sparse in both the township and the borough, increasing potential for stream degradation. Fortunately the woodlands that are here are generally located in the stream corridors. Despite land with limited riparian protection, most of the waterways in the region are attaining (meeting) goals for impairments, and one watershed, Muddy Run, has been listed as a high-quality cold-water fishery, with wild trout reproduction, as shown on Appendix Map 6-9.

# Agriculture

Agriculture dominates the landscape in the Greencastle-Antrim region. The township's land is largely ideal for agricultural production, and the borough is situated perfectly to service this industry. Indeed, agricultural land use, including preserved farms and agricultural security areas, cover more than 90% of the two municipalities. Appendix Map 6-10 shows the location of preserved farms and agricultural security areas in the region. Here again, geology is the key factor, with limestone in particular playing a substantial role.

Soils are categorized into agricultural classes, with Class I being the best, and Class VIII being the worst. Factors such as slope, erosion, flooding, stoniness, and droughtiness are the measures of these classes, and bear a direct correlation to how suitable a soil is for crops. Classes I – IV are considered "Agricultural Soils," meaning that they are likely to be productive for crops. Class I – III soils are regarded as being "Soils of Statewide Importance," indicating an even higher capacity for agricultural use. Finally, Class I and II soils are regarded as "Prime Agricultural Soils," exhibiting very few or no limitations, making them the ideal location to grow crops.

Agricultural soils are shown on Appendix Map 6-11. Nearly the entire region falls into these categories, but it is the limestone plane bordering Greencastle Borough to the north, east, and south, that is the richest, with large swaths of prime soils.

The soils in the carbonate areas have specific advantages over their counterparts to the west. First, the terrain makes them far less susceptible to erosion. Their depth allows for greater water absorption and retention. Formed from the alkaline bedrock, these soils have a more neutral pH, something that is preferred by most crops. The drainage and runoff properties of these soils also make them much more adaptable to manure application, allowing them to better utilize this farm generated resource to retain nitrogen and other nutrients consumed by growing plants. The gentle rolling hills, in contrast to the steeper ridges in the shale and sandstone areas, are easier to work with farm equipment. With these factors combined, it is understandable that such an area has thriving agricultural history.

# **Environmental Constraints**

The environment we live in defines the quality of life enjoyed by those living within the confines of the study area. In order to preserve and allow for the inevitable growth, it is vitally important that the environmental constraints be understood by the planner so that development within the regions can occur in an orderly fashion. The purpose of the profile is to help local, regional, and state government officials, developers, and citizens make more informed planning decisions. Sensitive environmental resources, threats to resource existence and function, the relationship between natural resources and development, and natural resources protection techniques are of specific interest. Understanding these parameters will aid in the identification of natural resources that are in need of remediation and key areas to preserve. It will also identify the location and types of features that impose constraints to development as well as areas that are well-suited for development. Appendix Map 6-12 summarizes the environmental constraints that exist in the region and that may hinder development potential.

# **Historic Resources**

The historic character of the Greencastle-Antrim region is a story of successive waves of human influence, all tied to the soil through agriculture. This began with native tribes, who lived by a combination of subsistence farming and hunting. Soon, they were displaced by European settlement, where the landscape made the drastic change from old-growth forest to an agricultural landscape. The value of the agricultural land in the region led to forays by bands of raiders from Maryland seeking to establish holdings under the authority of Lord Baltimore. These incidents were often quite violent, remaining unresolved until 1767 with the delineation of the Mason-Dixon Line. The town center of Greencastle grew to accommodate the pastoral landscape, providing for the commercial needs of the region. As railroads developed, industry began to supplement agriculture, with both relying on the new form of transportation to carry their goods to market. Next, it was the US Highway System, and a few decades later, the Interstate Highway System, that provided a new and versatile link to the greater world. In time, these routes became the conduits of growth from urban areas in Maryland, Virginia, and Washington, D.C., and suburban uses began to spread.

# **Early Settlement**

The Greencastle-Antrim area has a rich history that dates back to the early 1730s when Antrim Township (established 1741) was settled by Presbyterian Scots-Irish immigrants from Northern Ireland, followed shortly thereafter by the Germans. In the mid 1700s, during the French and Indian War and Pontiac's War, settlers in Antrim Township were attacked many times by Native Americans. Raiding parties not only killed settlers but captured them. One of the most well documented occurrences took place during the Pontiac's War (1763-1766) when a teacher named Enoch Brown and ten of his students were killed by three young Indians. During the attack, a scholar named Archie McCollough was scalped by the Indians and left for dead, but ultimately survived<sup>1</sup>.

The land at the center of the township and the intersection of two heavily-traveled roads is where Greencastle would be formed in 1782. During the late 1700s, William Allison operated a tavern at the intersection of these two roads that served travelers using these roads. Allison's son, John, operated the tavern for a while and in 1769, received 300 acres of land from his father. With the help of James Crawford, a local schoolteacher, William Allison divided the land into 246 building lots. In the years following, the population

<sup>1</sup> History of Antrim, Antrim Township Website, 2007.

continued to increase and by 1794 more than 60 houses were present in the town. John Allison named the town "Greencastle," after a town in Northern Ireland where many of the early settlers had come from. The town of Greencastle was officially incorporated on March 25, 1805<sup>2</sup>.

# The Civil War and the Region

The Greencastle-Antrim area saw much action during the Civil War (1861-1865), as it was regarded as a strategic location. On June 22, 1863 Corporal William H. Rihl of the 1<sup>st</sup> New York Cavalry was the first Union soldier to die north of the Mason-Dixon Line. Corporal Rihl was shot and killed by a Confederate infantry group just north of Greencastle Borough. In 1886, his remains were reinterred at the site of his death. The site was memorialized in 1887 by a monument along U.S. Route 11<sup>3</sup>.

Even as early as 1861, Union regiments spent time in the Greencastle-Antrim area. During their stay, many of the soldiers attended services at Greencastle churches, and some even went swimming and fished in the Conococheague Creek west of town. On June 8<sup>th</sup> of that year, the 10<sup>th</sup> Pennsylvania Volunteers Regiment commanded by Col. Sullivan A. Meredith was assigned to the 3<sup>rd</sup> Brigade of the 1<sup>st</sup> Division and ordered to march to Greencastle. When the 10<sup>th</sup> Regiment arrived, it encamped in a 30 acre grove of oak and cedar, approximately one mile north of Greencastle. This site, which became known as Camp Meredith, is where the Regiment engaged in company and battalion drill for 17 days. On June 25<sup>th</sup>, 1861, the Regiment received orders to join in the forward movement of General Patterson's army<sup>4</sup>.

Perhaps one of the most famous accounts during the Civil War in Greencastle was that of Dolly Harris. Born in 1845, and raised in a house near 45 North Carlisle Street, Frances (Dolly) Harris was deeply moved by the events of the Civil War. Beginning on June 15, 1863, Confederate forces began making their way north across the Mason-Dixon Line. Day by day, the residents of Greencastle and Antrim Township watched as they passed through the town on their way to Gettysburg. During the passing, the Confederates plundered food, supplies, livestock, and animals. Most likely feeling anger toward the Confederates, combined with a strong sense of patriotism, 17 year-old Dolly Harris made her feelings about the Confederates clear. According to a Chambersburg newspaper, on June 27, as General George Pickett and his men were marching up North Carlisle Street, Dolly rushed to the street and waved an American flag "in the face" of the leader of the southern band. While doing this, Dolly also denounced the Confederate troops as traitors to the United States, cut throats, and plunderers. The troops quite possibly could have killed her, but General Pickett instead rose in his stirrups, took off his hat, and saluted Dolly and the flag, thereby quelling an uprising in the street. Following Pickett's example, the troops also saluted Dolly as the division band began to play "Dixie." During a Gettysburg reunion in 1887, Gen. Aylett, formerly of Pickett's division, mentioned the courageous act of Dolly Harris during a speech that he gave. In his speech, Aylett said, "Why the bravest woman I ever saw was a Pennsylvania girl who defied Pickett's whole division as we marched through the little town called Greencastle. She had a United States flag as an apron which she defiantly waved up and down as our columns passed by her and dared us to take it from her."<sup>5</sup>

After the Battle of Gettysburg, on July 4, 1863, the defeated Confederate Army began their retreat back into Virginia. The army's route would take them across South Mountain into the Cumberland Valley, passing through the villages of Greenwood, New Franklin, Marion, and Greencastle. As many as 12,000 wounded soldiers made the trip through the valley. Just a few weeks before, the Confederates marched triumphantly through Greencastle; however, this time through the town would be a march in shame. The residents of Greencastle responded by stealing horses and taunting the soldiers as they marched down Carlisle Street. Confederate Brigadier General John Imboden recalled that Union Cavalry and approximately 30 to 40 citizens of the Greencastle area attacked the Confederate wagon train one mile south of the town on the Williamsport Pike. Armed with shotguns and axes, the citizens attacked the wagon train by cutting the spokes of the wagon wheels, but were soon driven off by Confederate forces. It would take the Confederate forces two days to pass through Greencastle<sup>6</sup>.

<sup>&</sup>lt;sup>2</sup> Sharon Baumbaugh, Greencastle's History, Greencastle Borough Website 2007.

<sup>&</sup>lt;sup>3</sup> History of Antrim, Antrim Township Website, 2007.

<sup>&</sup>lt;sup>4</sup> Ted Alexander. Greencastle During the Civil War: An Overview, Part I

<sup>&</sup>lt;sup>5</sup> Dolly Harris – Greencastle's Heroine, www.greencastlemuseum.org

<sup>&</sup>lt;sup>6</sup> Ted Alexander, The Confederate Retreat through Greencastle-Antrim

# **Places of Historical Significance**

Also included in this chapter are the Trails of History Self-Guided Tours, whereby one can explore places of historical and cultural significance in the region. The following outlines and describes these places of significance found within the region:

# Antrim Township

## Moss Spring Graveyard

- The log meeting house c.1737 was burned during the French and Indian War. The Red Church, a weatherboard building was built c.1767.
- The church no longer exists, but graves of the early Presbyterian parishioners remain.

## The Old Brown's Mill School

- Upon the enactment of the 1834 Free School Act, 51 citizens of the Brown's Mill community financed the building of the school.
- The school served as an education institution and community center for the Brown's Mill area for eighty-five (85) years.
- In addition to regular curricula, debates and spelling bees were held each school year.

## Brown's Mill Graveyard

- Contains the graves of many early settlers of the region
- The site is recognized as a historic cemetery, and contains the resting place of 17 American Revolutionary Veterans.
- Some notable persons buried in this cemetery include James Potter, a Pennsylvania general during the Revolutionary War, and James McLene, a member of the Continental Congress and political leader in the state government during the Revolutionary War.

## The Enoch Brown Park

- The park is named after the school master who, along with ten of his pupils, was killed by three young Indians in 1764 during a campaign to pillage the Conococheague Settlement.
- In 1885, 20 acres were purchased and a monument to Brown was erected on it.

# Corporal Rihl

- This site, located approximately one mile north of Greencastle Borough, commemorates Corporal William H. Rihl, a member of the 1<sup>st</sup> New York cavalry unit during the Civil War. During an exchange of fire between Union and Confederate forces, Rihl was shot and killed, making him the first Union soldier to be killed north of the Mason-Dixon Line.
- In 1886, Corporeal Rihl's body was removed from the Lutheran graveyard and buried at the site where he was killed. Members of the Greencastle G.A.R. raised funds that resulted in the erection and dedication of the monument on June 22, 1887, on the site of Rihl's final resting place.

# Civil War Signal Station

In 1864, a signal station was established at 500 Buchanan Trail West. The post located in Greencastle was headquarters for the signal system that extended from Mount Parnell to Harper's Ferry to monitor and warn against Confederate raids into Pennsylvania.

# Mormon Colony

- In the 1840s, followers of the Church of Jesus Christ of Latter-day Saints (Mormons) purchased the 400-acre McLanahan farm along the Conococheague Creek just one mile west of Greencastle.
- In the spring of 1846, Sidney Rigdon and 150 Mormon followers took possession of the farm. Some of the followers worked on the farm while others sought employment in Greencastle.
- One of the followers, Ebenezer Robinson, started a weekly newspaper called the Conococheague Herald, from which the present-day Echo-Pilot can trace its beginnings.

### Martin's Mill Bridge

- Martin's Mill Covered Bridge was constructed in 1849 across the East Branch of the Conococheague Creek to enhance access between the village of Upton and the Williamsport Pike.
- The bridge is 200 feet long and is one of the last bridges of its kind still in existence in Pennsylvania.
- In December 2003, Antrim Township's Supervisors assumed ownership of the bridge from the Martin's Mill Covered Bridge Association.

### The Robert Johnston Home

- Robert Johnston was a doctor during the late 1700s and practiced medicine out of his home along the King's Highway, just south of Greencastle.
- During the American Revolutionary War, Johnston became a surgeon in the 6<sup>th</sup> Pennsylvania Battalion. After the War, he returned to continue practicing medicine.
- President Washington and his staff visited the Johnston home while on his way west to quell the Whiskey Rebellion of 1794.

#### The Johnston Distillery

- The distillery was constructed in 1838 by Robert Johnston (no relation to Dr. Johnston), who used the distillery to make and sell whiskey in bulk quantities. Local customers came to fill their containers for home use.
- When Maryland banned the sale of whiskey in 1919, many people from that state came to Johnston Distillery to purchase whiskey.
- When national prohibition went into effect, the government bonded fifty-four (54) barrels of whiskey, stored it in a Johnston warehouse on the grounds, and placed the warehouse under constant guard.

# Crown Stone Markers

- As Charles Mason and Jeremiah Dixon were determining the boundary between Pennsylvania and Maryland, stone markers were placed every mile and a crown stone placed every five miles to delineate the boundary.
- One of the original crown stone markers still exists on the farm at 2160 Mason-Dixon Road. The marker, placed in 1765, bares the coats of arms of William Penn and Lord Baltimore, the proprietors of Pennsylvania and Maryland colonies, respectively.

#### John Mitchell Homestead

- This stone building was constructed in 1780 by John Mitchell, a pioneer who settled in Antrim Township.
- During the Civil War, the site was used as an encampment by both Union and Confederate units.
- The site was restored by the late Joseph Henson, a former owner of the property. Because of its historical/cultural significance, the property has been named on the National Register of Historic Places.

## Tayamentasachta

- Tayamentasachta is an Iroquoian word meaning "endless hills.," The name was given to the farm when owned by Col. Benjamin F. Winger after the Civil War.
- In 1822, the farm was purchased by Emmanuel Stover, when it was known as "Popular Springs." While owned by the Stovers, the farm contained extensive orchards and dairy operations and became one of the earliest examples of diversified farming. The sons of Jacob P. Stover, Daniel, Emmanuel, and Mitchell Stover, are known as pioneers in the development of windmills.
- The farm is now operated by the Greencastle-Antrim School District as a center for environmental research and preservation of the community's history.

#### Greencastle Borough

### The Dolly Harris Incident

- 37 North Carlisle Street is the site where Frances "Dolly" Harris denounced the Confederates and expressed her patriotism by waving the Union flag in front of the Confederate Army on June 27, 1863. Confederate General George Pickett saluted Dolly and the U.S. flag and then continued riding up Carlisle Street with the band playing a rendition of "Dixie."
- The site of the Harris House is now occupied by the Susquehanna Bank's north annex.

# Council Hall

- Erected in 1888, the Council Hall provided quarters on the 1<sup>st</sup> floor for the Rescue Hose Company's equipment and a room on the second floor was used for Borough Council Meetings. The rest of the second floor was a recreation hall for the firemen. On occasion, fairs, festivals, and socials were held here.
- The Second Floor of Council Hall was used by fireman until 1948 when a new fire hall was built on South Carlisle Street. From 1948 to 1962, the room was used to house the Greencastle Circulating Library before the Lilian S. Besore Library was built.

## Evangelical Lutheran Church

- The Evangelical Lutheran congregation likely began c.1775 in Antrim Township. The first building was erected c.1810 on the current site of the Evangelical Lutheran Church under the pastorate of Rev. John Ruthrauff. Reverend Ruthrauff served the church for approximately 40 years.
- The church building was enlarged in 1836, remodeled in 1857, and torn down in 1875 so that the current structure could be built.
- The church's graveyard contains the final resting place of many early German pioneers that settled into the region.

## Moss Spring Graveyard

- The log meeting house c.1737 was burned during the French and Indian War. The Red Church, a weatherboard building, was built c.1767.
- The church no longer exists, but graves of some of the early parishioners remain.

### Antrim House

- Built in 1859 by Thomas Pawling, the Antrim House hotel was used frequently by drivers of horse-drawn wagons, train and stage coach passengers, and livestock dealers and drovers.
- The establishment changed owners several times, and along with the changes of owners came a change of amenities over the years, including a restaurant, billiard parlor, and a vaudeville motion picture theater.
- The original structure was replaced with a three-story brick building in 1904 known as the McLaughlin Hotel.
- The Greencastle Lions Club secured ownership of the hotel in 1976 and renamed it the Antrim House. It is now known as the John Allison Public House.

# Town Hall

- Town Hall was erected in 1871 and was the town's first community auditorium a center of community entertainment and cultural activities. In addition to the auditorium, Town Hall contained offices, store rooms, and space for Knights of Pythias lodge meetings.
- Unfortunately, the Town Hall was destroyed by a fire on January 26, 2006.

# Ulric Dahlgren

During the Civil War, Dahlgren led a small force of Union cavalry into Greencastle's Town Square on July 2, 1863 and intercepted Confederate mail that was bound for General Lee in Gettysburg. Included in the mail was a message from Richmond informing Lee that southern military authorities could not send him any reinforcements. This was a vital piece of information for Union Gen. George Meade that may have helped the Union win the Battle of Gettysburg.

## McCullough's Tavern

- Owned by Robert McCullough, McCullough's Tavern operated in the 1700s during the time of American Revolutionary War. On his way west to suppress the Whiskey Rebellion in 1794, President Washington stopped in Greencastle and ate his breakfast there.
- Some of the original logs on the south side of the structure are exposed and can been seen between the buildings.

## Fire Fighters' Exhibit

The Rescue Hose Company No. 1, the only remaining all-volunteer firefighting organization in Franklin County, was organized in 1896. In its possession is a collection of old firefighting equipment, which includes a hand pump (c. 1741) and the "Old Brockway," which was purchased in 1917.

## German Reform Graveyard

- The German Reformed Congregation purchased a tract of land on South Carlisle Street from John Allison in 1786 and shortly thereafter erected a log church. In 1808, the log church was torn down and a brick sanctuary was built in its place.
- In 1854, a new edifice was built facing East Baltimore Street, which is the site of the current United Church of Christ.
- The graveyard itself was used from the 1700s until several decades after the Civil War. It contains the remains of many early German pioneers who attended services in the original log church.

# Allison's Tavern

- The tavern stood on the southwest corner of the intersection where Greencastle's square was laid out in 1782. It was the first lot to be surveyed by John Allison. Either a tavern or a hotel served the community at this location for a period of 150 years.
- The brick structure located on the site was built c. 1855 and was used as a tavern/hotel until 1920 when it was forced to close as a result of National Prohibition.
- The structure still exists today and is used for offices and businesses at the street level with apartments on the second level.

## The Town Clock

- The Town Clock is one of Greencastle Borough's most prominent landmarks. The First National Bank built the building on the northwest corner of the diamond in 1870, without the clock. Local civic leaders began a private subscription drive to raise \$500 to build the clock tower and \$300 for the bell. Once the money was raised, the bank's directors authorized the modifications to the roof of the building, required for the construction of the clock tower, which was built in 1872.
- Today, both the clock and the tower are maintained by the Borough.

# **The National Register**

This gradual progression has yielded a variety of historic resources in Greencastle Borough and Antrim Township, ranging from the pastoral to the industrial. At the core of this is the Greencastle Historic District, listed with the National Register of Historic Places. Four other buildings in the region have this designation as well, with four others (and one structure) determined to be eligible, and numerous others yet to be determined. This includes the region's farmsteads and mills, historic churches, and even structures such as bridges and towers. Because of the transition of uses since European settlement, these buildings and structures span centuries. Submitting applications to the National Register is extremely time-consuming, as is creating a detailed inventory for all of the potential sites. Therefore, many sites are likely to go unnoticed.

Table 6-1 shows the places in the region that are listed, eligible, ineligible, or undetermined for the National Register of Historic Places (NHRP). The spatial distribution of historic resources in the region is shown in Map 6-13.

#### Construction Construction **NHRP Status** Municipality **Property Name** Address Material Date Martin's Mill Covered Bridge N/A N/A 1849 Listed Old Brown's Mill School N/A Stone 1836 Listed Lietersburg Road Stover-Winger Farm Brick 1849 Listed Spring Grove Farm & Distillery Greencastle-Williamsport Pike Brick 1867 Listed Darrell Gibble Farm Williamsport Pike Weatherboard 1940 Eligible 14007 Willamsport Pike John Hade Farmstead Limestone 1774 Eligible Shelly Farm 2388 Buchanan Trail West N/A 1850 Eligible (36FR0404) 7748 Brown Mill Road Wood 1875 Ineligible Bridge across Conococheague Stone Bridge Road Stone N/A Ineligible Antrim Creek Brown's Mill 7748 Brown Mill Road Wood 1875 Ineligible Hickey, Robert Property N/A Wood 1930 Ineligible Stone House & Springhouse/ N/A N/A N/A Ineligible Jerri-Dan Site Williamson Road 1783 Bard, M.O. Farmhouse Limestone Undetermined Hicks, Alvin Farm Brick 1890 Undetermined 14648 Molly Pitcher Highway Molly Pitcher LLC N/A N/A Undetermined N/A Patton Bridge Road SR 7201 N/A Undetermined Stone Bridge Road N/A Brick 1890 Undetermined SR 3005 N/A Concrete 1941 Undetermined N/A SR 16 Concrete 1937 Undetermined Mitchell-Shook House Leitersburg Street Stone 1810 Listed Greencastle Greencastle Historic District N/A N/A Listed Hostetter Store Building 28 Center Square Brick 1910 Eligible

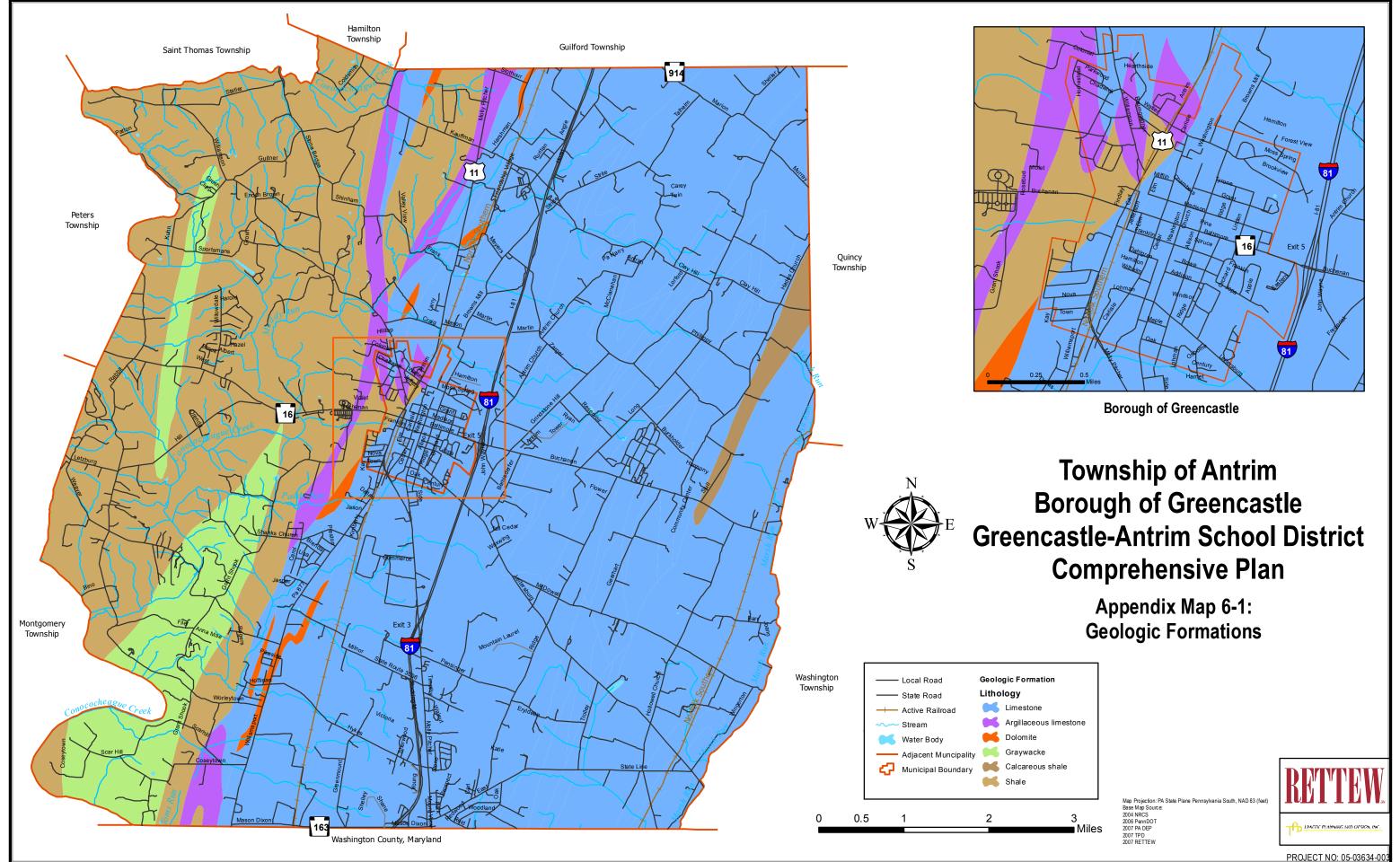
Table 6-1: National Register Status

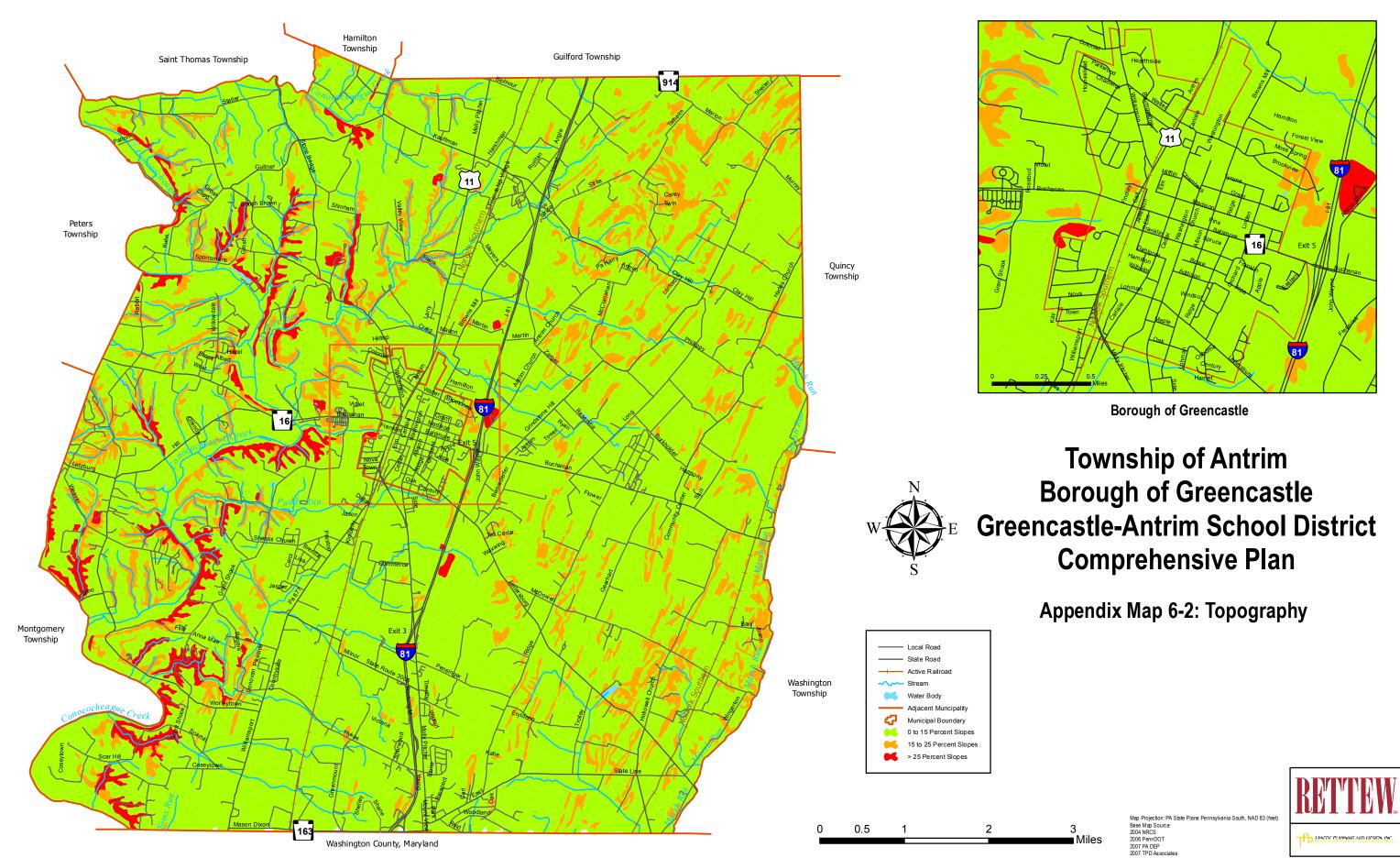
Source: Cultural Resources GIS, PHMC, 2007

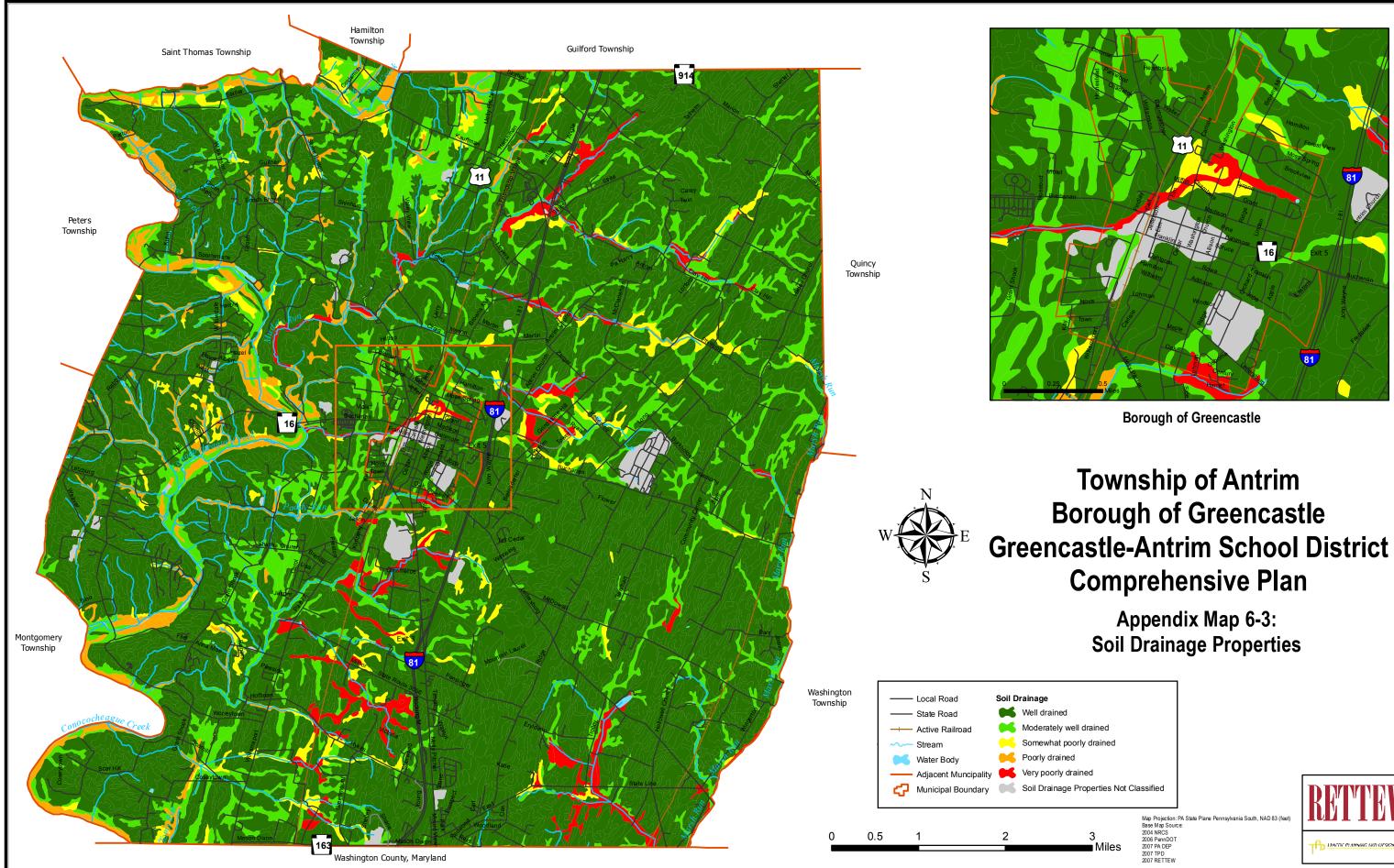
# Synthesis

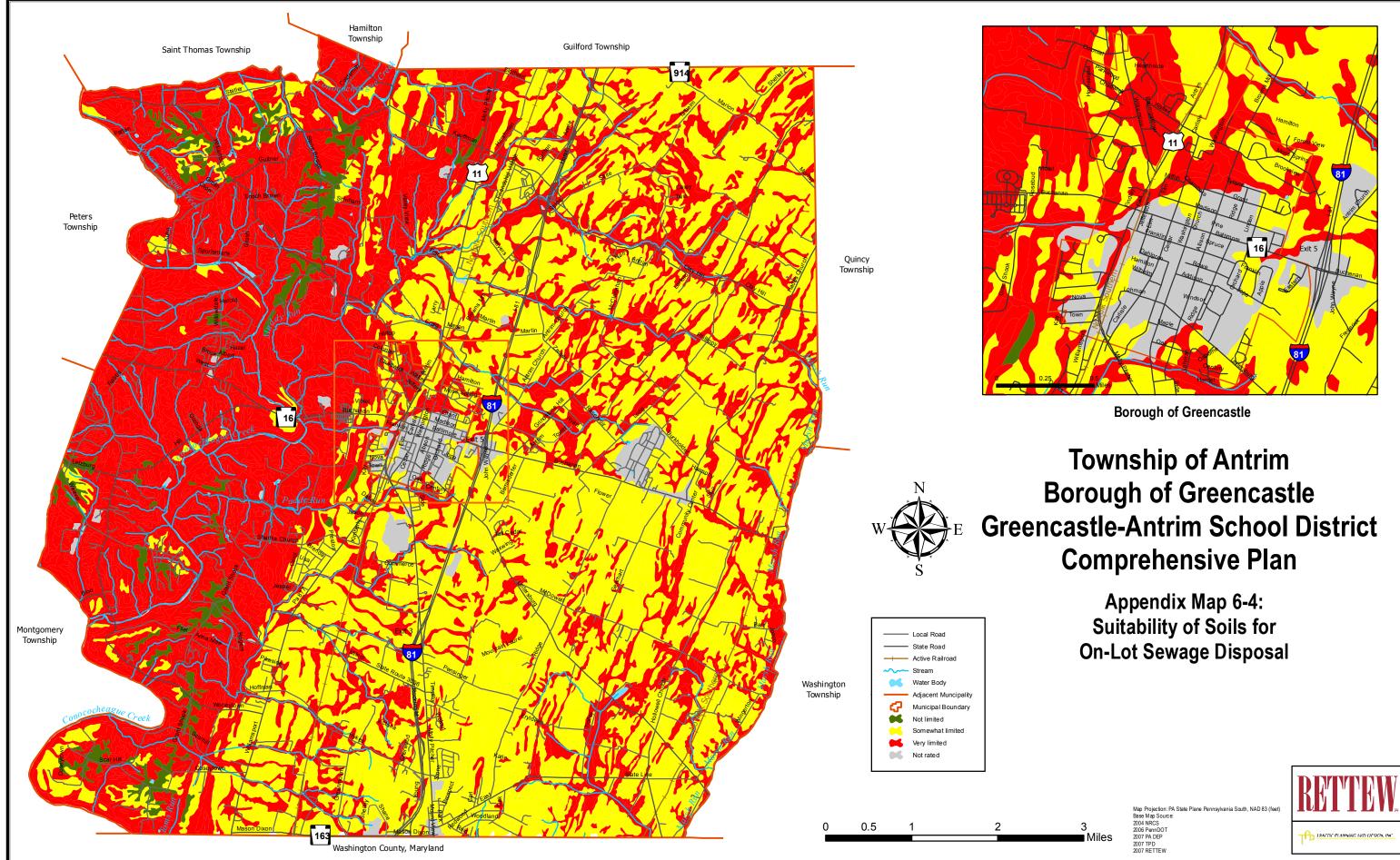
None of these natural and historic characteristics, whether soil properties or bedrock geology, forested regions or historic buildings, exist in a vacuum. Instead, they are interwoven, with each influencing the other. With the numerous streams, steep slopes, and environmental limitations, this western third of the region has a unique set of circumstances. These areas are not ideal for agriculture, nor are they suited for development. Well water and septic systems, the primary utilities in these areas, are not designed to function well in these circumstances. Natural habitats, formed around the streams and valleys, are found nowhere else in the region. This prominence of natural constraints and opportunities shapes this region, and defines it.

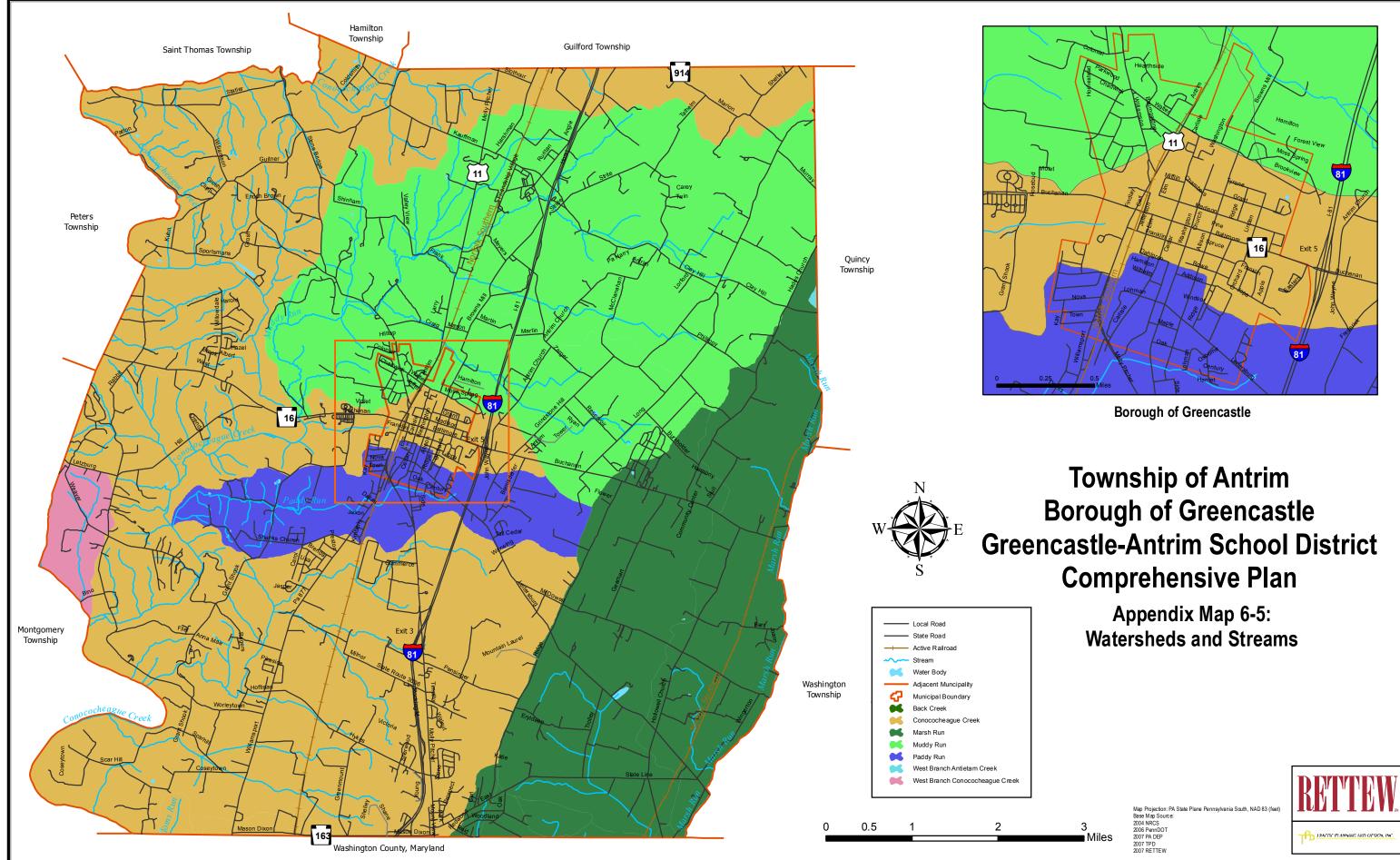
To the west, the gentle slopes, deep soils, and fertile earth frame this area for its environmentally ideal purpose: agriculture. The landscape here boasts tremendous crop yields, as if the land were designed for farming. The soils are also robust enough for long-term, sustained fertility, application of agricultural wastes for fertilization, and are located within 200 miles of numerous markets. This connection of resources and potential is the key to this region and its iconic characteristic.

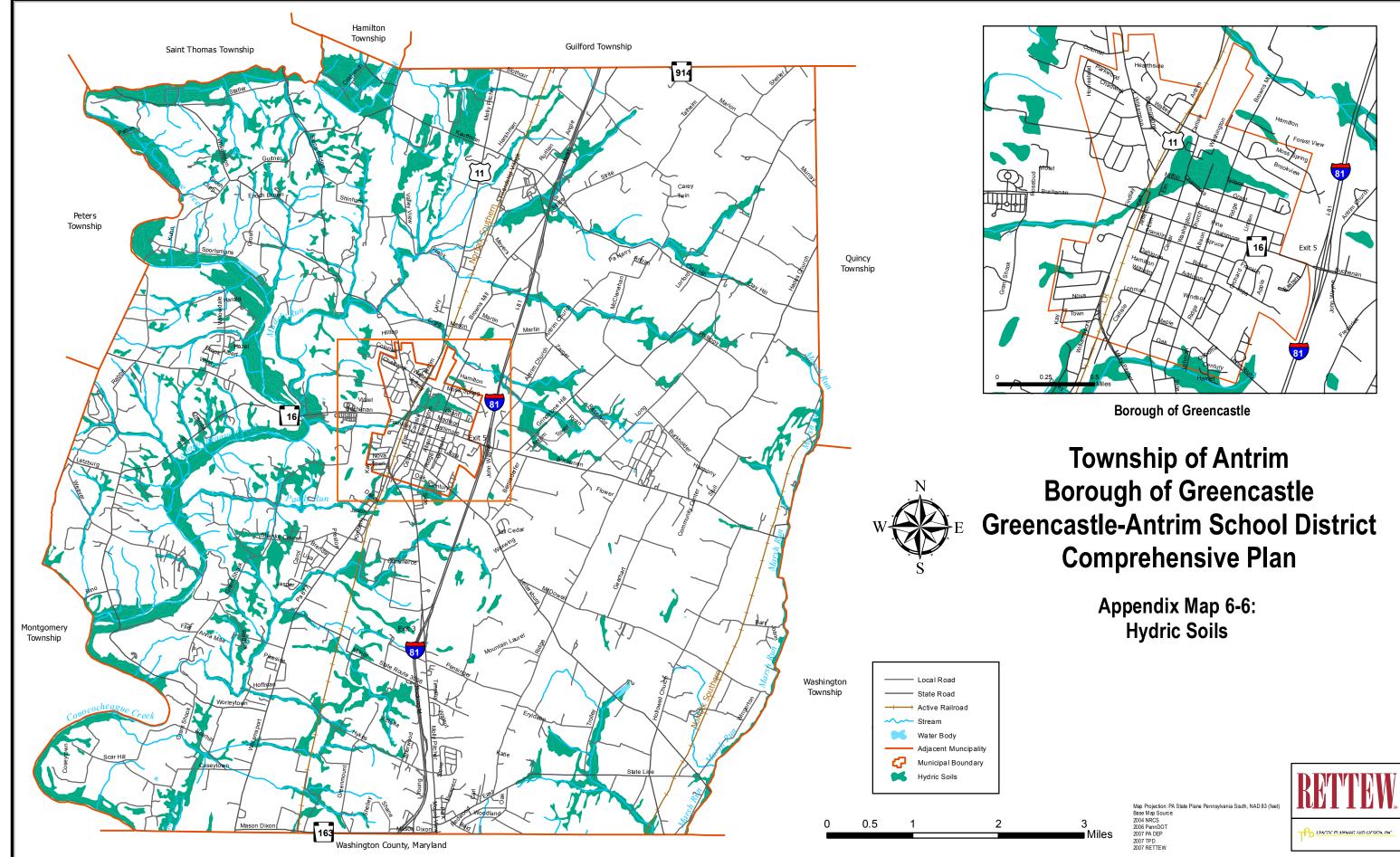


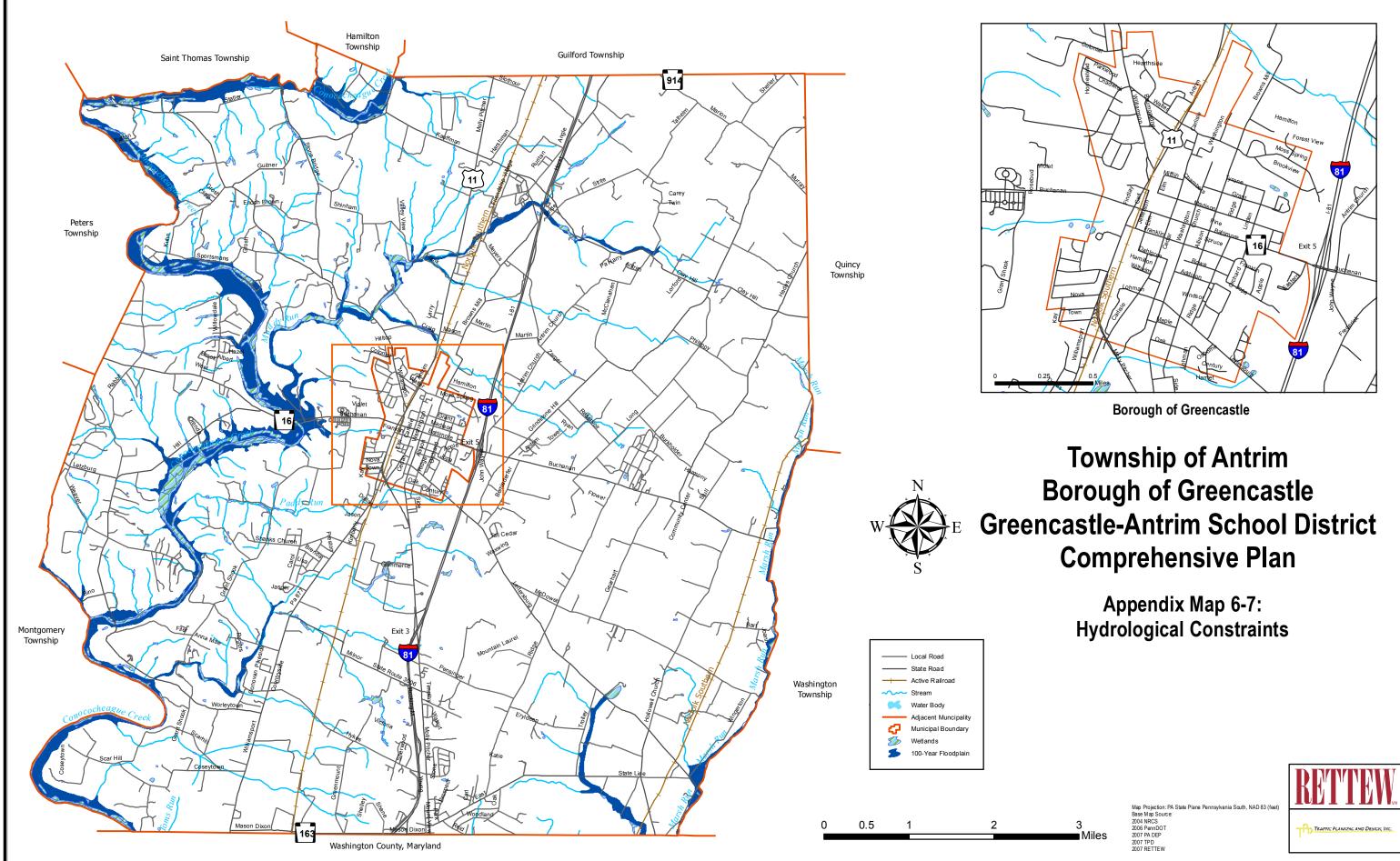


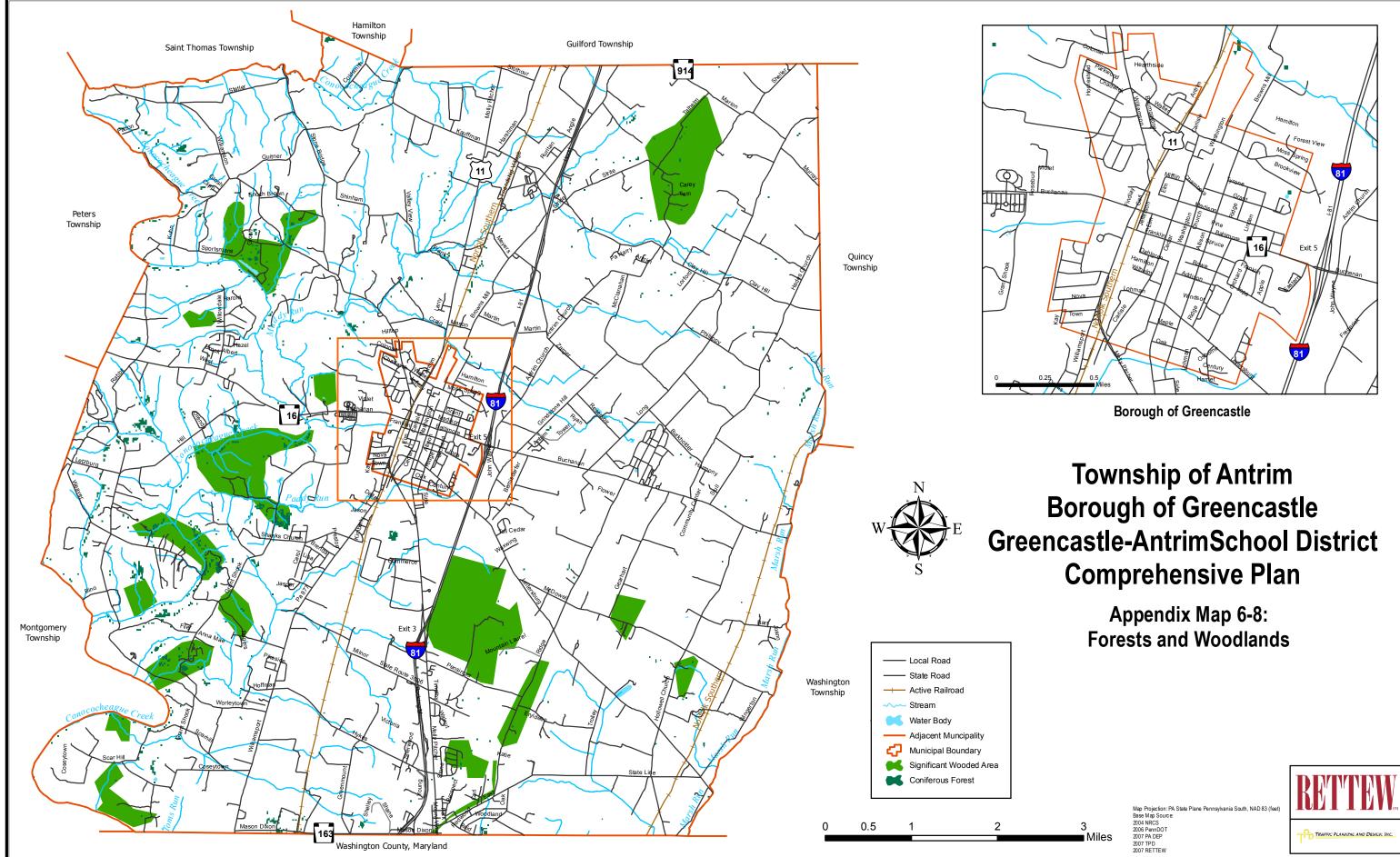


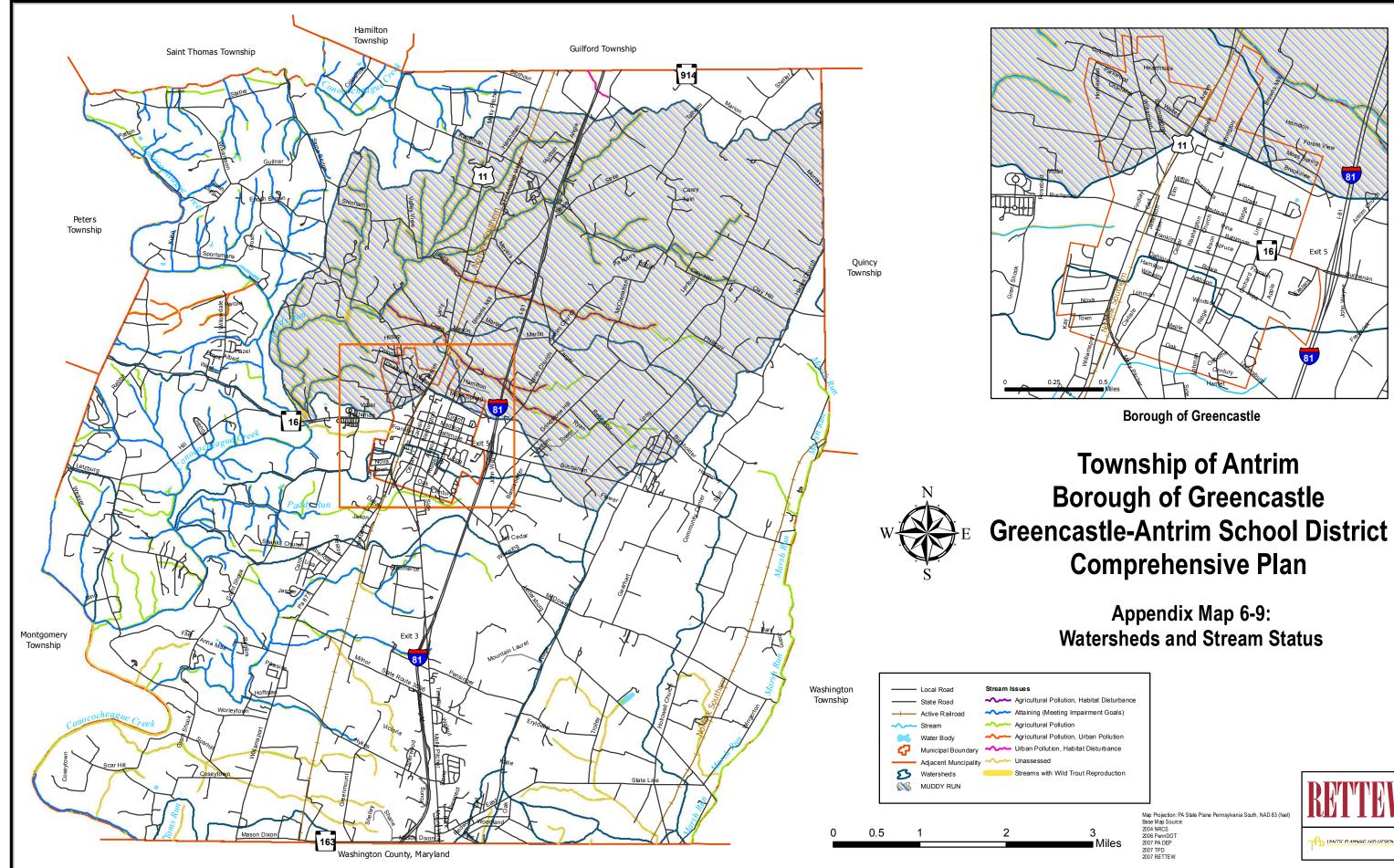




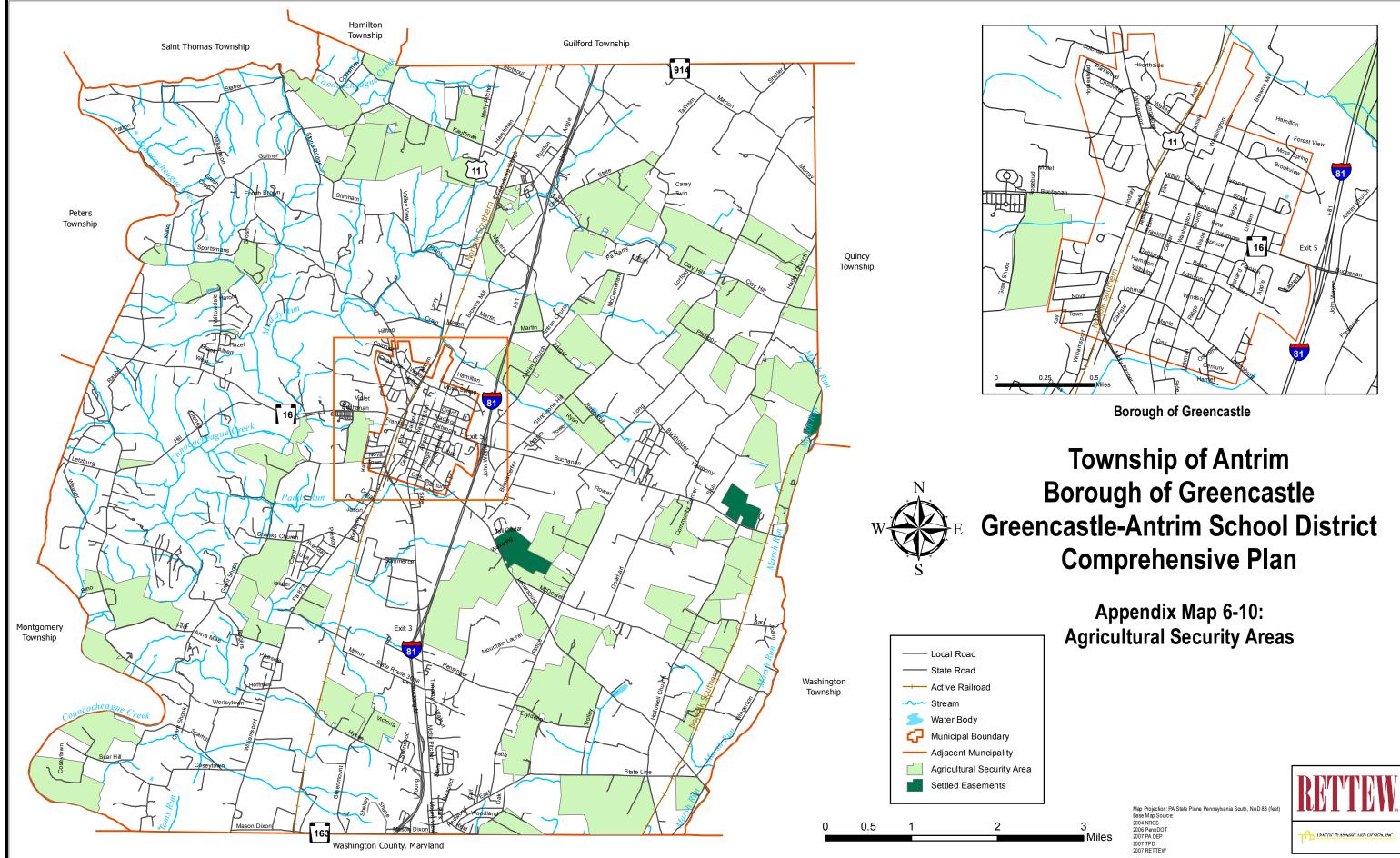




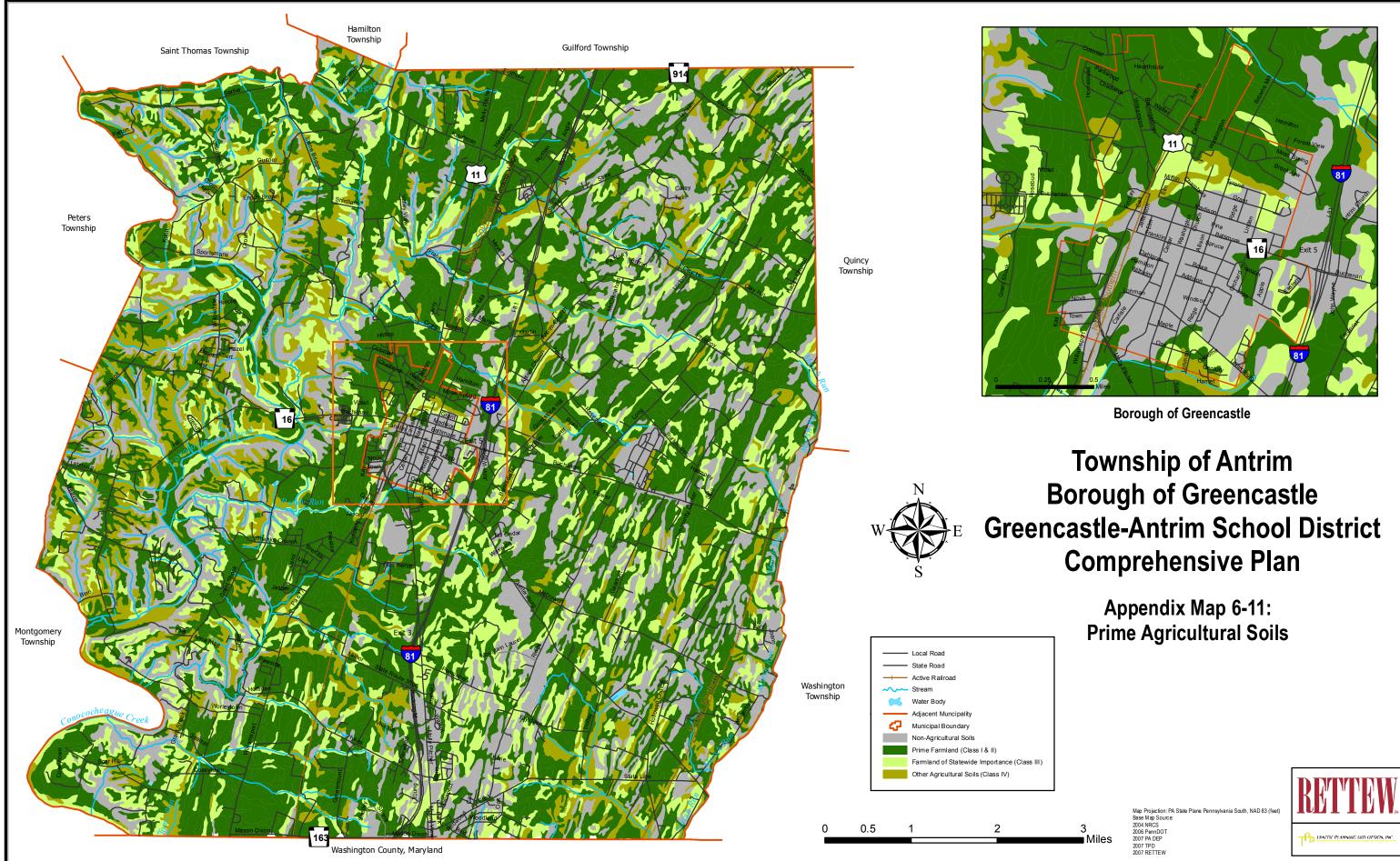




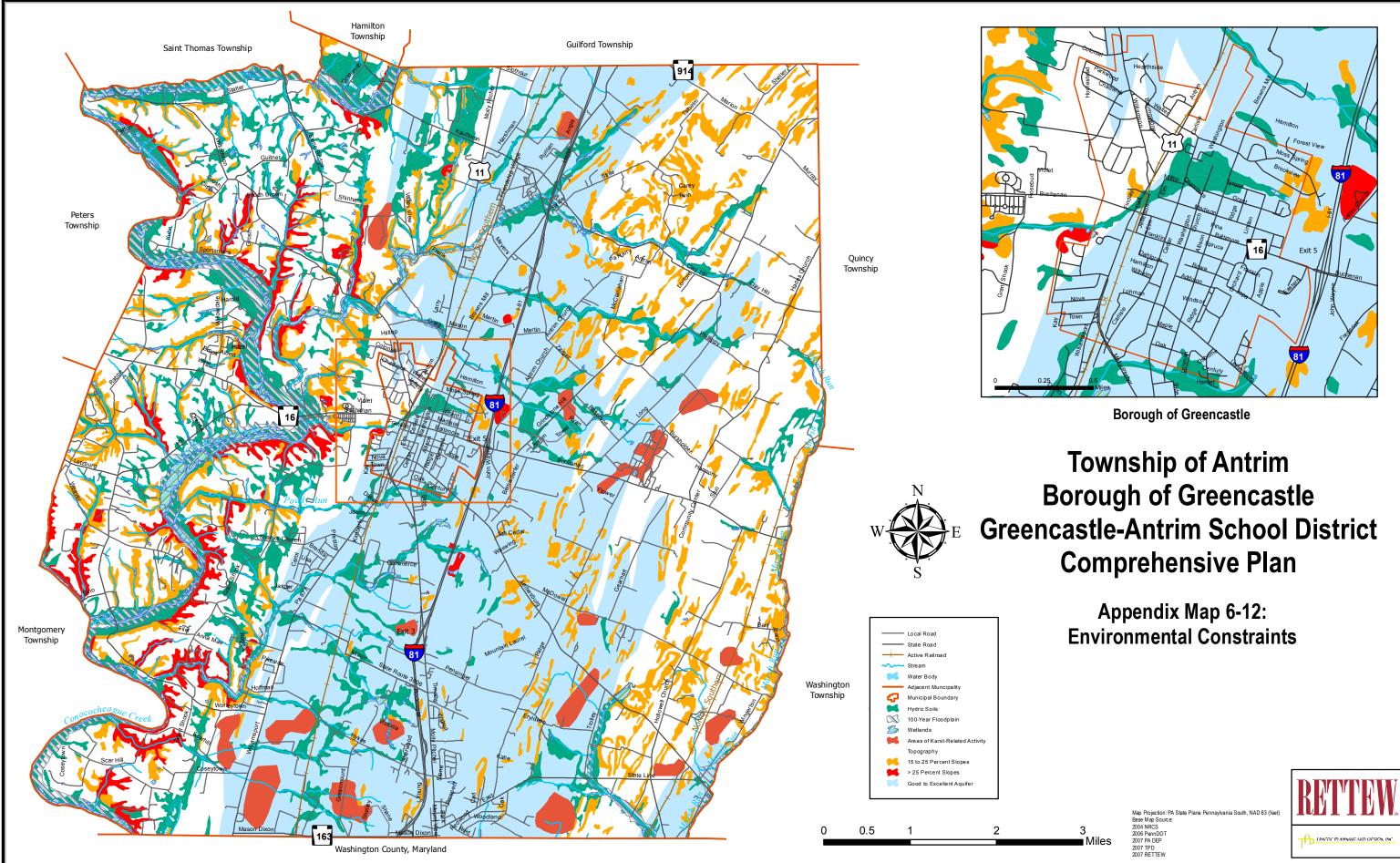
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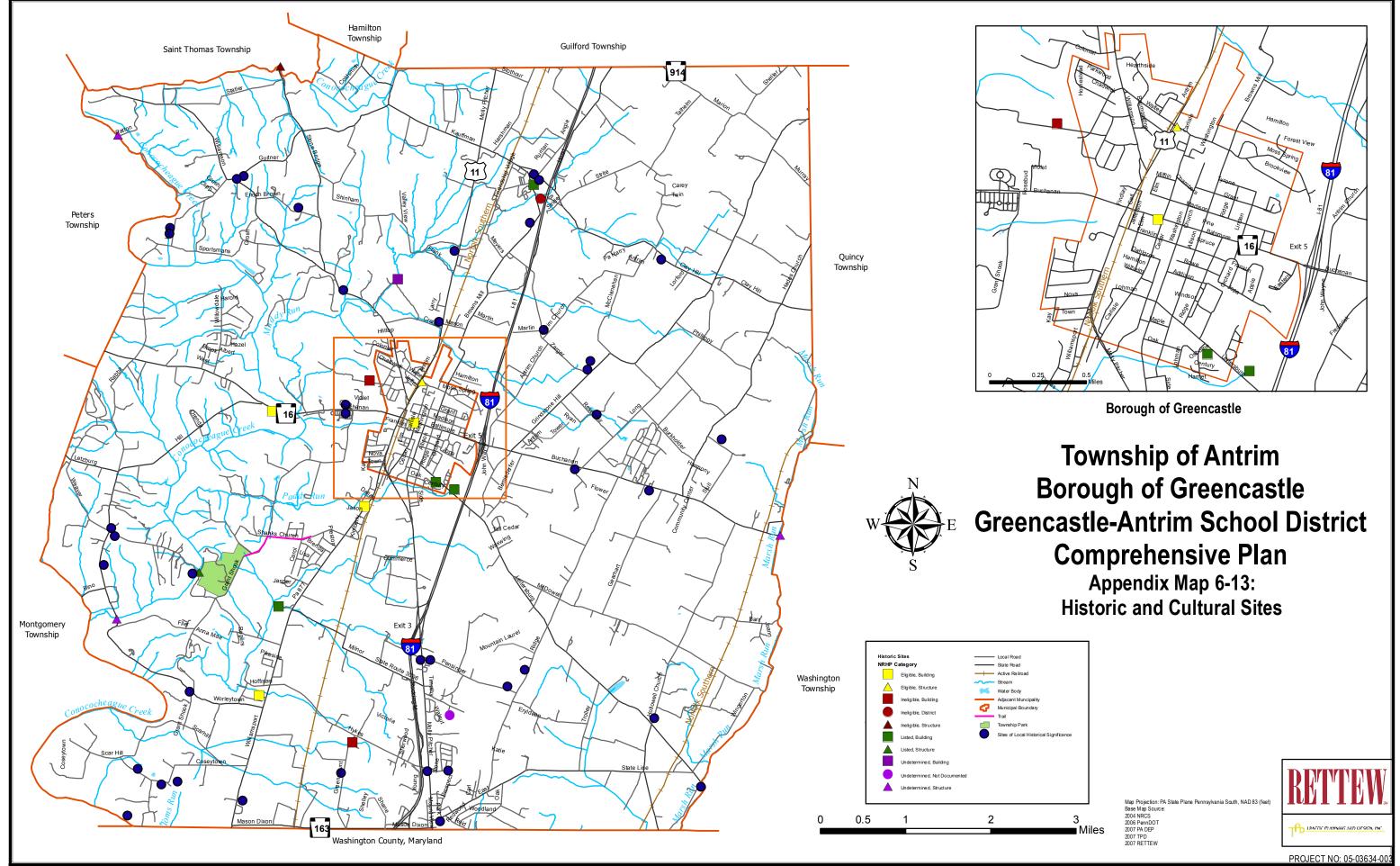
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# Public Outreach Initiative – An Introduction

Greencastle Borough, Antrim Township, and the Greencastle-Antrim School District recognize that in order for the comprehensive plan to be successfully implemented and supported by the community, it is necessary that the plan reflect the ideas and concerns of the community. To do this, it is necessary that the community have adequate opportunities to become involved in the planning process.

The public outreach initiative for the Greencastle-Antrim Comprehensive Plan was developed as a multi-faceted approach, targeted at reaching a wide cross-section of the community. Meetings were held specifically for residents of the region, and for business owners of the region, to discuss their concerns for the region, and to give them an opportunity to state their needs or desires for the region. These discussions helped to provide an indication of the items on which the plan should focus.

In addition to reaching out to the adult population, the plan also targeted the youth of the community, recognizing that the younger generation represents the future of the community, and these people may have very different views than their parents. A student outreach program was specifically designed to work with a group of eleventh and twelfth grade students and use this group as a conduit to reach the larger student body. Students were educated on the reasons for planning and the planning process, and took part in several activities to discuss strengths and weaknesses in the region, and to examine spatial relationships.

## How the Information is Used

Data collected through the various public outreach sessions were compiled and presented to the steering committee for their review. Several major themes surfaced, and these items were integrated into the goals, objectives, and actions for the region. In doing so, the community is directly involved in developing the comprehensive plan for the region.

## Additional Opportunities for Involvement

In addition to the structured public outreach initiatives discussed above, there were other opportunities for the community to become involved in the development of the plan. The draft plan components were reviewed at advertised, public meetings with a steering committee of representatives from the township, borough, and school district. These meetings were all open to the public, and the representatives on these meetings were meant to serve as conduits between the plan, the governing bodies, and the community. Steering committee members that were present at the public meetings for residents and business owners were introduced to the public so that the community could place a face with a name.

In addition to involvement during the drafting of the plan, the public was also given an opportunity to become involved during its review, prior to adoption. As mandated by the Pennsylvania Municipalities Planning Code, the comprehensive plan was reviewed at a public meeting of the planning commissions, and a public hearing was conducted prior to the meeting at which the governing bodies acted on the adoption of the plan. Adjacent municipalities, and the Franklin County Planning Commission, were given an opportunity to review the plan prior to its adoption.

## How the Information is Presented

Information contained in this appendix represents the results from the public meeting for residents of the region, public meeting for business owners of the region, and the student outreach program. These results are being made a supplement to the comprehensive plan to demonstrate their significance and value in the planning process.

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# Public Participation Meeting for Residents of the Greencastle-Antrim Region

The community public meeting for residents of Antrim Township and Greencastle Borough was held in the cafeteria at Greencastle-Antrim High School, Thursday, January 11, 2007. The meeting, which was scheduled from 6:30 PM to 9:00 PM, was designed to give local residents an opportunity to voice their opinions and concerns with respect to issues in Greencastle Borough and Antrim Township. In addition to RETTEW staff and members of the Greencastle-Antrim Comprehensive Plan Committee, there were approximately 60 local residents in attendance.

At the January 11<sup>th</sup> community public meeting, members of the community worked together in small groups to discuss strengths and issues of the community in the following five categories: downtown Greencastle; housing; land use and community development; transportation; community facilities/infrastructure, and natural resources. The identified issues were then ranked by the group to determine the top five issues of each category.

A take-home exercise was also made available for residents that attended the meeting and had additional comments that they wanted to share, or if they wanted to bring a copy to a friend or family member that was not able to attend the community public meeting. In the exercise, the residents were also asked to consider potential strategies to overcome the top five issues that they identified. Residents were asked to mail in their completed exercises within two weeks of the meeting. Responses that were received are included at the end of this analysis.

### Identified Strengths of the Region

The residents were asked to identify the strengths of living in the Greencastle-Antrim area. All the strengths presented at the meeting are listed in Table 1. The strengths were categorized into the six major areas of discussion: downtown Greencastle; housing; land use and community development; community facilities/infrastructure, and natural resources. Although strengths of the region were identified for each category, downtown Greencastle received the greatest number of strengths. Some of the strengths in that category include the presence of historic structures, core businesses, banks, a well-maintained square, and the presence of the library.

#### Table 2-1: Identified Strengths of the Greencastle Antrim Community

Housing	
New Housing	
Variety of Housing	
Construction provides jobs	
Good Mixture	
Good Density	
Well Maintained	
Pulls in extra tax dollars	
Downtown houses well maintained	
Moderate to upper moderate lifestyle/different income bracket (not low-income)	
Nice Place to Live	
Nice Place to Retire	
Safe	
Excellent Local Builders	
Community Facilities	
Schools	
Library	
Parks- still being developed	

Senior center
Churches
Golf
Tayamentasachta
School "campus" setting / One school "campus"
Schools well maintained
Lots of recreation at schools
School farm
School curriculum
Nice parks/tennis courts
Parks/recreation facilities are affordable
Bike riding on country roads with little traffic
Good coverage of fire/EMS
Martin's Mill Bridge
School is used for Community Functions
Good Quality Schools
Good Park in Town
Downtown Greencastle
Historic Buildings / Historic (in general)
Nice Shops
Good Variety of Shops
Bakery
Support Family Business
Square-Compact/walkable, Well Maintained, Unique Features, Community Events
Nice Streets, Gateways to Downtown (Carlisle / Washington)
Buildings well maintained
Number of Businesses
Core Businesses / Viable businesses
Buildings well maintained
Preserving Historic Integrity
Parking
Banks
Square is well maintained, decorated
Less Loitering
Library- Access kids
Park/Playground
Sidewalks
Festivals
Parking Supply
Attractive
Square
Walkable
Parking is Convenient and Cheap

Lighting is Adequate
Land Use
Farmland
Parks
Former Golf Course
Pool (Private)
Good Variety of Commercial
Conservation by Design
Flat Land Supply
Good Fertile Land
Agriculture Preservation
Natural Resources
Tree Preservation in new development
Wetlands
Stream- West End Park
Parks
Productive Farmland
Conococheague Creek
Tayamentasachta Center / School Farm
Farmland
Ample amount of rural land
Creeks
Small Floodplain
Ag Soils
Transportation
Rural Roads
I-81 - Easy Access (3 interchanges)
North/South Travel Routes (I-81 & US 11)
Railroad Grade Separation at crossings in Greencastle
Proximity of Hagerstown Airport
Sidewalks in Greencastle Borough
Not Many Traffic Lights
Proximity to other Major Interstates (I-70/I-76)
Route 11/Williamson Road Realignment
Southbound Right Turn Lane on Route 11 @ Route 16
Alleys within Greencastle Borough
Railroad "Tunnels" in Greencastle Borough

## Identified Issues in the Region

In addition to identifying the strengths of the Greencastle-Antrim area, the residents were also asked to identify any issues that exist in each category. The issues that were identified are listed in their corresponding categories in Table 2. The category with the least amount of comments was natural resources, in which the residents only identified 7 issues. The community facilities category received the most comments, where residents identified 39 issues.

Issue	Vote Count
Natural Resources	
Water Supply insufficient for amount of Development	26
Conservation by Design, Not Appropriate in some areas	11
Development blending with surrounding Landscape	9
Ample amount of rural land	8
Limited Number of Parks	6
Highway Accessibility	6
Lack of Publicity of Resources	2
Downtown Greencastle	
Congestion at Specific Times	18
Police Issues over Enforcement	10
Truck Traffic	11
Preservation/Integrity Historic of Buildings	11
Inadequate Water Pressure	6
Crosswalks Education/Enforcement	6
Stormwater	4
More Variety of Businesses	4
Better Variety of Restaurants	2
Too Much Traffic	2
Parking, (Cost/Limiting, lack of free public parking, publicity, accessibility)	1
Maintenance of Buildings & Property	1
Lighting off Square is Inadequate	0
Funding for Replacement of Building across from Antrim House	0
Sidewalk maintenance - one block off square	0
Land Use	
Lack of Impact Fees	20
Too Much Development	14
Connectivity of Developments (Bike/Pedestrian)	11
Water Supply Threatened	10
Need for more Commercial in the township	9
Lack of Infrastructure to Support Industrial	8
Zoning- Needs Reviewed	6
Agriculture/Development Conflicts (need more education and awareness)	6
Growth Directed to Southwest of Township	5
Pallet Business/Outdoor Storage	4
Zoning for Agricultural Needs based on Land Capability	4
Keep Big Box Stores out of Area	3
Park Facilities, Timing of Implementation	1
More Variety of Businesses	1

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Issue	Vote Count
Need for a facility for indoor recreation	6
walking paths to get from "just outside of town" into town or to the park	5
More businesses and industry to pay for services	5
Need for Bike Lanes	4
Water and Sewer in township needs to be expanded	3
Local government meetings and advertisement of local government meetings need better coverage in local papers	2
Library needs updated	2
Jerome Park needs updated	2
Need a banquet facility	1
Need more restaurants	1
Not enough places for kids to go	1
Full-time Police officer needed	1
Need to advertise strengths of the community (school farm/Allison-Antrim Museum) - Chamber of Commerce is not getting information out to people	1
Distributing the cost of new community facilities	1
Need for more police enforcement	1
Need for more police enforcement/coverage in the area of Baltimore street, heading downtown (speeding)	1
Need for better police coverage in the township	1
Antrim Park needs grass	1
Township & Borough should merge/ combine government	1
Membership or fees for recreation	1
Student Population is Growing, Need for Schools	0
Fire Safety in new Developments	0
Need for a Skate Park	0
Need for a Movie Theater	0
New Football Field at the High School	0
Need a (Public/Indoor) Swimming Pool	0
Historical Features are not maintained (Downtown)	0
Township should be "wet" - should allow liquor licenses	0
Need for a paid fire department	0
Need for Senior Citizen Recreation/ (senior) Outdoor Recreation Facilities	0
Better Access to Conococheague Creek is needed	0
Separate fields for recreation that are not multi-use	0
Transportation	
Bypasses should not go through residential areas	16
Need Bike/Ped paths	14
I-81 Exit 5 - Needs Redesigned	14
Williamsport Pike Safety - Sight Distance/Vertical Curves/Clear Zones	13
Route 16 congestion westbound at Route 11	11

Issue	Vote Count
I-81 safety Exits 3-10	10
Left turn onto I-81 North at Exit 5	9
I-81 Exit 3 redesign	9
Need Right Turn on Red	6
Route 16 congestion in Greencastle	5
East-West Bypass for Greencastle Boro	3
Widen I-81 to 6 lanes	3
Need Walter Avenue Bypass completed	3
Route 11/Williamsport Pike intersection	3
Use Railroad for Economic Development Opportunities	3
Speeding on Route 11	3
Route 11 needs more lanes	3
Travel from CVS to Borough	3
Exit 3 is holding up economic development	3
Nighttime visibility/lack of street lights in rural areas	2
Road surface maintenance	2
No Sidewalks on Williamson	2
Railroad Crossings need Safety/Warning Devices	2
Williamsport Pike speeding	2
School Pedestrian safety	2
Land development around State Line	1
I-81 & Railroad Bridges are constraints for Improvements	1
Railroad underpasses are too small for trucks to travel	1
Northbound Exit at Route 11 (I-81 Exit 3)	1
Speeding	1
One Lane Bridges Need Widened	1
Northbound I-81 Exit to go west on Route 16 for trucks	1
Train Bridge is getting pretty old. Some time it will need replaced	1
New development on small feeder roads need improved width for turn lanes	1
Route 11 resurfacing	0
Route 11 underpass flooding	0
Improve I-81 overpasses	0
Directional Signage	0
Railroad Bridges are Deficient	0
Transport of Hazardous Materials on Railroad	0
Route 16 pavement condition	0
Access management	0
Limited Funding	0
On Street Parking affects Bike Travel	0
East-West Travel	0
Traffic Diverted to Secondary Roads	0
Green Moss Bypass planned through residential areas	0
No Bus service	0

Issue	Vote Count
No funding to improve roads for development	0
Leitersburg bypass	0
Public transportation - train service	0

## **Top Issues Identified**

Table 3 shows the number one issue in each category, as identified at the resident community public meeting. These issues also comprise the highest rated issues overall.

Category	Issue	Vote Count
Natural Features	Water Supply Insufficient for Amount of Development	26
Community Facilities	Township & Borough should combine services	21
Land Use	Lack of Impact Fees	20
Downtown Greencastle	Congestion at Specific Times	18
Housing	Rate at which Housing is being Constructed without Infrastructure improvements	18
Housing	Need Impact Fees on all new Construction	18
Transportation	Bypasses should not go through residential areas	16

## Index Card Responses

Participants were also given an index card on which they were instructed to write any additional comments that they had, or items that they did not feel comfortable discussing in front of a group. Responses that were received on index cards are listed below:

- I-81 six lanes through
- Rt. 11 four lanes through plus turning lanes
- New development on small feeder roads needs improved road width for turn lanes
- Train Bridge is getting pretty old. Sometime it will need to be replaced
- Downtown strength I like how the square is used for many community activities such as Heritage Christmas, Old Home Week, etc.
- In all areas housing, transportation, etc., the look (trees, aesthetics) needs to be considered
- Kids really want a good place to skateboard so that they're not betting chased away from inappropriate places.

# Public Participation Meeting for Businesses in the Greencastle-Antrim Region

The business owners community public meeting was held in the cafeteria of the Greencastle-Antrim High School, Thursday, February 8, 2007. The meeting, which was scheduled from 6:30 PM to 9:00 PM, was designed to give local business owners an opportunity to voice their opinions and concerns with respect to business growth in Greencastle Borough and Antrim Township. In addition to committee members and members of the consultant team, there were approximately 15 persons in attendance that represented local businesses and organizations, along with representatives from the Greencastle-Antrim Chamber of Commerce and the Franklin County Area Development Corporation, members of the press, and six Shippensburg University students who were observing.

The meeting was primarily in the format of a group discussion broken into two major areas, opportunities and obstacles to business growth in the Greencastle-Antrim area. First, participants (business owners) identified numerous opportunities that aid in the growth and success of businesses in the local region. Participants then identified obstacles to business growth in the Greencastle-Antrim rea, by noting issues that they felt were problems for or hindered businesses and commercial growth.

After the opportunities and obstacles were identified and recorded, the participants were asked to take several minutes and vote for the obstacles that they felt were the most important. After the voting was over, a quick count of the votes identified several obstacles of primary importance to the participants, several of which were related to transportation concerns.

### **Opportunities for Business Growth**

During the meeting the participants identified 16 opportunities for business growth and sustainability in the Greencastle-Antrim area. These opportunities include a good workforce, available land in Antrim Township, the reaching out of local education centers to match educational resources with business needs, and the well-connectedness that exists with the Chamber of Commerce.

- Opportunities for business growth that were identified are as follows:
  - "Antrim Township has been good to me"
  - School District is #1 reason people move into the region
  - Good Workforce
    - Good Schools
      - High School
      - Colleges and Universities
  - Small town environment, knowing the customers
  - Growth of business climate provides growth opportunities for locally established businesses, attractive downtown
  - Available land in the township
  - In the last five years, the high school and universities have made an effort to reach out to businesses to match educational resources with business needs.
  - Prosperous area based on the number of banks and financial institutions (hub)
  - Franklin county
    - #3 in population growth
    - #1 in business growth
  - Residential growth
  - Transportation network / proximity to major ports
  - Opportunity to "reverse" time on commutes
    - Draw people to Franklin County for employment
  - Deportunity for business growth to balance out residential growth
  - Well connected with the Chamber of Commerce
    - Generally, the Chamber of Commerce is one of the first contacts made by perspective residents and businesses.
  - Social clubs
    - Lion's club

- Exchange
- Rotary Člub
- Business Network International (Meets Thursday Mornings)
- Old Home Week
- 38 committees

### **Obstacles to Business Growth and Sustainability**

The second part of the group discussion included the identification of issues and concerns that the participants felt were obstacles to business growth. In this discussion the participants identified 25 obstacles to business growth, some of which include existing restrictions on liquor licenses, transportation issues, water and sewer availability, and the need for a balance between wages and the types of jobs available and the cost of housing in the region. A more extensive list of the obstacles identified is found in Table 1.

#### Table 1: Identified Obstacles to Business Growth

Identified Obstacle	Vote Count
Exit 3 (Interstate 81) -no infrastructure / Most of Commercial and Industrial Development is south of township	13
Long-term water and sewer, availability and capacity	11
Capacity of Infrastructure to support business growth is a problem	7
Interstate 81 overcapacity	7
Exit 5 is a problem	5
Lack of access to Interstate 81 South via Route 11 North - resolving this situation would open up approximately 800 acres for business	4
No a lot of liquor licenses available in state, but it can be a "double-edged sword"	2
Traffic - problem getting from east to west / 25-year plan from the 1970s that contained a bypass needs to be implemented	2
Growth management issues & accommodating growth - growth will happen in the regional economy, challenge is how to handle that growth	2
Route 16	1
Land is available but isn't "shovel ready"	0
No "Decent" Restaurants -chains/corporate operations such as TGIFridays, Applebee's, or Outback	0
Antrim Township is dry	0
Not having enough property zoned for business growth to occur	0
NIMBY (Not In My Backyard)	0
Exit 3 to Exit 5 Connection	0
Railroad underpass/overpass limiting flow of east-west traffic	0
Need someone to coordinate staffing	0
Need to create a supportive commercial and industrial base to balance tax base & support community services required by new residential development	0
Jobs/Housing Balance - Do jobs that are available in the area allow people to "afford" the area and "afford" a home?	0
Need for the community to provide housing for their workforce	0
People need to network & reach out to tell others that the region is a nice place to live	0
People need to build equity by purchasing older homes & fixing them up	0
Borough is not "consumer friendly" - businesses not open on weekends or limited hours in the evenings/weekends	0
Challenge to get good employees- quantity, not quality, issues - higher pay elsewhere	0

Of the 25 identified obstacles, only 10 of them received votes from the participants, indicating their level of importance. The obstacles are listed and ranked in Table 1. Some of the top issues identified included the heavy traffic on Interstate 81, the lack of infrastructure at Exit 3 of Interstate 81, and long-term water and sewer needs.

### **Discussion on Downtown Issues**

In addition to the general discussion on opportunities and obstacles to business growth, a discussion also occurred on this subject, pertaining specifically to the downtown. Participants didn't vote on the issues that were discussed and related specifically to the downtown. These issues are shown below:

- Downtown peak hour traffic is prohibiting
- Square needs modernizing
- Parking is an issue downtown, a need for more parking
- Need for businesses downtown that want to walk to- restaurants, cafes with outside dining
- No properties available downtown
- Is there an opportunity for redevelopment/expansion of downtown
- Need to remember that residents are a key component to downtown success
- Square footages of buildings
- Need to put future growth in business park off of Interstate 81 so that downtown can maintain its integrity.

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# Analysis of Underlying Themes from the Public Meetings

### Analysis of Top Issues

This section compares the top issues from the public meetings for residents and business owners and analyzes their results. Tables 1 and 2 show the top five issues as identified and voted on at the community public meeting for residents and the business owners community public meeting. During both meetings, time was allotted to the participants so that they could vote on the issues presented that they felt were the most important in the community.

A quick comparison between Table 1 and Table 2 shows that transportation obstacles seemed to be a more important issue to the business owners than the residents. However, both the residents and the business owners identified the need for public infrastructure improvements, including water and sewer improvements, as being a significant issue for the Greencastle-Antrim area.

In both meetings, there was an underlying understanding of the need to address growth pressures that the region has been experiencing. Both the residents and the business owners recognized that this growth was occurring and that there is a need to adequately manage this growth. In conjunction with the need to manage growth, there will be necessary planned infrastructure improvements and transportation improvements that will need to occur.

Both of the groups identified the need for affordable housing as an issue, and the need to match the types of jobs and wages of the area with the cost of housing. However, in both the community public meeting and the business owner public meeting, although this issue was discussed a lot, it received very little to no votes, indicating that although a concern is present, it is not a high priority at the current time.

Also relating to growth management were discussions on the "cost" of residential growth on community services and the local school district. It was recognized that in addition to residential growth, commercial and industrial growth will be needed to offset the "costs" of such growth due to the high demands that residential growth places on existing community facilities and services. Commercial and industrial development will help to offset the cost to pay for necessary improvements, by contributing more to the tax base than this type of development actually uses in services.

Category	Issue	Vote Count
Nat. Features	Water Supply Insufficient for Amount of Development	26
Com. Facilities	Township & Borough should combine services	21
Land Use	Lack of Impact Fees	20
Downtown Greencastle	Congestion at Specific Times	18
Housing	Rate at which Housing is being Constructed without Infrastructure improvements	18
Housing	Need Impact Fees on all new Construction	18
Transportation	Bypasses should not go through residential areas	16

#### Table 1: Top Five Issues Identified by Residents, January 11, 2007 Meeting

#### Table 2: Top Obstacles Identified by Business Owners, 2/08/07 Meeting

Obstacles	Votes
Exit 3 (Interstate 81)	13
No infrastructure	
Most of commercial/industrial is south of the township	
Long-term water and sewer availability and capacity	11
Capacity of infrastructure to support business growth is a problem	7
Exit 5 is a problem	5
Lack of access to Interstate 81 South via Route 11 North 800 acres for businesses	4

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# **Strengths and Weaknesses Identification Exercise**

In order to successfully plan for the future, it is important to understand the state of the community today including assets of the area and issues that need to be addressed. The Comprehensive Plan will formulate goals and objectives to capitalize on the strengths that exist in the area and strive to improve any weaknesses that are apparent.

At the January 11<sup>th</sup> Community Public Meeting, members of the community worked together in small groups to discuss strengths and issues of the community in the following five categories: Downtown Greencastle; Housing; Land Use and Community Development; Transportation; Community Facilities / Infrastructure, and Natural Resources. The identified issues were then ranked by the group to determine the top five issues of each category. In this exercise, you are also asked to consider potential strategies to overcome the top five issues that you identify.

If you were present at the Community Public Meeting and have more to contribute; or if you were unable to attend all or a portion of the Community Public Meeting but wish to participate in this exercise and express your opinions, please complete the following information by **January 26**, **2007** and mail to:

RETTEW Associates, Inc. Attn: Lauren Zumbrun 2500 Gettysburg Rd, Suite 100 Camp Hill, PA 17011

We value your opinions! Information obtained from the community public meeting and will be used to assist in the development of goals and objectives for Greencastle Borough and Antrim Township, a vital component in the comprehensive planning process. The plan will strive to find ways to accentuate the assets of the Greencastle-Antrim Area and improve upon any issues that may be present.

- Review the five different categories that are listed. Identify any strengths or weaknesses that exist in your community. Be sure to be detailed and specific. It may be helpful to ask yourself the following questions:
  - What do you like about living here?
  - What would you change?
  - If someone from out of town comes to visit you, what do you want to show them? Where do you want to take them?
  - How would you describe this area to someone who has never been here? What makes this area unique?
  - What do you complain about with your neighbors on the back porch?
  - What types of things would benefit or improve the community as a place to live, work, play, and shop?
- After you have identified strengths and weaknesses for each category, number from 1 to 5, with one being the most important, the issues that you feel are the most pertinent.
- Consider the weaknesses that you feel are the most important. What can be done to help improve upon these weaknesses? Are there any suggestions you have that would greatly improve upon conditions in the area? Use the Strategies section under each category to list ways to improve upon the stated weaknesses. Strategies listed under #1 should correspond to the weakness you rated as #1. Be creative, there is no "wrong" answer. Use additional sheets of paper if necessary.

### Downtown Greencastle

economy, aesthetics and appearance, trar <b>Strengths</b>	nsportation or parking, and commercial or housi Weaknesses	ng opportunities, among other things. <b>Strategies</b> 1.
		2.
		3.
		4.
		5.

# Downtown Greencastle relates to anything about the form or function of the downtown. It can deal with physical properties, the economy, aesthetics and appearance, transportation or parking, and commercial or housing opportunities, among other things.

### Housing

The Housing topic can include anything related to housing in the Greencastle-Antrim Area including availability, affordability, maintenance, and variety, among other things.

Strengths	Weaknesses	Strategies
		2.
		3.
		4.
		5.

## Land Use and Community Development

Land Use and Community Development relates to the layout of the community and the relationship between different land uses in the community.

Strengths	Weaknesses	<b>Strategies</b> 1.
		2.
		3.
		4.
		5.

## Transportation

Transportation relates to anything involving the current transportation system in the Greencastle-Antrim Area including maintenance issues, connectivity, problem intersections, public transportation, or needed improvements, among other things.

Strengths	Weaknesses	s, among other tinngs. Strategies 1.
		2.
		3.
		4.
		5.

### **Community Facilities / Infrastructure**

The Community Facilities and Infrastructure topic relates to any municipal or community services such as emergency services, parks and recreation, library facilities, water and sewer services, and health care facilities, among other things.

Strengths	Weaknesses	1.	Strategies
		2.	
		3.	
		4.	
	1	5.	

### Natural and Historical Resources

Natural resources include anything in the natural environment including, but not limited to, geology, soil composition and suitability, water resources, open space, woodlands, ecologically sensitive habitats, and historical landmarks, sites, and other resources.

Strengths	Weaknesses	1.	Strategies
		2.	
		3.	
		4.	
		5.	

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+ = STRENGTH - = WEAKNESS

#### DOWNTOWN GREENCASTLE

- + The open public square & its use for special community occasions
- + Variety of specialty shops
- + Central location of banks, post office, barber shops, drug stores
- Post office interior and parking often crowded

Strategy: Offer property incentives to enable the Post Office to expand.

#### HOUSING

+ Township moves toward requiring/maintaining open space in developments

- Glut of expensive new housing, which devalues existing homes.
- Lack of new low and mid-range family housing
- Need for more apartment complexes w/pool, clubhouse, recreation facilities

Strategy: Promote a greater variety of housing.

LAND USE & COMMUNITY DEVELOPMENT

+ Allowing homeowners to use private wells as long as adequate and safe (especially in areas with public sewer).

#### TRANSPORTATION

+ Presence of Interstate 81 to link us with Chambersburg & Hagerstown.

- Immediate need for a third lane each way on I-81.

- Critical need for a flow-regulated traffic light at intersection of South Antrim Way (US 11) and Williamsport Pike to facilitate entry of Pike traffic onto US 11 at certain heavy times. Since the Pike is a growth area anyway, why isn't anyone addressing this? Perhaps because it's near the borough/township border?

- Speed limits that are unreasonably LOW in specific corridors, both in the borough (e.g. South Carlisle Street extended) and township (e.g. entire Williamsport Pike). These roads are generally straight and are being used by necessity as **primary connector routes**, not local streets. Raising the speed limit by 10 or even 5 mph will bring them closer in line with the reality of how a majority of local, knowledgable drivers are using them safely every day. If there are one or two trouble spots, mark and fix them! Limits should NOT be determined by the very few reckless drivers for whom any limit is disregarded anyway. - Past failure of planners to forsee the need for a connector road linking US 11 south of the borough with PA 16 west of the borough. Such a road would have relieved some of the congestion now at the US 11/PA 16 intersection.

Strategy: Expand Interstate 81, add a signal on South Antrim Way, reasonably **raise** speed limits on heavily-used corridors.

#### COMMUNITY FACILITIES/INFRASTRUCTURE

- + Availability of trained fire/rescue/EMS
- + Grove Medical Center
- + Restraint in extending public water & sewer only where essential
- + Presence of a library and Jerome King Playground.
- + Concentrated school facilities

- The move toward an expanded/consolidated police agency. It will become a monster whose appetite is never satisfied. Citizens are paying for PSP coverage and should demand proper service from the state. We have not been given enough good arguments to support a township police department at this time. If the borough police department is any indicator, its primary task appears to be writing traffic tickets! (No, I haven't received one).

- Need for improvements to, or expansion of, the bandshell at Jerome King.

#### NATURAL & HISTORICAL RESOURCES

+ Presence and maintenance of historical resources such as Brown's Mill, Enoch Brown, Martin's Mill Bridge, etc.

+ Tayamentasachta Environmental Center

+ Township development of Antrim Township Community Park, its fields and trails. + Conococheague Creek & its scenic & recreational benefits. Perhaps additional creekside land could be secured for hiking/nature trails.

- Failure to reopen Martin's Mill Park & allow free public access for swimming, canoeing, picnics. Swimming should be allowed (at one's own risk and posted accordingly) as had been a very popular tradition for decades. Before the township took over, there had been a sand beach and even a small diving pier at the deepest point. The swimming hole there in the natural setting is a very unique resource that should not be killed by the threat of lawsuits and occasional vandalism. But excessive police patrolling, heavy township regulations or fees also could ruin the point of having a quiet place where individuals can get away and "chill." Years ago, it was open around the clock. Allow it to be the

#### **Downtown Greencastle**

Downtown Greencastle relates to anything about the form or function of the downtown. It can deal with physical properties, the economy, aesthetics and appearance, transportation or parking, and commercial or housing opportunities, among other things. Strengths Strategies

1. Pass ordinance that

3

4

5.

Unique shops with good reputations Usually easy to park

Weaknesses Chinese Restaurant looks terniste makes centrel down tom businesses part of downtown 2. must comply with appear stammy Commonly acceptable TRucks on Balthnore St. Reschetics TRUCKS ON Baltinore St. make the down this experience a negative one - sometimes

Housing

The Housing topic can include anything related to housing in the Greencastle-Antrim Area including availability, affordability, maintenance, and variety, among other things.

Strengths	Weaknesses	Strategies 1.
		2.
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		4. 5.

#### Land Use and Community Development

Land Use and Community Development relates to the layout of the community and the relationship between different land uses in the community.

Strengths Small Farms promote nice community diversity, great local Foods

Weaknesses I think more and bette kept parks. Need more e prom oten healthy lifestyles In our commany

Strategies

1.

2.

3.

4.

5.

Transportation

Transportation relates to anything involving the current transportation system in the Greencastle-Antrim Area including maintenance issues, connectivity, problem intersections, public transportation, or needed improvements, among other things. Strategies

Strengths

Convenient access to interstate and hearby commani the

Weaknesses 1. Baltimore St. Some Times this is a 2. mess. Trycks on this street make 3. noisey and dangerous. 4. 5.

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#### Community Facilities / Infrastructure

The Community Facilities and Infrastructure topic relates to any municipal or community services such as emergency services, parks and recreation, library facilities, water and sewer services, and health care facilities, among other things.

Strengths Weaknesses Library personnel More shall be 1. make the library a done to promote great place. active, healthy lifestyle Socces fields could? Strategies use better maintenance 3. More bike paths ; the a public dog park would be great. 5.

#### Natural and Historical Resources

Natural resources include anything in the natural environment including, but not limited to, geology, soil composition and suitability, water resources, open space, woodlands, ecologically sensitive habitats, and historical landmarks, sites, and other resources.

Weaknesses Strengths Scenic Seanty) lots of potential to Conoco que coulds-lots of potential to developal & promoted make this an even Monwtain Sike trails betty place to Could be developad. Live and visit. In other words more could be done To take advantage of our natural resources.

Strategies

1.

2.

3.

4.

5.

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### **Downtown Greencastle**

Downtown Greencastle relates to anything about the form or function of the downtown. It can deal with physical properties, the economy, aesthetics and appearance, transportation or parking, and commercial or housing opportunities, among other things.				
ENVERAL GOVIT AND POPULACE EM TO BE DOING ABOUT THE BET JOB POLNIBLE WITH WHAT'S AVAILABLE ETC.	Weaknesses	Strategies 1. 2. 3. 4. 5.		
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Housing

The Housing topic can include anything related to housing in the Greencastle-Antrim Area including availability, affordability, maintenance, and variety, among other things.

Strengths

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Preserve Our Local Heritage and History; Serve Our Citizens and Community; and Plan for Our Future Generations

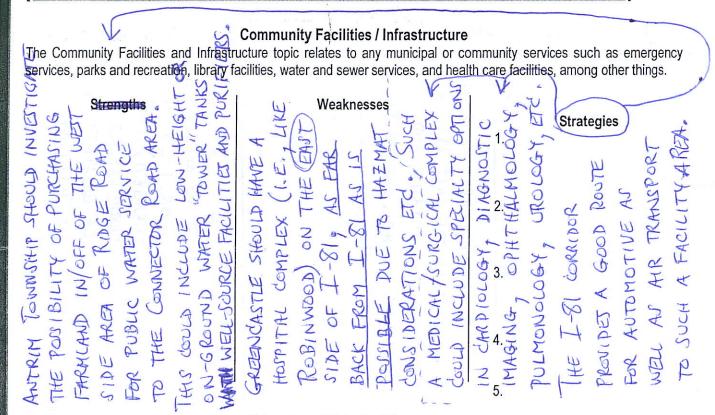
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Land Use and Community Development

Land Use and Community Development relates to the layout of the community and the relationship between different land uses in

the community. THOSE Strengths Weaknesses Strategies RCS 王 U 1. JUNENCOPHENTE NEIGHBOR HOODS LOOK LIKE OF R je je RECIPENTIA REAL FOR F INCORPORTING NAUD it roug to u 永四 2. ENCOURS ED IN HOSPITABLE LAST ANTREN 11 NEIGHBOR HOONS ALTER 3 上市 3. OF SNISNOH MILE 2 NED DEGRETE ι 4. MUNICI PAL PURPOSE QUARE BE SREEN CHOTH ANSTRU CTU していいいろ MORE NEW RELOPERS PAR P NHL ADNON 5. )LDER DELENT NOOK A E 0 江市 S K 0 5 m Transportation (1) Transportation relates to anything involving the current transportation system in the Greencastle-Antrim Area including maintenance issues, connectivity, problem intersections, public transportation, or needed improvements, among other things, INCL POLICE Derg Strengths Strategies Weaknesses X CAR NTERCOOP AGREMEN 1. XA m IN ACOUNTNENCE NTTER N б 20 CHOULD くる王 THOURS INCE MUNICIPALI BC 945 ANA qui **Tak**C Maul X DISTRUCTU School LOCAL A.C. 2. SERVICE EMPTY SPACE DEPARTMENTS POLICE ₹4 NOLE REVIVA 79020 da 400 ANTRIM 3. GREENCATT ANY P ろきろ t SEPARATE 20694 0 PIZOPLE DOP PRATE R NGH Reg SUCH HAUE BG P ANO S HODH HADI 5 N P V CRVIC 5 JARY Poul 5 し N E E NAN A UNE TE TAN A BRV 2 A 50 るを正 ND 3 tV 000 A  $(\mathcal{O})$ Preserve Our Local Heritage and History; Serve Our Citizens and Community: and Plan for Our Future Generations

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#### Natural and Historical Resources

Natural resources include anything in the natural environment including, but not limited to, geology, soil composition and suitability, water resources, open space, woodlands, ecologically sensitive habitats, and historical landmarks, sites, and other resources.

Strengths	Weaknesses	Strategies
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Land Use and Community Development

and Use and Community Development relates to the layout of the community and the relationship between different land uses in the community.

	Weaknesses	Strategies
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es, connectivity, problem intersecti	A LEFT TURN LAWE ON ALLEFT TURN LAWE ON ALLEFT TURN LAWE ON	<ul> <li>among other things.</li> <li>Strategies</li> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> </ul>

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### **Student Outreach Program**

### **General Conclusions**

The students were able to provide a perspective on the region that was somewhat different from the feedback obtained through the other community outreach initiatives. Students were able to think through some of the issues of the region, but did not always recognize the interrelationships that exist between different aspects of community planning. The following represents general themes that emerged from the student outreach program.

- Hagerstown has a tremendous influence on the Greencastle-Antrim Area. People work, play, and do business in Hagerstown, in addition to using their medical facilities. However, students that responded to the survey do not plan to receive an education, training, or to be employed in the Hagerstown Area.
- Many students indicated that they plan on attending college and living in locations other than those that were listed. (The places listed included the Greencastle-Antrim Area, elsewhere in Franklin County, the Hagerstown Area, elsewhere in Pennsylvania, and the D.C. Area) A question for the students would then be, what places are they thinking of when they identify "other".
- Students are concerned about the rising costs of housing in the Greencastle-Antrim Area. Housing costs and options was identified by the majority of students as a factor that would influence their decision to stay in or leave the Greencastle-Antrim Area.
- Through discussions and in the survey, students have indicated that they recognize the growth pressures that the region is experiencing. Growth management and open space were identified as a top priority for local officials, and urbanization and development was identified as a factor that would influence their decision to stay in or leave the Greencastle-Antrim Area. Although the students recognize these pressures, they were accepting of additional growth scattered in the rural areas of Antrim Township. Students also indicated that they planned to look for a single family home in the rural countryside or in the suburbs.
- The Greencastle-Antrim Area is lacking retail and shopping resources. Regarding Downtown Greencastle, students expressed a need for more stores and a greater variety of stores, in addition to entertainment options.
- A few of the students have parents that work in the Greencastle-Antrim Area, but the majority of their parents are employed in other locations. Students also expressed concern over employment opportunities in the region. Students did not feel that employment opportunities in the Greencastle-Antrim Area were ample for students to stay, will be plentiful in the future, or pay enough for their desired quality of life, or in some cases, to meet their expenses. Students also did not feel that employment opportunities in the Greencastle-Antrim Area were available in the field that they plan on pursuing. Most students surveyed were interested in employment in education or the science-healthcare-engineering industries.
- Students expressed interest in improving emergency services in the area. Students discussed the need for better hospitals and healthcare facilities in the area, and were able to make the connection between community growth and the pressures placed on emergency services. Lack of emergency care was the number one issue. Students also indicated that emergency services (fire, police, EMS) should be a top priority for local officials.

### Leadership Group Activities

The student outreach program consisted of a focus group of approximately ten students. These students were taught about comprehensive planning, the *Township of Antrim, Borough of Greencastle, and the Greencastle-Antrim School District Comprehensive Plan,* and the importance of and reasons for seeking feedback from this age group during the preparation of the plan.

The leadership team of students discussed components of a community, participated in a mini Strengths and Weaknesses exercise, and then completed a student survey and a mapping activity. The leadership team of students then taught their peers in civics classes about comprehensive planning and the project, and conducted the survey and mapping activity with them. Each class also did a mini Strengths and Weaknesses exercise. The following information represents initial feedback that was received from the leadership team of students.

#### **Definition of a Community**

The students participating in the student outreach program discussed the term "community" and were asked to state what they felt were different components that were included in, or comprised a community.

- Natural Features
- People / Values
- Parks
- Schools
- Houses
- Activities and Recreation
- Agriculture
- Transportation
- Churches
- Jobs
- Hospitals
- Hotels
- Manufacturing
- Police
- Neighborhood

#### Strengths of the Greencastle-Antrim Area

The students also identified fourteen (14) strengths of the Greencastle-Antrim area. These strengths are shown in the table below.

Strength
A lot of things are close together in the borough
Everybody knows everybody
School
No pollution
No violence / crime
Not too noisy
Close to Interstate 81
Community spirit
Traditions- Old Home Week
Parks
History
Tayamentasachta
Open space and farms
Smells good

#### Issues in the Greencastle-Antrim Area

In addition to identifying strengths of the region, the students identified things that they considered to be an issue or a weakness in the Greencastle-Antrim Area. The students identified a total of thirty-one (31) issues, and then used stickers to vote on the issues that they felt were most important. The issues, listed by rank, are displayed in the following table.

Issue	Votes
Lack of emergency care	6
Growing too fast	5
Overcrowded schools	4
Need more things to do- theaters and activities	3
Lack of a YMCA or summer camps for kids	3
Franklin County has highest cancer rate in Pennsylvania	2
Lack of Variety, Restaurants & Activities	2
Will need a police force in the township in the future	2
Peanut Shop smells	1
Homes are too expensive	1
Sloppy construction	1
Traffic near the Square	1
Route 16 and Allison intersection	1
Travel to go shopping	1
Lack of job variety	1
Need more educational places to go on field trips, Museums and Lack of Funding	1
Sewer smell	0
Nutrition / obesity	0
No plowing in some places (privately owned roads)	0
Need to stop building houses	0
Train is too loud	0
"Rather be behind a tractor than in a traffic jam"	0
Don't want an Olive Garden because it (the region) will get bigger	0
Impolite people	0
Who uses the gift and antique stores? We need new stores and a taco bell	0
No grocery stores	0
Places should stay open on Wednesdays and Sundays	0
Police don't respond fast enough in borough	0
Curfew is an issue	0
Interstate 81	0
Acid rain is high	0

### **Student Survey**

The focus group of students completed a survey during the first meeting, and then conducted the same survey with their peers in their civics classes. The surveys from the focus group were analyzed separately. These results were also included in the total survey tabulation.

### **Focus Group Results**

### Demographic and Socioeconomic Information

The focus group was comprised mostly of students that lived in Greencastle Borough or the southwestern part of Antrim Township.

- All of the students in the focus group planned to attend college, and the majority of students indicated that they planned to attend school elsewhere in Pennsylvania.
- When asked what industry they planned to work in, nearly half of the students indicated that they plan to work in Science-Healthcare-Engineering, and nearly half of the students indicated that they plan to work in Education. When asked where they expected to be employed, the only area where students did not expect to be employed was the Hagerstown Area. Most of the students expected to be employed elsewhere in Pennsylvania.
- In general, over half of the respondents indicated that they felt employment opportunities are available for unskilled workers in the Greencastle-Antrim Area and nearly half felt that employment opportunities in the area pay enough to meet their expenses.
- Regarding employment opportunities in the Greencastle-Antrim Area, less than one quarter of respondents indicated that they felt opportunities were available in the field they plan on pursuing, pay enough for the desired quality of life, and will be plentiful into the future.
- Approximately one-third of respondents indicated that career considerations and operations would factor into their decision to stay in or leave the Greencastle-Antrim Area.

#### Housing

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- The majority of students indicated that they planned to look for a single family dwelling as a young adult.
- When asked where they expect to look for housing, results were distributed between the rural countryside, suburbs, town, and small city.
- The majority of respondents indicated that rising housing costs in the Greencastle-Area concerns them, and housing costs and options was identified as the primary factor that would lead them to decide to stay in or leave the Greencastle-Antrim Area.

### Growth and Community Development

- Two thirds of respondents indicated that the most important element of a good neighborhood was safe streets.
- Nearly half of the focus group indicated that new growth in the Greencastle-Antrim Area should be scattered in rural areas of Antrim Township.

### Community Facilities and Recreation

- Nearly 80% of respondents indicated that if bus routes connected the places they spend a lot of time, they would take the bus. The same percentage of respondents indicated that they would walk or bike to these locations if biking or walking trails connected them.
- Two thirds of respondents indicated that indoor recreation facilities were the most needed recreational facilities in the Greencastle-Antrim Area. Nearly half of the respondents indicated that community all-purpose parks were most needed. No respondents felt that athletic fields or nature parks were of prime importance.
- Approximately half of all respondents indicated that they had traffic or safety concerns at intersections in developed areas and on residential streets.
- When asked what three services should be a top priority for local officials, two thirds of the students indicated that emergency services (fire, police, and EMS) should be a priority. Approximately 45% of students selected each of the following three categories: transportation (roads, traffic, bridges); water, sewer and other utilities; and growth management.

### Downtown Greencastle and Historic Resources

- Students' responses were divided when asked which aspect of a historic building is most important to protect.
- When asked how often they visit Downtown Greencastle, other than just passing through, approximately one third of students indicated that they visit the downtown 1-5 times a month. Another one third of students indicated that they visit downtown more than 30 times a month.
- When asked what would lead them to visit Downtown Greencastle more often, all but one respondent indicated that entertainment would increase their visits to the downtown. Nearly half of all respondents indicated that more stores or a greater variety of stores would increase their trips downtown in any given month. One third of respondents indicated that parking improvements would encourage them to visit the downtown, and one third indicated that increased business hours would increase their trips.

### **Results of All Surveys**

The focus group of students conducted the survey with their peers in their civics classes. The following results represent all responses, including the responses given by the focus group.

#### Demographic and Socioeconomic Information

- The group of students that took the survey represented all five geographic areas. The greatest percentages of students lived in the northwestern part of Antrim Township, or in Greencastle Borough.
- When asked how they plan to continue their education and training after high school, nearly 90% of respondents indicated that they plan to attend college, and just over 10% indicated that they plan to receive on-the-job training. None of the students surveyed planned to go to technical school, business school, or enter the military. Approximately half of the respondents chose "other" when asked where they plan to continue their education and training elsewhere in Pennsylvania. Less than 5% indicated that they planned to continue their education in the Greencastle-Antrim Area, and less than 7% indicated that they planned to receive education or training in Franklin County.
- When asked what industry they planned to work in, the two most popular responses were Science-Healthcare-Engineering, and Education. All of the categories received at least one response with the exception of Building-Construction-Repair and Finance-Insurance-Real Estate.
- When asked where they expected to be employed, 20% of the students expected to be employed elsewhere in Pennsylvania and 13.33% of students expected to be employed in the Greencastle-Antrim Area. Over half of the respondents chose "other".
- In general, nearly half of the respondents indicated that they felt employment opportunities are available for unskilled workers in the Greencastle-Antrim Area and approximately 30% felt that employment opportunities in the area are available for skilled workers.
- Regarding employment opportunities in the Greencastle-Antrim Area, less than one quarter of respondents indicated that they felt opportunities are ample for students to stay, were available in the field they plan on pursuing, pay enough to meet their expenses, pay enough for their desired quality of life, and will be plentiful into the future.
- Over 40% of respondents indicated that career considerations and operations would factor into their decision to stay in or leave the Greencastle-Antrim Area.

#### Housing

- The majority of students indicated that they planned to look for a single family dwelling as a young adult. Approximately 30% of respondents planned to look for an apartment, half-house, or duplex. No students planned to look for a mobile home as a young adult.
- When asked where they expect to look for housing, results were distributed over the various geographies. Over 35% of respondents indicated that they planned to live in the rural countryside, and 20% planned to look for housing in the suburbs.
- The majority of respondents indicated that rising housing costs in the Greencastle-Area concerns them, and housing costs and options was identified as the primary factor that would lead them to decide to stay in or leave the Greencastle-Antrim Area.
- 20% of students felt that attractive housing was the most important element of a good neighborhood.

### Growth and Community Development

- Approximately two thirds of respondents indicated that the most important element of a good neighborhood was safe streets.
- When asked where new growth in the Greencastle-Antrim Area should be located, responses were divided between all of the categories. The "other" category received the greatest number of responses, followed by a tie between "Scattered in rural areas of Antrim Township" and "In and adjacent to Greencastle Borough".
- Approximately 40% of students indicated that urbanization and development would be a factor that would lead them to decide to stay in or leave the Greencastle-Antrim Area.

### Community Facilities and Recreation

- The majority of students indicated that if bus routes connected the places where they spend a lot of time, they would not take the bus. Nearly 80% of respondents indicated that they would walk or bike to these locations if biking or walking trails connected them.
- Approximately 55% of respondents indicated that indoor recreation facilities were the most needed recreational facilities in the Greencastle-Antrim Area. Community all-purpose parks and athletic fields were the second and third most popular responses.
- Approximately 42% of respondents indicated that they had traffic or safety concerns at intersections in developed areas. Students expressed concerns about traffic or safety in all of the categories listed. Nearly half of the focus group indicated that they had traffic or safety concerns on residential streets.
- When asked what three services should be a top priority for local officials, over 60% of students indicated that transportation (roads, traffic, bridges) should be a top priority. Approximately 48% of students thought that emergency services (fire, police,

EMS) should be a top priority, and approximately 42% thought that growth management and open space should be a top priority.

#### Downtown Greencastle and Historic Resources

- Students' responses were divided when asked which aspect of a historic building is most important to protect.
- When asked how often they visit Downtown Greencastle, other than just passing through, approximately 30% of students indicated that they visit the downtown 1-5 times a month. Approximately 25% of students indicated that they visit downtown more than 30 times a month and approximately 20% of students indicated that they visit the downtown 6-10 times a month.
- When asked what would lead them to visit Downtown Greencastle more often, over 60% of respondents indicated that entertainment would increase their visits to the downtown. 60% of respondents indicated that more stores or a greater variety of stores would increase their trips downtown in any given month.



### **Mapping Activity**

Students also participated in a mapping activity that will allow for further analysis of spatial relationships. Students were asked to identify certain locations on a map with different colored stickers, based on the following five questions:

- 1. Where do your parents work?
- 2. Where do you go for recreation?
- 3. Where do you go for medical appointments?
- 4. Where do you go for dining/entertainment?
- 5. Where do you go shopping?





If the location a student chose as

an answer to a question was in the Greencastle-Antrim Area, they were asked to put a sticker on a local map. If the location was outside of the Greencastle-Antrim Area, they area asked to put a sticker on the regional map. The following points summarize the data collected from the mapping activity.

- The largest cluster of stars of all colors was in Hagerstown, indicating the large influence that this location has on the Greencastle-Antrim Area.
- Parents of students worked in a variety of locations, some in Antrim Township and a couple in Greencastle Borough. The majority of parents were employed in Hagerstown, or other locations outside of the Greencastle-Antrim Area including several locations in Maryland,

McConnellsburg, Mercersburg, Shippensburg, and Chambersburg.

- The majority of students indicated that they go to Hagerstown for recreation, but several students identified recreational locations in the Greencastle-Antrim Area including the Greencastle Greens Golf Course, Moss Spring Swimming Pool, and the Greencastle-Antrim school facilities.
- Many students went to Hagerstown for medical appointments, but the John L. Grove Medical Center and the health care facilities in Waynesboro were also highly rated.
- Hagerstown was the most popular answer when the students were asked where they go for dining and entertainment. A few students indicated that they travel to Chambersburg or Harrisburg for dining and entertainment, and a few students travel to Frederick or to the Washington, D.C. area.
- Almost all of the students participating in the activity indicated that they travel to Hagerstown to go shopping. A few students indicated that they travel to Chambersburg, Harrisburg, Frederick, or the Washington, D.C. area to go shopping. There were no students that indicated that they go shopping in Greencastle Borough or Antrim Township.



### Follow-up Meeting with the Leadership Group

After the results from the student outreach program were compiled, a second meeting was held with the leadership team to discuss the results. We also wanted to initiate discussions with the leadership team to see if they could provide input regarding why the results turned out the way they did.

The students met in smaller groups during one of three lunch periods and discussions were generally informal. The following are some general comments that came out of the second meeting.

- One of the biggest differences between survey results from the leadership team and the entire group of students was relating to public transportation. Students were asked if bus routes connected three places where they spend most of their time, would they take the bus. Leadership team students indicated that they would take the bus, while the general student survey results indicated that they would not. We asked the leadership team why this may be.
  - Many of the students felt that the answers were not so much geared to the busses themselves; rather, most students are excited have recently received their drivers licenses and wish to be driving in their own car.
  - Students also noted that many people from the Greencastle-Antrim area do not have personal experience with busses, and that they are more likely to stick with the forms of transportation they are familiar with.
  - However, students did note that, "There is something icky about public transportation."
  - Students also noted that when traveling, they don't know many people who would want or choose to walk if they had other options available.
- When asked where students planned to receive an education, training, or be employed, many students marked the "Other" choice, ruling out all of Pennsylvania, the Hagerstown area, and the Washington D.C. area. We asked the students what places they thought most of the students were referring to.
  - Most of the leadership team thought that students saw themselves going south.
  - Students also felt that people look at bigger cities for what they want to do.
- Many students (leadership team and their peers) indicated that they planned to go into Science, Healthcare, or Engineering fields, or Education. We asked students why they thought this was the trend and if they thought students chose these fields because they are familiar names to high school students (i.e. students understand *science* and *education* because they are in school and they study science)
  - Many of the leadership team of students indicated that they planned to enter into medicine or education. Students felt that the results may have been influenced by the fact that students in the Greencastle-Antrim area are not exposed to many other industries.

- Many students also noted that their parents have a big influence on them when it comes to deciding what they plan to pursue.
- Many of the students either had parents or neighbors who were teachers, nurses, or involved in medicine or education in some way.
- All students indicated that they wanted more or different stores or shopping opportunities in the region, and additional entertainment opportunities. We asked the leadership team of students specifically what they were looking for. In general, the students felt that there should be more opportunities for their age group because they have disposable income.
  - Responses relating to retail stores and shopping opportunities included:
    - More modern retail and clothing stores
    - Something other than E.L.M. There is a lot of elastic in there. We need a more modern clothing store.
    - A mall or small outlet center
    - Popular / trendy clothing stores
  - Responses relating to entertainment and recreation included:
    - A lot of people really want a Y.M.C.A. or indoor recreation center
    - Movies
    - Small movie theater that shows current (first-run) movies
    - Responses relating to dining included:
      - There really isn't a lot of fine dining or upscale restaurants in this area, but do people really want those?
      - Existing establishments are enough Brothers and Café del Sol
      - Taco Bell and KFC
      - Indian Food
- We also discussed growth and development with students and explained how most of the students did not want to see growth, but did want to live in a single family home in the suburbs or rural countryside. Students noted that growth is inevitable.
- Many of the students expressed a concern about emergency services and health care, which was not something that stood out in the public participation meeting with the adults. We asked the leadership team why they thought this was so.
  - Students indicated that although it is not something they think about everyday, when healthcare or emergency services are brought to their attention through discussions or through the survey, it becomes an important issue.
  - Students place themselves in situations where they would need emergency care and conclude that this item should be given attention.



- 1. What is the most important element of a good neighborhood? (*Choose Only 1*)
- O Attractive housing
- O Neighborhood playgrounds and parks
- O Safe streets
- O Sidewalks or trails
- O Trees along streets and landscaping
- 2. What kind of housing do you expect to look for as a young adult? (Choose Only 1)
- O Mobile Home
- O Apartment
- O Townhouse or Row Home
- O Half-House or Duplex
- O Single House
- 3. Where do you expect to look for housing as a young adult? (Choose Only 1)
- O Rural Countryside
- O Suburbs
- O Small Village
- O Town
- O Small City
- O Large City

# 4. If the three places where you spend most of your time, other than your home...

...had biking/walking trails connecting them to one another, would you walk or bike to these locations? (*Choose Only 1*)

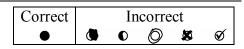
O Yes O No

...had bus routes connecting them to one another, would you take the bus to these locations? (*Choose Only 1*)

O Yes O No

- 5. Which of the following recreational facilities are most needed in the Greencastle-Antrim area? (*Choose all that apply*)
- O Biking/Walking Trails
- O Athletic Fields
- O Neighborhood Playgrounds
- O Nature Park
- O Community All-Purpose Parks
- O Skate Park
- O Indoor recreational facility
- 6. Which aspect of a historic building is most important to protect? (Choose Only 1)
- O How it looks
- O Function/original use of the building
- O Events that took place in the building
- 7. As a local official, you are preparing the annual budget for local services. Which 3 services would be your top priority? (*Choose Up To 3*)
- O Transportation (Roads, Traffic, Bridges)
- O Parks, Recreation and Trails
- O Emergency Services (Police, Fire, EMS)
- O Trash, Recycling, Yard Waste Removal
- O Water, Sewer and Other Utilities
- O Growth Management & Open Space
- O Libraries and Community Facilities
- O Economic Development
- O Improving Neighborhoods

- 8. How do you plan to continue your education and training after high school? (*Choose Only 1*)
- O On-the-job training
- O Technical School
- O Business School
- O College/University
- O Military
- 9. Where do you expect to continue your education and training after high school? (*Choose Only 1*)
- O Greencastle-Antrim Area
- O Elsewhere in Franklin County
- O Hagerstown Area
- O Elsewhere in Pennsylvania
- O Washington D.C. Area
- O Other
- **10.** In which industry do you plan to work? (*Choose Only 1*)
- O Agriculture or Agricultural Business
- O Building/Construction/Repair
- O Technical (Electrician, Mechanic, etc.)
- O Information Technology
- O Science, Healthcare or Engineering
- O Education
- O Retail Trade (Retail Sales, Services, etc.)
- O Finance, Insurance, Real Estate
- O Government, Public Admin., or Military



RETTEW

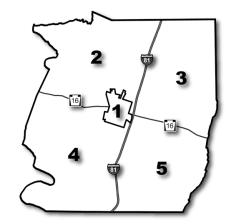
- **11. Where do you expect to work?** (*Choose Only 1*)
- O Greencastle-Antrim Area
- O Elsewhere in Franklin County
- O Hagerstown Area
- O Elsewhere in Pennsylvania
- O Washington D.C. Area
- O Other
- 12. What factors would lead you to decide to stay in or leave the Greencastle-Antrim area? (Choose all that apply)
- O Traffic and Road Conditions
- O Career Considerations/Opportunities
- O Leisure Activities and Entertainment
- O Urbanization and Development
- O Parks and Protected Open Space
- O Housing Costs and Options
- O Access to Healthcare
- O Quality of Education
- O Crime and Public Safety
- O Taxes
- O Other
- 13. If new growth is to occur in the Greencastle-Antrim area, where should it be located? (Choose all that apply)
- O In and adjacent to Greencastle Boro.
- O Crossroads and villages in Antrim Twp.
- O Adjacent to developed land
- O Scattered in rural areas of Antrim Twp.
- O Other

REFTEW

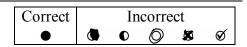
- 14. In a typical month, excluding times when you were simply "passing through," about how many times do you visit Downtown Greencastle? (*Choose Only 1*)
- O None
- O = 1 5 Times
- O 6 10 Times
- O 11 20 Times
- O 21 30 Times
- O More than 30 Times
- 15. What would lead you to visit Downtown Greencastle more often? (Choose all that apply)
- O Parking improvements
- O A more pedestrian friendly environment
- O Sidewalks/ trail connections to home
- O More stores or a greater variety of stores
- O Entertainment
- O Increased business hours
- O Other
- O Nothing
- 16. Please indicate if you have traffic or safety concerns in Greencastle-Antrim... (Choose all that apply)
- O ... at intersections in developed areas
- O ...at intersections in rural areas
- O ... on roads with agricultural traffic
- O ... on residential streets
- O ... when walking or riding bicycle
- O ... on highways and their interchanges
- 17. Housing costs have been climbing in the Greencastle-Antrim area. Does this concern you? (*Choose Only 1*)
- O Yes
- O Yes, but only in buying my first home
- O Yes, because of a desire to enter farming
- O No
- O I haven't given the matter much thought

- **18.** Do you feel employment opportunities in Greencastle-Antrim ... (*Choose all that apply*)
- O ... are ample for students to stay
- O ... are in the field you plan on pursuing
- O ... pay enough to meet your expenses
- O ... pay enough for desired quality of life
- O ...will be plentiful into the future
- O ... are available for skilled workers
- O ... are available for unskilled workers

#### **19.** In which portion of the Greencastle-Antrim region do you live? (*Choose Only 1*)



- O 1. Greencastle Borough
- O 2. Northwestern Antrim Township
- O 3. Northeastern Antrim Township
- O 4. Southwestern Antrim Township
- O 5. Southeastern Antrim Township



### **Condensed Item Analysis Report**

## What is the most important element of a good neighborhood? (Choose Only 1)

Response	Frequency	Percent
Attractive housing	1	11.11
Neighborhood playgrounds and parks	0	0.00
Safe Streets	6	66.67
Sidewalks or trails	1	11.11
Trees along streets and landscaping	1	11.11
Missing	0	0.00

## Where do you expect to look for housing as a young adult? (Choose Only 1)

Response	Frequency	Percent
Rural Countryside	2	22.22
Suburbs	2	22.22
Small Village	0	0.00
Town	3	33.33
Small City	2	22.22
Large City	0	0.00
Missing	0	0.00

If the three places where you spend most of your time, other than your home, had bus routes connecting them to one another, would you take the bus to these locations? (Choose Only 1)

Response	Frequency	Percent
Yes	7	77.78
No	2	22.22
Missing	0	0.00

### What kind of housing do you expect to look for as a young adult? (Choose Only 1)

Response	Frequency	Percent
Mobile Home	0	0.00
Apartment	2	22.22
Townhouse or Row Home	1	11.11
Half-House or Duplex	1	11.11
Single House	5	55.56
Missing	0	0.00

If the three places where you spend most of your time, other than your home, had biking/walking trails connecting them to one another, would you walk or bike to these locations? (Choose Only 1)

Response	Frequency	Percent
Yes	7	77.78
No	2	22.22
Missing	0	0.00

Which of the following recreational facilities are most needed in the Greencastle-Antrim area? (Choose all that apply)

Response	Frequency	Percent
Biking/Walking Trails	2	22.22
Athletic Fields	0	0.00
Neighborhood Playgrounds	3	33.33
Nature Park	0	0.00
Community All-Purpose Parks	4	44.44
Skate Park	1	11.11
Indoor Recreation Facility	6	66.67
Missing	0	0.00

Which aspect of a historic building is most important to protect? (Choose Only 1)

Response	Frequency	Percen	t
How it looks	2	22.22	
Function/origina	4	44.44	
building Events that took place in the building	3	33.33	
C C			
Missing	0	0.00	

## How do you plan to continue your education and training after high school? (Choose Only 1)

Response	Frequency	Percent
On-the-job training	0	0.00
Technical School	0	0.00
Business School	0	0.00
College/Univers ity	9	100.00
Military	0	0.00
Missing	0	0.00

# As a local official, you are preparing the annual budge for local services. Which 3 services would be your top priority? (Choose Up To 3)

Response	Frequency	Percen	t
Transportation - Roads Traffic Bridges	4	44.44	
Parks Recreation and Trails	2	22.22	
Emergency Services - Fire Police EMS	6	66.67	
Trash Recycling Yard Waste Removal	1	11.11	
Water Sewer and Other Utilities	4	44.44	
Growth Manangement Open Space	4	44.44	
Libraries and Community Facilities	1	11.11	
Economic Development	0	0.00	
Improving Neighborhoods	2	22.22	
Missing	0	0.00	

## Where do you expect to continue your education and training after high school? (Choose Only 1)

Response	Frequency	Percent	
Greencastle-An trim Area	1	11.11	
Elsewhere in Franklin County	0	0.00	
Hagerstown Area	0	0.00	
Elsewhere in PA	7	77.78	
D.C. Area	1	11.11	
Other	0	0.00	
Missing	0	0.00	

1)						
Response	Frequency	Percent	Response	Frequency	Percen	t
Agriculture-Agri ousiness	0	0.00	Greencastle-An trim Area	2	22.22	
Building-Constr	0	0.00	Elsewhere in Franklin County	1	11.11	
Fechnical-Electr cian-Mechanic- etc.	0	0.00	Hagerstown Area	0	0.00	
nformation echnology	0	0.00	Elsewhere in PA	3	33.33	
cience-Health are-Engineerin		44.44	D.C. Area	1	11.11	
ucation	4	44.44	Other	2	22.22	
etail ade-Sales-Se es-etc.	0	0.00				
nance-Insura e-Real Estate	-	0.00				
overnment-Pu ic dmin-Military	1	11.11				
lissing	0	0.00	Missing	0	0.00	

## In which industry do you plan to work? (Choose Only 1)

### Where do you expect to work? (Choose Only 1)

What factors would lead you to decide to stay in or leave the Greencastle-Antrim area? (Choose all that apply)

Response	Frequency	Percent	t
Traffic and Road Conditions	2	22.22	
Career Considerations/ Opportunities	3	33.33	
Leisure Activities and Entertainment	2	22.22	
Urbanization and Development	1	11.11	
Parks and Protected Open Space	1	11.11	
Housing Costs and Options	4	44.44	
Access to Healthcare	3	33.33	
Quality of Education	1	11.11	
Crime and Public Safety	3	33.33	
Taxes	2	22.22	
Other	3	33.33	
Missing	0	0.00	

In a typical month, excluding times when you were simply "passing through," about how many times do you visit Downtown Greencastle? (Choose Only 1)

Response	Frequency	Percent
None	0	0.00
1 - 5 Times	3	33.33
6 - 10 Times	1	11.11
11 - 20 Times	1	11.11
21 - 30 Times	1	11.11
More than 30 times	3	33.33
Missing	0	0.00

If new growth is to occur in the Greencastle-Antrim area, where should it be located? (Choose all that apply)

Response	Frequency	Percent
In and adjacent to Greencastle Boro.	2	22.22
Crossroads and villages in Antrim Twp.	1	11.11
Adjacent to developed land	1	11.11
Scattered in rural areas of Antrim Twp.	4	44.44
Other	3	33.33

Missing	0	0.00	

## What would lead you to visit Downtown Greencastle more often? (Choose all that apply)

Response	Frequency	Percent
Parking improvements	3	33.33
A more pedestrian friendly environment	2	22.22
Sidewalks/trail connections to home	1	11.11
More stores or a greater variety of stores	-	44.44
Entertainment	8	88.89
Increased business hours	3	33.33
Other	1	11.11
Nothing	0	0.00
Missing	0	0.00

Please indicate if you have traffic or safety concerns in Greencastle-Antrim... (Choose all that apply)

Response	Frequency	Percent
at intersections in developed areas	5	55.56
at intersections in rural areas	1	11.11
on roads with agricultural traffic	0	0.00
on residential streets	4	44.44
when walking or riding bicycle	3	33.33
on highways and their interchanges	3	33.33
Missing	0	0.00

### Do you feel employment opportunities in Greencastle-Antrim... (Choose all that apply)

Response	Frequency	Percent	Respons
are ample for students to stay		33.33	Greencas Borough
are in the field you plan on pursuing	12	22.22	Northwes Antrim Township
pay enough to meet your expenses	94	44.44	Northeas Antrim Trownshi
pay enough for desired quality of life	2	22.22	Southwes Antrim Township
will be plentiful into the future	2	22.22	Southeas Antrim Township
are available for skilled workers	3	33.33	
are available for unskilled workers	5	55.56	
Missing	1	11.11	Missing

Housing costs have been climbing in the Greencastle-Antrim area. Does this concern you? (Choose Only 1)

Response	Frequency	Percent
Yes	5	55.56
Yes - but only in buying my first home	1	11.11
Yes - because of a desire to enter farming	0	0.00
No	1	11.11
I haven't given the matter much thought	2	22.22
Missing	0	0.00

### In which portion of the Greencastle-Antrim region do you live? (Choose Only 1)

Borough Northwestern 1 11 Antrim Township Northeastern 0 0. Antrim Trownship Southwestern 3 33	4.44
Antrim Township Northeastern 0 0. Antrim Trownship Southwestern 3 33	
Antrim Trownship Southwestern 3 33	00
Antrim Township	3.33
Southeastern 1 1′ Antrim Fownship	1.11

0.00

0

### **Condensed Item Analysis Report**

## What is the most important element of a good neighborhood? (Choose Only 1)

Response	Frequency	Percent
Attractive housing	9	20.00
Neighborhood playgrounds and parks	4	8.89
Safe Streets	29	64.44
Sidewalks or trails	1	2.22
Trees along streets and landscaping	2	4.44
Missing	0	0.00

## Where do you expect to look for housing as a young adult? (Choose Only 1)

Response	Frequency	Percent
Rural Countryside	16	35.56
Suburbs	9	20.00
Small Village	1	2.22
Town	8	17.78
Small City	6	13.33
Large City	5	11.11
Missing	0	0.00

If the three places where you spend most of your time, other than your home, had bus routes connecting them to one another, would you take the bus to these locations? (Choose Only 1)

Response	Frequency	Percent
Yes	19	42.22
No	24	53.33
Missing	2	4.44

### What kind of housing do you expect to look for as a young adult? (Choose Only 1)

Response	Frequency	Percent
Mobile Home	0	0.00
Apartment	8	17.78
Townhouse or Row Home	3	6.67
Half-House or Duplex	6	13.33
Single House	27	60.00
Missing	1	2.22

If the three places where you spend most of your time, other than your home, had biking/walking trails connecting them to one another, would you walk or bike to these locations? (Choose Only 1)

Response	Frequency	Percent
Yes	35	77.78
No	10	22.22

Which of the following recreational facilities are most needed in the Greencastle-Antrim area? (Choose all that apply)

0.00

0

Response	Frequency	Percent
Biking/Walking Trails	8	17.78
Athletic Fields	16	35.56
Neighborhood Playgrounds	8	17.78
Nature Park	5	11.11
Community All-Purpose Parks	19	42.22
Skate Park	6	13.33
Indoor Recreation Facility	25	55.56
Missing	0	0.00

Missing

Which aspect of a historic building is most important to protect? (Choose Only 1)

Response	Frequency	Percen	ıt
How it looks	14	31.11	
Function/origina I use of the	11	24.44	
building Events that took place in the building	20	44.44	
Missing	0	0.00	

## How do you plan to continue your education and training after high school? (Choose Only 1)

Response	Frequency	Percent
On-the-job training	5	11.11
Technical School	0	0.00
Business School	0	0.00
College/Univers ity	40	88.89
Military	0	0.00
Missing	0	0.00

# As a local official, you are preparing the annual budge for local services. Which 3 services would be your top priority? (Choose Up To 3)

Response	Frequency	Percen	t
Transportation - Roads Traffic Bridges	28	62.22	
Parks Recreation and Trails	11	24.44	
Emergency Services - Fire Police EMS	22	48.89	
Trash Recycling Yard Waste Removal	4	8.89	
Water Sewer and Other Utilities	8	17.78	
Growth Manangement Open Space	19	42.22	
Libraries and Community Facilities	6	13.33	
Economic Development	12	26.67	
Improving Neighborhoods	8	17.78	
Missing	0	0.00	

## Where do you expect to continue your education and training after high school? (Choose Only 1)

Response	Frequency	Percen	t
Greencastle-An trim Area	2	4.44	
Elsewhere in Franklin County	3	6.67	
Hagerstown Area	1	2.22	
Elsewhere in PA	15	33.33	
D.C. Area	1	2.22	
Other	23	51.11	
Missing	0	0.00	

In which industry do you plan to work? (Choose On	ly
1)	-

Where do you expect to work? (Choose Only 1)

Response	Frequency	Percen	t	Response	Frequency	Percer	nt
Agriculture-Agri business	3	6.67		Greencastle-An trim Area	6	13.33	
Building-Constr uction-Repair	0	0.00		Elsewhere in Franklin County	1	2.22	
Technical-Electrician-Mechanic-etc.	3	6.67		Hagerstown Area	2	4.44	
Information Technology	4	8.89		Elsewhere in PA	9	20.00	
Science-Health care-Engineerin g		37.78		D.C. Area	2	4.44	
Education	10	22.22		Other	24	53.33	
Retail Trade-Sales-Se rves-etc.	2	4.44					
Finance-Insura nce-Real Estate	-	0.00					
Government-Pu blic Admin-Military	5	11.11					
Missing	1	2.22		Missing	1	2.22	

What factors would lead you to decide to stay in or leave the Greencastle-Antrim area? (Choose all that apply)

Response	Frequency	Percent
Traffic and Road Conditions	16	35.56
Career Considerations/ Opportunities	19	42.22
Leisure Activities and Entertainment	17	37.78
Urbanization and Development	18	40.00
Parks and Protected Open Space	10	22.22
Housing Costs and Options	24	53.33
Access to Healthcare	13	28.89
Quality of Education	13	28.89
Crime and Public Safety	17	37.78
Taxes	12	26.67
Other	17	37.78
Missing	0	0.00

In a typical month, excluding times when you were simply "passing through," about how many times do you visit Downtown Greencastle? (Choose Only 1)

Response	Frequency	Percent
None	3	6.67
1 - 5 Times	14	31.11
6 - 10 Times	9	20.00
11 - 20 Times	6	13.33
TT-20 TIMES	0	13.33
	2	4.44
More than 30 times	11	24.44
Missing	0	0.00

If new growth is to occur in the Greencastle-Antrim area, where should it be located? (Choose all that apply)

«pp.J/		
Response	Frequency	Percent
In and adjacent to Greencastle Boro.	13	28.89
Crossroads and villages in Antrim Twp.	6	13.33
Adjacent to developed land	11	24.44
Scattered in rural areas of Antrim Twp.	13	28.89
Other	17	37.78

Missing	0	0.00	

## What would lead you to visit Downtown Greencastle more often? (Choose all that apply)

Response	Frequency	Percent	
Parking improvements	7	15.56	
A more pedestrian friendly environment	4	8.89	
Sidewalks/trail connections to home	3	6.67	
More stores or a greater variety of stores		60.00	
Entertainment	28	62.22	
Increased business hours	10	22.22	
Other	14	31.11	
Nothing	4	8.89	
Missing	0	0.00	

Please indicate if you have traffic or safety concerns in Greencastle-Antrim... (Choose all that apply)

Response	Frequency	Percent
at intersections in developed areas	19	42.22
at intersections in rural areas	12	26.67
on roads with agricultural traffic	6	13.33
on residential streets	9	20.00
when walking or riding bicycle	5	11.11
on highways and their interchanges	6	13.33
Missing	4	8.89

### Do you feel employment opportunities in Greencastle-Antrim... (Choose all that apply)

	· ·		 -
Response	Frequency	Percent	Respo
are ample for students to stay		8.89	Green Borou
are in the field you plan on pursuing	8	17.78	North Antrim Towns
pay enough to meet your expenses	9	20.00	Northe Antrim Trown
pay enough for desired quality of life	5	11.11	South Antrim Towns
will be plentiful into the future	7	15.56	South Antrim Towns
are available for skilled workers	14	31.11	
are available for unskilled workers	22	48.89	
Missing	4	8.89	Missi

### Housing costs have been climbing in the Greencastle-Antrim area. Does this concern you? (Choose Only 1)

Response	Frequency	Percent
Yes	17	37.78
Yes - but only in buying my first home	11	24.44
Yes - because of a desire to enter farming	4	8.89
No	5	11.11
I haven't given the matter much thought	8	17.78
Missing	0	0.00

### In which portion of the Greencastle-Antrim region do you live? (Choose Only 1)

Response	Frequency	Percen	nt
Greencastle Borough	10	22.22	
Northwestern Antrim Township	13	28.89	
Northeastern Antrim Trownship	6	13.33	
Southwestern Antrim Township	8	17.78	
Southeastern Antrim Township	7	15.56	

Missing 1 2.22