

5. Land Use

5.1 Overview

Land use in Union County has been shaped by its natural features – ridges and valleys, rivers and streams, woodlands, and productive agricultural soils – and by its agricultural and small town heritage. The pattern of boroughs, villages, farmland, and forests that have characterized the Union County landscape since the 19th century still define the County’s unique identity and sense of place today. However, this pattern is being disturbed, and in some cases destroyed, by trends such as commercial strip development along roadway corridors and scattered, large-lot development in rural areas. An analysis of recent residential development reveals that approximately 40% is occurring outside of established towns and villages.

Despite these trends, Union County’s traditional land use pattern is remarkably intact. Almost 90% of the County is classified either as woodlands (60%) or agriculture (29%). Residential, commercial, industrial, and other “developed” uses comprise less than 10% of the County’s total land area. These uses are largely concentrated in towns and villages located along the County’s watercourses, such as the Susquehanna River, Buffalo Creek, and Penns Creek, as well as along active and inactive rail lines. In addition, smaller villages dot the County’s rural landscape (see Section 3.5 for a more

SUSTAINABILITY KEY = MIXED-USE

Mixed-use is reinforced throughout the Land Use and related elements of the Comprehensive Plan. The intent is to strengthen and adapt Union County’s traditional land use pattern of compact, mixed-use development focused on small towns and villages to the growth and environmental changes occurring in the 21st century. The benefits of mixing, rather than separating land uses, include opportunities for:

- Walkable and accessible neighborhoods, centers, parks, and schools;
- Activity in town and village centers during varying hours of the day;
- Diverse housing types to meet the needs of residents (attached, detached, housing above retail, etc.);

- Reduced dependence on vehicle travel and increased transportation options; and
- Reinforced sense of place and community in towns and villages.

Mixed-use can be created at varying scales (building, parcel, neighborhood) and its success depends on its ability to relate to the established development context. As a Sustainability Key, mixed-use has the ability to affect all other plan elements (e.g., by promoting transportation choices, conservation of natural and agricultural resources, and housing diversity).

complete description of existing land use).

Union County’s traditional land use pattern of compact, mixed-use development focused on towns surrounded by farmland and natural resources in rural areas embodies contemporary principles of sustainability. The challenge for the County’s future is how to perpetuate and adapt this pattern to maintain its viability in the face of growth and accelerating change in the 21st century.

The overall intent of this chapter is to influence the location, pattern, and form of development to achieve the Sustainable Growth and Preservation Framework set forth in Chapter 4. In addition to land use policy and regulation, a variety of factors – transportation, utility systems, economic development, the viability of farming as a business, etc. – will impact future land use in Union County.

5.2 Land Use Strengths and Issues

Strengths

- Nearly 90% of the County's land use is either woodlands or farmland. About 60% of the County's land area is woodland (state-owned, federally-owned, or privately owned forests and open space) and 29% is agricultural use.
- Prime farmland soils and soils of statewide importance are present throughout Union County with the major concentration in the County's central valley. Working farms and cropland activities are located in many of these areas.
- Traditional small towns and villages are located throughout the County and provide a high quality of life, livable communities, mixed-used commercial districts, and public and civic amenities.
- The majority of the County (82%) is zoned for agriculture, agricultural preservation, woodlands, or rural density.
- Availability of outdoor recreational opportunities ranks high among residents as a strength of the County. Over 32% of the County is within the Bald Eagle State Forest and three state parks.

Issues

- While 29% of the County is in agricultural land use, only 3% of the total land area has been permanently preserved as farmland through the County's agricultural preservation program.
- Residential housing has been increasing at a steady pace since 1990. The number of housing units is projected to increase (from 14,684 in 2000) by 40% in 2030 and 68% in 2050.
- Recent development activity has been scattered around the County and not necessarily located near existing towns and villages or municipal services. A GIS analysis of new development between 2000 and 2006 found that about 60% occurred in or near existing towns and villages and 40% occurred outside of those areas.
- Prime farmland soils are relatively easy to build on and are therefore attractive for new development located outside of established towns and villages. Such development consumes prime soils and creates compatibility issues with nearby working farms.
- While many of the County's municipalities have agriculture or preservation zoning districts, some form of low density residential development is permitted in

over two-thirds of those zoning districts.

- Residents have expressed a strong need for employment and retail services in the County, especially in the Western Planning Area.
- Constraints to developing in older towns and villages include the presence of the 100-year floodplain along stream corridors.
- There are some vacant or underutilized commercial and industrial properties in the County, in particular along Route 15 in Lewisburg and Route 45 in Mifflinburg. The closing of the Laurelton State Center in Hartley Township and Pennsylvania House Furniture in East Buffalo Township and downsizing of Yorktowne in Mifflinburg have created vacancies and loss

5.3 Land Use Goals

of employment in the County.

Land Use Goals

- Productive farmland with prime agricultural soils is preserved from development and remains in agricultural use.
- Union County’s valued natural resources (e.g., streams, wetlands, bird and animal habitat, steep slopes), woodlands, and open spaces are protected and preserved throughout the County.
- Urban services, such as public water and sewer, are designed to serve towns and villages and do not extend into working agricultural lands.
- Residential, commercial, and employment land uses are located in areas where they can be best supported, limiting their impact on agricultural land, natural resources, and community services/utilities.
- Municipal policies and regulations, including municipal zoning, are developed to support the preservation of farmland, conservation of natural resources, and development of traditional neighborhoods.
- New development is designed to incorporate a mix of uses and residential densities and provide convenient access to retail, parks, and services, and to create alternatives to vehicular transportation.
- Employment opportunities are maximized in new development to serve both towns and rural areas and provide a solid tax base in the municipalities.
- Underutilized and infill sites are used for new commercial and employment development.
- Development is sited and oriented to avoid the 100-year floodplain, maximize passive solar heating and cooling, and reduce energy costs.



5.4 Future Land Use

Figure 5-1 (Future Land Use) depicts in general terms where different types of uses should be located to implement the goals of the Plan. Table 5.1 provides definitions of the land use types shown on the map. As described below, the proposed future land use pattern is structured around the Growth and Preservation Framework presented in Chapter 3 and its two primary components, the Town Policy and Rural Policy. Based on this framework, approximately 80% of new residential development is targeted to occur in growth areas (Primary and Secondary) and 20% is targeted to occur in rural areas.

Town Policy

Primary Growth Areas

Figure 5-1 designates four Primary Growth Areas in the County, centered on the four boroughs: Hartleton, Lewisburg, Mifflinburg, and New Berlin. In addition, a growth area was designated in Gregg Township by the US 15 South Comprehensive Plan and is shown on Figure 5-1. In these areas growth is focused in existing towns and established contiguous areas of a township, where infrastructure and services are available.

Boundaries are determined based on the existing development pattern, zoning, location of natural features, preserved farmland, and infrastructure. Most (at least 2/3) future growth occurring over the next 40-year period will be directed to the Primary Growth Areas and should be provided with a full range of infrastructure and services.

To be compatible with existing town development and to maximize the use of land and infrastructure, an average density of 6 dwelling units (DU) per buildable acre is proposed for the Primary Growth Areas. Future land use in these areas is designated as town mixed-use or medium to high density residential on Figure 5-1.

Densities within the Primary Growth Areas are expected to be mixed. Where appropriate, based on services and the surrounding development pattern, densities of new development in some areas will exceed the 6 DU/buildable acre average and in other areas may be built at lower densities. The Eastern and Western Planning Areas each have one designated Primary Growth Area. There are two Primary Growth Areas in the Central Planning Area: Mifflinburg and a smaller area designated around New Berlin.

The preferred land use pattern in Primary Growth Areas is referred to as Traditional Neighborhood Development (TND). In the overall future land use framework, the majority of growth is directed to Primary Growth Areas, while the Secondary Growth Areas, described under the Rural Policy below, are envisioned to accommodate a much smaller proportion of total growth.

Traditional Neighborhood Development

(TND) promotes compact, mixed-use, pedestrian-friendly patterns modeled after traditional American towns as an alternative to conventional suburban development. Typical TND characteristics include interconnected streets, street design focused on creating a pedestrian-friendly environment, buildings close to the street, and a mix of uses. These uses include diverse housing types and a central core of retail and community-serving uses within convenient walking distance of the surrounding neighborhood.

Rural Policy

Secondary Growth Areas

In the Rural Policy, development that occurs outside of towns is directed to Secondary Growth Areas, focused on existing villages. These areas are designated throughout the County and are illustrated on Figure 5-1 (Future Land Use). New development is envisioned with the desired walkable land use pattern focused around a central place. Secondary Growth Areas are intended for a smaller percentage of the overall growth than Primary Growth Areas. In this category the intent is to “capture” development that would typically occur as rural sprawl. The target density for new development in the Secondary Growth Areas is an average of 2.5 DU per buildable acre. While it is envisioned that the amount of development in Secondary Growth Areas will be much less than in Primary Growth Areas, the combined total should be at least 80% of all new development in the County.

Rural Resource Areas

As described in the Growth and Preservation Framework (Chapter 3) Rural Resource Areas include land with environmentally sensitive features, conservation areas, productive agricultural soils, preserved farms, woodlands, or steep slopes. Development is limited in these

areas in order to maintain and protect natural features or agricultural uses. On Figure 5-1 (Future Land Use) Rural Resource Areas include two categories: Conservation/Woodlands and Agriculture.

Rural Development Areas

The Growth and Preservation Framework (Chapter 3) calls for a maximum of 20% of development to occur in Rural Development Areas. This category includes Rural Neighborhoods, Rural Business Centers, and “on-farm” development.

- Rural Neighborhood development may occur in existing Hamlets (see Table 5.1) or in existing subdivisions with undeveloped lots. The purpose is to capture residential development, which would otherwise occur outside of growth areas, and locate it adjacent to existing development. Rural Neighborhoods should be limited in scale and should incorporate conservation subdivision design principles and a clear development edge.
- Rural Business Centers (see Table 5.1) are areas where agricultural support services, mining, or light industrial uses occur. These areas are located near working farms, but should maintain a separation from residential neighborhoods to limit negative impacts related to business operations.

- On-farm Development refers to uses that relate to a farm business (e.g., agricultural support businesses, energy production, agri-tourism) and are located on the farm. It may also include a limited number of residential lots for family members.

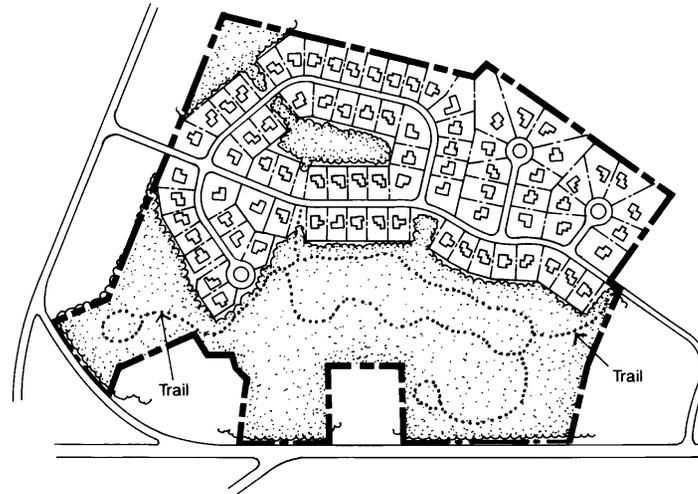
Conservation Subdivision Design promotes small-lot residential subdivision (1/2 to 1-acre lots) with the preservation of open space and farmland. Intended as an alternative to conventional large-lot subdivision, residential units are clustered in a neighborhood and open space is preserved through permanent conservation easements or covenants.

The developer is required to first provide a site plan which delineates and preserves environmentally sensitive features (e.g., steep slopes, wetlands, woodlands, or working farmland). Typically there is a minimum lot size required for this type of development and incentives such as density bonuses are offered to developers. Non-residential land uses are generally restricted to agriculture, parks, and municipal uses. In hamlets, limited commercial, service, institutional, and office uses are also permitted (see following page for conservation subdivision design illustration).

**Garnet Oaks, Bethel Township, Delaware County Developer: Realen Homes, Ambler
Source: Natural Lands Trust, Growing Greener, Conservation by Design**

Just over half of this 58-acre site has been conserved as permanent privately-owned open space through the simple expedient of reducing lot sizes to the 10,000–12,000 sq. ft. range (approximately 1/4 acre). The developer reports that these lot sizes did not hinder sales because about two-thirds of the lots directly abut the densely wooded open space, which gives them the feel and privacy of larger lots. In fact, the evidence indicates that the open space definitely enhanced sales in two ways: increased absorption rates and higher prices (through premiums added to the prices of lots which abut the conservation areas).

The locations of these conservation areas were carefully selected after a comprehensive analysis of the site's natural and historic features had been conducted.



Conservation Subdivisions, New Jersey



Regional Impacts

The Pennsylvania Municipalities Planning Code (MPC) requires that County Comprehensive Plans identify current and proposed land uses which have a regional impact and significance. The majority of new growth in the County is planned for infill development in existing commercial, employment, and residential centers (see Town Policy). This type of new development will provide additional housing and employment opportunities but is not expected to have a significant regional impact. There are developments with the potential to impact the region in terms of traffic impacts, employment, commercial floor space, and residential options. Two examples include the planned redevelopment of the 40-acre Pennsylvania (PA) House site and the potential development of the former Walmart site on Route 15. Redevelopment of the PA house site is mostly conceptual at this stage but is planned for mixed-use. MC Federal Credit Union recently completed a partial renovation of the main showroom and is using the facility for offices and banking. Energy efficient practices (including the installation of a geothermal heating and cooling system) were utilized in the renovation. Plans for the remaining 11,000 SF space are underway. As the site develops, additional traffic impacts and employment, retail, and housing options are anticipated.

Bucknell University, Evangelical Community Hospital, and the existing Super Walmart are developed sites that currently impact the region. Other future land uses that may cause regional impacts include large shopping centers, movie theaters, large-scale entertainment, major industrial parks, distribution centers, school complexes and/or office parks.

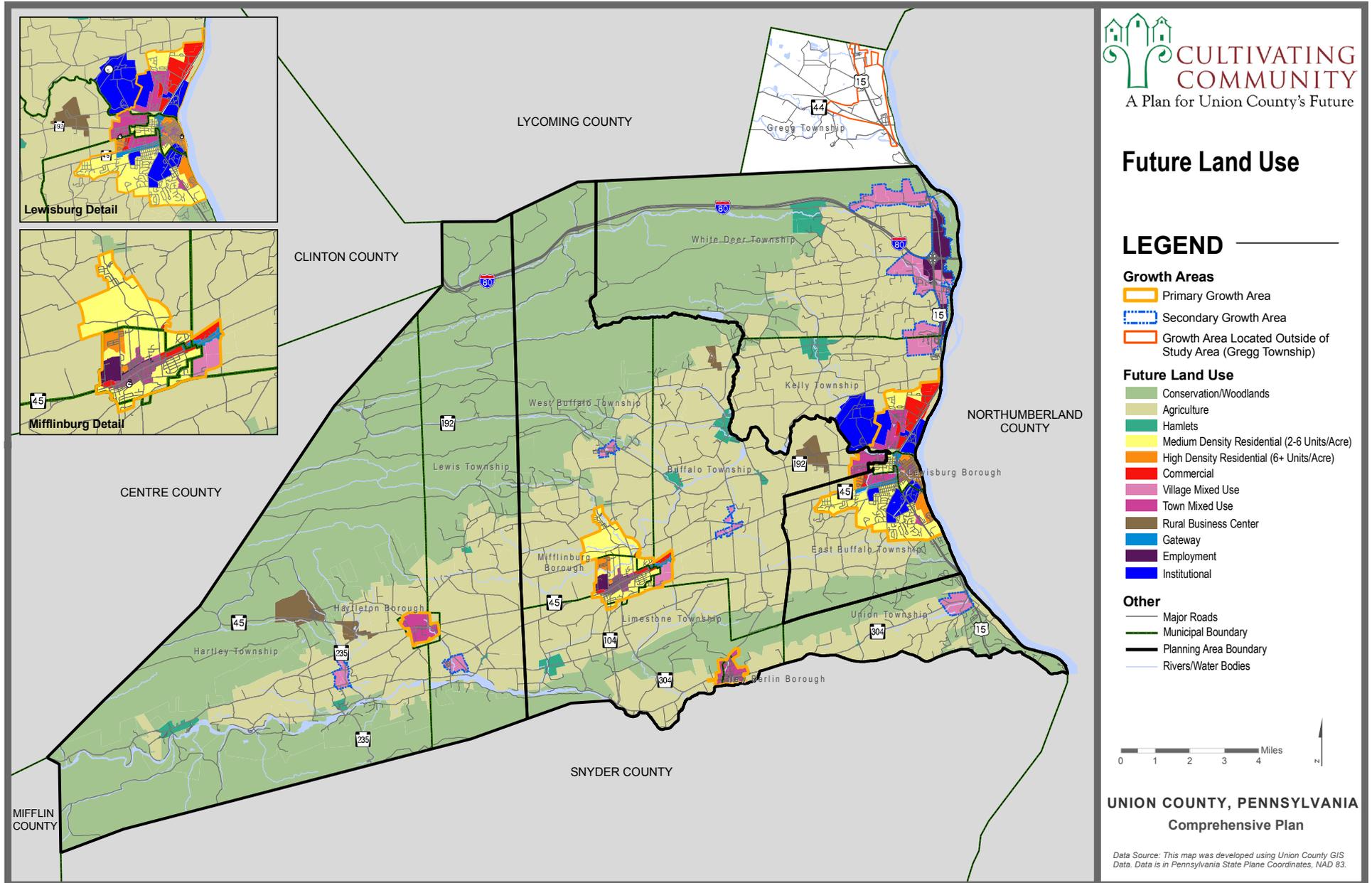
Compatibility with Contiguous Municipalities

Union County's proposed land use pattern (see Figure 5-1) is compatible with existing and proposed development in the County's contiguous municipalities. In many areas the Bald Eagle State Forest and surrounding woodlands create an open space buffer between Union and its surrounding counties (Lycoming, Clinton, Centre, Mifflin, and part of Snyder County). The Susquehanna River creates a similar buffer to the east with Northumberland County.

Planned growth areas in Lycoming County are compatible with the planned areas in Union County. Planned agricultural and woodland uses along the southern boundary of the County are consistent with Snyder County's plans for rural and woodland uses and a potential greenway corridor along Penn's Creek. Snyder County's Future Land Use Plan designates a center for new development (Penn's Creek) which is similar in concept and scale to New Berlin's Primary Growth Area.

Table 5.1 Future Land Use Map – Land Use Categories	
Agriculture	Land primarily used for agricultural purposes. Residential and other farm related uses are incidental to the agricultural land use. Agricultural land is typically located on soils of prime or statewide importance.
Conservation	Land that is characterized by forest habitat, steep slopes, wetlands, and wildlife habitat. The majority of the land in this category is in state forest ownership. Development is strictly limited to protect natural resources and woodlands.
Hamlet	Areas of existing development located in predominantly rural areas, which are too small to be considered villages. Typically these areas include a mix of uses or are predominantly residential, adding to the County's agricultural character. A limited portion of the County's future land use needs can be accommodated in these areas. New development should be consistent with the existing rural character and preserve resource areas through conservation subdivision design or similar technique. Hamlets indicated on Figure 5-1 include Weikert, Glen Iron, Swengal, Pleasant Grove, White Springs, Cowan, Mazappa, Buffalo Crossroads, and Kelly Crossroads.
Medium Density Residential	Land designated for single, two, or multi-family residential at densities less than 6 units per acre.
High Density Residential	Land designated for single, two, or multi-family residential development at densities of 6 units per acre or greater.
Commercial	Land that is designated for commercial sale of goods and services, including retail and wholesale establishments, personal services (dry cleaners, beauty salons, restaurants, etc.) and service related offices (medical, dental, financial, real estate, etc.).
Gateway	Land in this category is generally commercial in use, but requires added consideration for its form and design, given its prime visibility along major corridors in and out of growth areas. The concept is to create attractive entrances to growth areas through coordinated streetscape design (street trees, sidewalks, building setbacks, landscaping, signage, lighting, etc.).
Mixed-Use (Town or Village)	Land designated for a mix of residential and commercial uses. Mixed-use development typically occurs in a denser, compact, and walkable form. Proposed mixed-uses within Primary Growth Areas are classified as Town Mixed-Use. All Secondary Growth Areas are classified as Village Mixed-Use on Figure 5-1.
Rural Business Center	Land primarily used for commercial or industrial development that is related to the agricultural and rural economy. Such development is intended to be consistent with the agricultural areas in which the centers are located. As indicated on Figure 5-1 there are three Rural Business Centers proposed for the County, one in the Western Planning Area and two in the Central Planning Area. Rural Business Centers are not intended to stimulate growth in rural areas, but rather to "capture" development that would typically occur as rural sprawl.
Employment	Land primarily designated for employment-related uses, including offices, light manufacturing, technological and research-related parks. Convenience retail and personal services (dry cleaners, beauty salons, daycare facilities, etc.) are incidental to the employment-related uses. The major employment center in the County is located in the White Deer Township Secondary Growth Area, along Route 15, near the I-80 and US 15 Interchange.

Figure 5-1
Future Land Use



5.5 Land Use Strategies



The land use strategies provide direction for achieving the Town and Rural Policies. They are divided into three categories: location, pattern, and form, respectively.

While some strategies may overlap, in general:

- Location addresses where growth and preservation will occur.
- Pattern addresses the type or mix of land uses.
- Form addresses the shape that new development will take and how it will relate to existing development and rural resources.

Location

5-1. Enact municipal or multi-municipal policies and regulations to direct at least 80% of new residential development through the year 2050 to Primary and Secondary Growth Areas.

Figure 5-1 (Future Land Use) designates four Primary Growth Areas and six Secondary Growth Areas throughout the County and targets at least 80% of new residential development through 2050 into these areas. In addition, the Town Policy calls for all major new commercial (retail and employment) to be located in Primary Growth Areas or in designated employment centers. Adopting the growth area boundaries

at the municipal level is a first step in advancing the sustainable growth principles introduced in Chapter 3, which are: 1) focus new development in and around established communities; 2) preserve rural resources; 3) conserve energy; and 4) conserve fiscal resources.

Municipalities that have growth areas within their boundaries should evaluate and revise, where necessary, existing zoning and subdivision ordinances to accommodate residential and mixed-use development within the designated boundaries.

5-2. Enact municipal or multi-municipal policies and regulations to protect Rural Resource Areas and direct the remaining 20% of growth to Rural Development Areas as the basis for managing development outside Primary and Secondary Growth Areas.

As part of the Rural Policy, Figure 5-1 (Future Land Use) designates Hamlets and Rural Business Centers throughout the County. Rural Business Centers are located in the Central and Western Planning Areas and are intended to "capture"

agriculturally-related commercial or industrial development that would otherwise occur as rural sprawl. Concentrating this type of development in Rural Business Centers, rather than allowing it to spread out, requires fewer infrastructure improvements (e.g., roads, water, and sewer) and development costs.

To accommodate a minimal amount of residential growth and acknowledge the existing rural development patterns which contribute to the character of the County, Rural Neighborhood development should be directed to existing hamlets and other development areas as well as a limited number of new on-farm residences for family members.

5-3. Concentrate infrastructure improvements and expansion of public services in growth areas.

Limiting infrastructure and service improvements, such as roads, water, and sewer extensions to the Growth Areas is essential to influencing where development will occur in the future. In addition, by improving existing infrastructure and services, the growth areas can better accommodate new development.

5-4. Encourage broader participation in land conservation programs.

Union County has an active Conservation District which administers the County’s Purchase of Agricultural Conservation Easement (PACE) program. Increasing participation in this program and considering implementation of other land and natural resource preservation programs (e.g., TDR, voluntary easements, etc.) can help limit development in Rural Resource Areas.

Pattern

5-5. Examine zoning districts countywide to implement the development pattern shown on Figure 5-1 (Future Land Use).

To implement the Growth Management Strategy and Future Land Use Plan, municipal zoning ordinances must be adopted, where they do not now exist (Union Township, Limestone Township, and Hartleton Borough), and revised to be consistent with land use categories shown on Figure 5-1 (Future Land Use).

Specifically, zoning changes or new ordinances should limit development outside of Growth Areas, Rural Business Centers, or Hamlets and





encourage mixed-use development inside of Growth Areas.

5-6. Establish Traditional Neighborhood Development (TND) as the preferred land use pattern in Growth Areas.

Mixed-use development is the Sustainability Key for the Land Use Element. A major component of TND is the inclusion of a mixed-uses and residential densities, similar to the pattern already established in Lewisburg, Mifflinburg, and smaller communities throughout the County. Extending and improving the existing TND pattern as infill or new development in the Growth Areas where infrastructure is present, can help to maintain the viability of existing communities while diverting growth from the surrounding rural areas. Zoning and developer incentives (e.g., density bonuses) are effective tools in implementing TND. TND regulations can vary in scale and density as appropriate to the established context. For example, lower density village or hamlet overlay districts can be applied to Secondary Growth Areas or in smaller communities located outside of designated growth areas.

5-7. Develop a variety of residential amenities, such as parks and community centers, in Growth Areas and avoid development in the floodplain.

Open space and preservation of natural features should not be reserved for Rural Resource Areas; instead, quality of life amenities, such as parks, trails, bike paths, and open space, can be integrated within neighborhoods and centers throughout the Growth Areas. Existing floodplains areas along stream corridors present an opportunity to create additional parks, greenway corridors, and passive open space in Growth Areas. All commercial and residential development in flood prone areas should be avoided.

Form

5-8. Create walkable, mixed-use, compact communities that maintain and complement the historic and cultural character of existing towns and villages in Growth Areas.

Municipalities can adopt a range of regulations, standards, and other strategies to implement mixed-use development. Examples of potential tools include TND ordinances, historic districts, design guidelines, form-based zoning overlays,

infill development standards, developer incentives, and standards for mixed-use development.

5-9. Preserve and enhance natural resource systems throughout rural resource areas by influencing the shape and density of new development.

By influencing the form of development in rural areas, through regulations, standards, and other strategies, municipalities can help preserve and enhance natural resource systems (air quality, water quality, riparian/wetland areas, etc.). Potential tools include conservation subdivision, minimum open space requirements, tree preservation standards, light pollution ordinances, rural neighborhood design standards, acquisition of easements for open space or farmland, public-private partnerships, private land-owner outreach programs, and technical assistance.

5-10. Reduce the overall environmental impact of buildings.

In addition to creating mixed-use neighborhoods in and around established communities, the need to conserve energy by decreasing fossil fuel consumption and reducing automobile use is one of the sustainable growth principles introduced

in Chapter 4 and a priority issue identified in the citizen survey.

According to the U.S. Green Building Council (USGBC), buildings account for 72% of total electricity consumption and 39% of energy use. Minimizing the impact of buildings on the environment, through green building techniques and low impact site design standards, is one approach to conserving energy and protecting natural resources. Sustainable building practices, such as passive solar building siting, energy efficient building systems, use of renewable energies, green roofs, on-site water recycling, and native landscaping can be integrated into existing and new development through increased education, awareness, and incentives.

The SEDA-COG Energy Resource Center, is an example of a local organization working in the public and private sectors with the goal of reducing energy costs and creating new energy markets in the region. The Center is planning to move into a new LEED-certified building, partially funded by a state grant, which will serve as a learning laboratory for sustainable building practices.

