



ELANCO

Region Comprehensive Plan

Brecknock Township - August 12, 2008

Caernarvon Township - September 8, 2008

Earl Township - July 7, 2008

East Earl Township - August 12, 2008

Terre Hill Borough - August 12, 2008

ELANCO Region Comprehensive Plan

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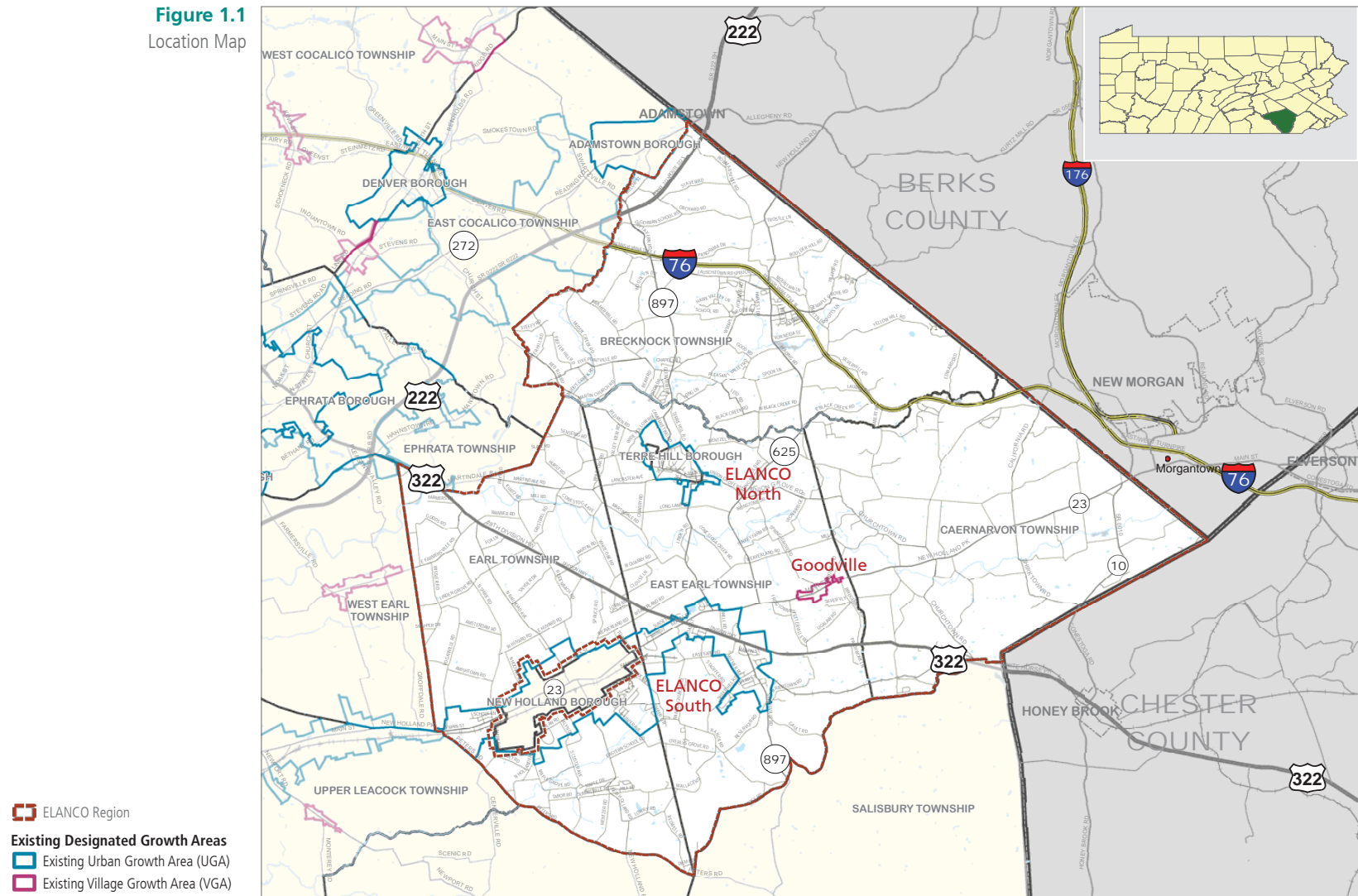
1. Introduction

1.1 Regional Context

A thriving agricultural economy and deep rural heritage are defining characteristics of eastern Lancaster County, situated in southeastern Pennsylvania. Some of the most productive non-irrigated farmland in the United States is concentrated in this part of Lancaster County. The area has a rich history and strong cultural traditions, including the rural way of life of the Plain Sect community. The five municipalities participating in the ELANCO Region Multi-Municipal Plan – Brecknock, Caernarvon, Earl, and East Earl Townships and Terre Hill Borough – are located in the heart of eastern Lancaster County and its rich resources. Figure 1.1 illustrates the location of the ELANCO study area within the region. It also shows the locations of existing Urban Growth Areas (UGAs) and Village Growth Areas (VGAs) that have been adopted by ELANCO region municipalities.



Figure 1.1
Location Map



1.2 Need for the Comprehensive Plan

Lancaster County has a history of forward-thinking planning in the region. The recently adopted Growth Management Element of the Lancaster County Comprehensive Plan provides an excellent framework for planning, and multi-municipal planning enables the use of innovative tools under the Pennsylvania Municipalities Planning Code (MPC).

Benefits of Multi-Municipal Planning

Multi-municipal planning provides many benefits for participating municipalities. Examples include:

- Increased ability to protect rural resources by directing development to regionally designated growth areas.
- Protection against “curative amendment” lawsuits because each municipality within a multi-municipal planning area does not have to provide for every use.
- Priority eligibility for state multi-municipal planning and funding programs.
- Increased capacity to share costs and resources among participating municipalities.
- Ability to authorize transfer of development rights (TDR) across municipal boundaries within the planning region.

The key need for and challenge of the Multi-Municipal Comprehensive Plan is: How can growth and change be managed to maintain the rural and agricultural character of the ELANCO Region?

Like all of Lancaster County, the ELANCO region is affected by new patterns of mobility, migration, and growth that have accelerated the rate of change in recent years, including:

- Pennsylvania Turnpike interchanges located at Morgantown in Berks County and East Cocalico in Lancaster County provide easy access to the expanding Philadelphia metropolitan region to the east.
- Regional “corridors of growth,” including Route 23, Route 322, and Route 222 to the west, increase mobility and accessibility to the region.
- Further south, Route 30 connects to the Philadelphia metropolitan area and is a major corridor of growth in Chester County.
- Improvements to Route 23 being evaluated through the EIS process have the potential to further improve accessibility and increase growth pressures.

The fundamental purpose of the ELANCO Regional Comprehensive Plan is to chart a future course for the region that maintains its rural heritage in the face of growth and change. This plan for the region's future consists of a vision statement, goals, objectives, and strategies established by the ELANCO Steering Committee, with input from residents, business owners, and local leaders. Consistent with the MPC, elements covered by this Comprehensive Plan include:

- Population and Development Trends
- Vision Statement and Goals
- Agricultural, Natural, and Historic Resources
- Land Use
- Housing
- Transportation
- Community Facilities and Utilities
- Implementation

The success of the plan depends on developing and implementing a comprehensive strategy that preserves rural resources, a viable agricultural industry, and the rural way of life. Key plan strategies include:

- Adapt the concepts contained in the countywide Growth Management Element to local conditions in the five municipalities, identifying the specific tools that can be used and actions that can be taken to maintain rural character.
- Accommodate the region's growth in Urban and Village Growth Areas and in rural centers where appropriate to prevent sprawl.
- Improve the character and compatibility of development that is occurring in these areas.



1.3 Planning Process

The planning process was broken down into five phases as described in Figure 1.2 and the accompanying text below. The process was led by a 22-member Steering Committee comprised of representatives of the five participating municipalities and the ELANCO School District. The Steering Committee worked with Lancaster County Planning Commission (LCPC) staff and the project consultant, Wallace Roberts & Todd, LLC, to understand the pressures of growth and change affecting the region, define community values and a vision for the future, and develop initiatives and actions to achieve the vision. The Committee gathered input from citizens, stakeholders and elected officials in developing the plan.

The planning process consisted of the following phases:

Phase 1 – Project Organization and Mobilization:

During this initial organizational phase, a kickoff meeting and community tour were conducted to initiate discussion on the issues to be addressed in the Comprehensive Plan, the public outreach program for the project was finalized, and existing plans and data available to inform the planning process were assessed.

Phase 2 – Issues Identification, Existing Conditions and Trends Analysis:

In this phase data on existing conditions and trends, the results of Steering Committee discussions and stakeholder interviews, existing plans and policies, and input received at a public meeting were analyzed and synthesized. The purpose was to gain a strategic understanding of the important issues and trends that will influence the ELANCO Region's future, based on analysis of facts, future development projections, and citizen perceptions and values.

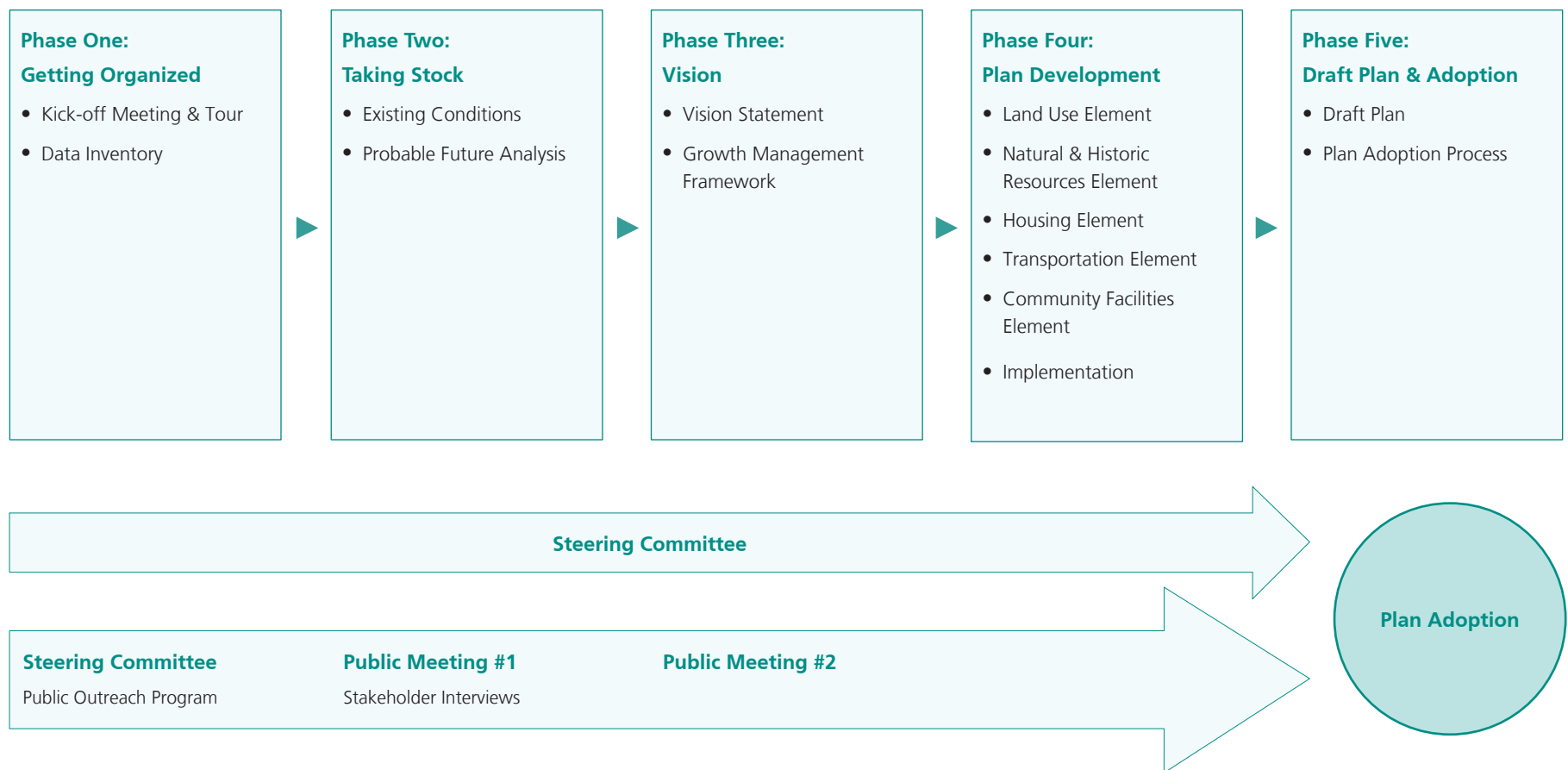
Phase 3 – Framing the Vision: In this phase a vision and goals for the future of the ELANCO region were formulated based on the results of Phase 2. A "growth management framework" was also developed comprised of a draft future land use plan defining patterns of preservation and growth, along with key initiatives to implement the vision and goals. A second public meeting was conducted to review and receive input on the vision, goals, and growth management framework.

Phase 4 – Plan Development: In this phase the results of the previous phases were developed, tested, and fleshed out into a complete Comprehensive Plan for the ELANCO region. The plan includes topical elements (Agricultural, Natural, and Historic Resources; Land Use, etc.) and a chapter addressing implementation.

Phase 5 – Comprehensive Plan Preparation, Review and Adoption:

This phase includes completion of the complete ELANCO Regional Comprehensive Plan document, public review, and adoption by the participating municipalities.

Figure 1.2 Planning Process Chart ELANCO Region Planning Process Chart



Public Meeting #2 – Citizen Input

Citizens attending a public meeting on May 10, 2007 were asked to complete a questionnaire regarding preservation and growth in the ELANCO region. The results were as follows:

1. What are the region's most valuable land resources?

- Prime Agricultural Land
- Welsh Mountain/Watershed
- Small Streams

2. Are there key places that should be preserved?

- Current Farmland
- Woodland
- Welsh Mountain Area
- Watershed

3. What are the threats to those resources or places?

- Development
- New Route 23/Route 23 Bypass
- New roads/traffic

4. Where are the problems with road safety and congestion located?

- Route 23
- Speeding Trucks/Cars

5. Are there issues with water and/or sewer service in your community?

- 77% of those responding say "NO"
- 23% of those responding say "YES"
- Of those responding YES, the majority is concerned there is not enough public water.

6. Are you satisfied with current development? Please explain why?

- 22% of those responding say "YES"
- 78% of those responding say "NO"
- If those responding NO, comments include 1) Too Much/Too Fast; 2) Loss of Farmland and Open Space; 3) Development Too Sporadic and Separated

7(a). Where should future growth be located?

- New growth should surround existing areas/roads/towns
- On marginal land NOT on prime farmland
- New growth should only go where water and sewer already exist

7(b). What should future development look like?

- Higher density should be promoted
- Cluster housing
- Compact like in town centers of New Holland / Terre Hill

8. Are additional commercial and/or industrial facilities needed in the region?

- 30% of those responding say "YES"
- 70% of those responding say "NO"
- If those responding YES, comments include "minimal to support workforce" and "in the boroughs but without expanding borough limits."

1.4 Plan Contents

The ELANCO Regional Plan is organized by planning element. This introduction to the Comprehensive Plan and the planning process (Chapter 1) is followed by an overview of population and development trends in the ELANCO Region (Chapter 2); the vision and goals for the region's future (Chapter 3); and five plan elements:

- Agricultural, Natural, and Historic Resources (Chapter 4)
- Land Use (Chapter 5)
- Housing (Chapter 6)
- Transportation (Chapter 7)
- Community Facilities and Utilities (Chapter 8)

An overview, strengths and issues, and goals and strategies are provided for each element. The final chapter of the plan (9. Implementation) outlines actions that can be taken by each municipality involved in this multi-municipal planning effort to implement the plan.

2. Population and Development Trends

2.1 Population and Employment Trends

Population Growth

The ELANCO region has been steadily growing since the 1950s. The average rate of growth in the region was 13.7 percent per decade between 1950 and 1990. The fastest growth decade of that period occurred between 1960 and 1970, mostly due to population increases in Earl and East Earl Townships. During the forty-year period, Lancaster County as a whole grew by an average rate of 15.9% per decade. The tables on the following pages (2.1-2.4) summarize population change and projected growth.

Population growth slowed down slightly in the ELANCO region between 1990 and 2000 compared to the previous decade (from 13.5% to 12.7%). The decrease is more apparent in Lancaster County as a whole, where population grew at a rate of 16.7% between 1980 and 1990 and a rate of 11.3% between 1990 and 2000. The surrounding region experienced growth during the twenty-year period as well. However, Chester County grew at a faster rate over the twenty-year period, while in Berks County growth occurred at a much slower rate (see Table 2.1).

Table 2.1 – Population Change in the ELANCO Region and Surrounding Counties

Location	Area, Square Miles	Population 1980	Population 1990	Population 2000	Population 2006 (Est)	% Change 1980-1990	% Change 1990-2000	% Change 2000-2006
Brecknock Township	24.84	4,088	5,197	6,699	7,045	27%	29%	5.2%
Caernarvon Township	23.14	3,392	3,946	4,278	4,535	16%	8%	6%
Earl Township	22.20	5,125	5,515	6,183	6,824	8%	12%	10.4%
East Earl Township	24.70	4,872	5,491	5,723	6,237	13%	4%	9%
New Holland Borough	1.93	4,147	4,484	5,092	5,146	8%	14%	1.1%
Terre Hill Borough	0.46	1,217	1,282	1,237	1,245	5%	-4%	0.7%
ELANCO Totals	97.27	22,841	25,915	29,212	31,032	13.5%	12.7%	6.2%
Lancaster County Totals	983.29	362,346	422,822	470,658	494,486	16.7%	11.3%	5.1%
Chester County Totals	755.97	316,660	376,396	433,501	482,112	18.9%	15.2%	11.2%
Berks County Totals	858.88	312,509	336,523	373,638	401,149	7.7%	11%	7.3%

Source: Lancaster County Housing Element, US Census 2006 Estimated Data

Population Projections

Population projections developed by the Lancaster County Planning Commission (LCPC) for the ELANCO Region municipalities (including New Holland Borough) are presented in Table 2.2 for the next three decades: 2010, 2020, and 2030. Based on the County's linear population projections, over the next twenty years growth in ELANCO is projected at a rate of 6-8% per decade. Brecknock and Caernarvon Townships are expected to experience the fastest growth rates (9-13%) during that period. Table 2.3 presents the projected growth in households for the same period.

Table 2.2 – Population Projections 2000-2030 in the ELANCO Region

Location	Total Population 2000	Total Population 2010	% Population Change 2000-2010	Total Population 2020	% Population Change 2010-2020	Total Population 2030	% Population Change 2020-2030
Brecknock Township	6,699	7,588	13%	8,487	12%	9,342	10%
Caernarvon Township	4,278	4,742	11%	5,215	10%	5,661	9%
Earl Township	6,183	6,583	6%	6,967	6%	7,298	5%
East Earl Township	5,723	5,960	4%	6,181	4%	6,360	3%
New Holland Borough	5,092	5,368	5%	5,629	5%	5,849	4%
Terre Hill Borough	1,237	1,252	1%	1,266	1%	1,273	1%
ELANCO Totals	29,212	31,493	8%	33,745	7%	35,783	6%
Lancaster County Totals	470,658	509,720	8%	548,979	8%	585,489	7%

Source: Lancaster County Housing Element; population projections are an average of linear projections.

Table 2.3 – Projected Households Based on Cohort Component Linear Projections by Municipality

Municipality	Area Square Miles	2000		2010		2020		2030	
		Population (Census)	Total Households	Total Population 2010	Projected Number of Households	Total Population 2020	Projected Number of Households	Total Population 2030	Projected Number of Households
Brecknock Township	24.8	6,699	2,115	7,588	2,424	8,487	2,746	9,342	3,061
Caernarvon Township	23.1	4,278	1,269	4,742	1,424	5,215	1,586	5,661	1,744
Earl Township	22.2	6,183	2,019	6,583	2,179	6,967	2,335	7,298	2,478
East Earl Township	24.7	5,723	1,738	5,960	1,834	6,181	1,925	6,360	2,006
New Holland Borough	1.9	5,092	2,084	5,368	2,220	5,629	2,358	5,849	2,481
Terre Hill Borough	.46	1,237	440	1,252	451	1,266	462	1,273	471
ELANCO Totals	97.3	29,212	9,665	31,493	10,532	33,745	11,413	35,783	12,240
Lancaster County Totals	983.3	470,658	172,560	509,720	189,540	548,979	206,669	585,489	223,072

Source: Lancaster County Planning Commission; population projections are an average of linear projections; assumes household size for the decades between 2000-2030 will change at the same rate estimated for the period 2000-2010.

Recent Population Growth

Tables 2.4 and 2.5 illustrate the latest residential development trends, as represented by building permits issued and compared with the 2010 household forecasts. These tables are useful for analyzing recent development and comparing projected 2010 household growth with development that has already occurred. Of the four townships, Earl and East Earl Townships issued the greatest number of residential building permits between 2000 and 2007, followed by Brecknock and Caernarvon Townships. Comparing proposed residential units with the 2010 household forecast (Table 2.5), the data shows that housing growth in each municipality will either meet or exceed the 2010 household forecast by the year 2008.

Table 2.4 – Residential Building Permits Issued, 2000-2007

	2000 Households	2000	2001	2002	2003	2004	2005	2006	Total	Est. 2006 Households
Brecknock Township	2,115	35	25	18	22	32	31	17	180	2,295
Caernarvon Township	1,269	27	24	44	1	15	8	4	123	1,392
Earl Township	2,019	81	60	66	58	63	NA	NA	328	2,347
East Earl Township	1,738	29	41	34	34	46	44	69	297	2,035
Terre Hill Borough	440	-	-	4	1	2	1	1	9	449
Total	7,581	172	150	166	116	158	84	91	937	8,518

Source: Lancaster County Housing Element, US Census 2006 Estimated Data

Table 2.5 – Proposed Residential Units Compared with 2010 Household Forecast

Municipality	Proposed Residential Units 2005-2006	Building Permits Issued 2000-2006	Estimated New Units by 2007-2008	Estimated Total Units by 2007-2008	2010 Household Forecast
Brecknock Township	193	180	373	2,488	2,424
Caernarvon Township	14	123	137	1,406	1,424
Earl Township	459	328	787	2,806	2,179
East Earl Township	428	297	725	2,463	1,834
Terre Hill Borough	44	9	53	493	451
Total	1,138	937	2,075	9,656	8,207

Source: Lancaster County Planning Commission

Employment

A diverse business and employment base exists in the ELANCO region. Strengths include a strong mix of agriculture and industrial land uses, and business and industrial employment centers in New Holland Borough and Earl Township. Challenges include supporting “Main Street” businesses in New Holland and attracting new employment and commercial centers that do not negatively impact regional traffic patterns and the rural landscape.

Large business and industrial employers in Lancaster County include (in order of top employers in 2003):

- Lancaster General Hospital
- R.R. Donnelley & Sons Co.
- Mutual Assistance Group
- Armstrong World Industries, Inc
- Lancaster County Government
- Auction Services in Manheim
- Ephrata Community Hospital

Within ELANCO, major employers include Tyson Poultry (14th in County) and Conestoga Wood Specialists (30th in County).

ELANCO regional employment figures for the year 2000 are provided in Table 2.6. Table 2.7 presents LCPC projections for the year 2030.

Table 2.6 – Employment by Industry, 2000

Location	Area (Square Miles)	2000 Industrial Employment	2000 Service Employment	2000 Commercial Employment	2000 Total Employment
Brecknock Township	24.84	352	345	322	1,019
Caernarvon Township	23.14	173	229	97	499
Earl Township	22.20	1,152	565	948	2,665
East Earl Township	24.70	1,364	1,155	1,096	3,615
Terre Hill Borough	0.46	54	65	49	168
ELANCO Totals	95.34	3,095	2,359	2,512	7,966
County Totals	983.29	71,559	77,791	65,853	215,203

Source: Lancaster County Planning Commission

Table 2.7 – Projected Employment Change, 2000-2030

	2030 Ind. Employment	Indust. Emp. Change	2030 Service Employment	2030 Comm. Employment	Serv/Comm Emp. Change	2030 Total Employment	Total % Change
Brecknock Township	395	43	601	401	959	1,398	37%
Caernarvon Township	275	102	398	121	417	794	59%
Earl Township	1,301	149	2,717	1,578	4,146	5,596	110%
East Earl Township	1,620	256	2,914	1,571	4,229	6,104	69%
Terre Hill Borough	61	7	197	80	270	338	101%
ELANCO Totals	3,652	557	6,827	3,751	10,021	14,230	79%
County Totals	82,839	11,280	180,319	91,870	128,545	355,029	65%

Source: Lancaster County Planning Commission

2.2 Future Growth Analysis

This section examines future development in the ELANCO region if the year 2030 population, housing unit, and employment projections developed by the LCPC come to fruition. It is presented in terms of the acreage needed (land demand) inside and outside Urban Growth Areas (UGAs) to accommodate projected new housing units and commercial and industrial employment in the region by 2030.

The future growth analysis also examines the capacity for future residential and industrial/commercial development at full buildout (i.e., if all available buildable land in the region were to be completely developed as allowed by the current zoning). It is not intended to represent proposed or planned development, but rather to quantify how much land would be consumed if all zoned land were to be developed in a hypothetical “what if” scenario. The buildout analysis assumes that new development can take place only on available buildable land, which is defined as agricultural, vacant, or very low density (lots of five acres or more) residential development that is unconstrained by natural features (steep slopes, wetlands, floodplains) and is zoned for residential, industrial or commercial development. Permanently protected land (agricultural and other easements, parkland, schools, etc.) is excluded from the analysis.

Tables 2.8 through 2.13 on the following pages illustrate the data calculations and assumptions used for this analysis.

Table 2.8 presents the analysis conducted to determine the amount of land that would be required to accommodate projected housing units by 2030, both inside and outside UGAs, for each municipality in the ELANCO region. The first column provides the number of additional housing units projected for 2030 as per LCPC housing projections. The second and third columns include a calculation of the average residential densities allowed by zoning both inside and outside UGAs for each municipality. The average density is then divided into the projected number of housing units to determine the amount of land required to accommodate the projected units both inside and outside UGAs, represented in the third and fourth columns. The assumption for how much land is consumed inside and outside UGAs is built on the goal, as established in the Lancaster County Growth Management Element, that 85% of new housing units should be developed inside UGAs and 15% in rural areas. Because Brecknock and Caernarvon Townships do not presently have designated growth areas, all dwelling units and land consumed are shown as occurring outside UGAs. It should be noted that Brecknock Township is considering (and this plan recommends) adoption of Village Growth Areas for Bowmansville and Fivepointville.



Table 2.9 presents a similar analysis for future commercial and industrial development, based on employment projections developed by LCPC for 2030. Columns one and two identify the number of additional industrial and commercial employees projected for 2030. The third and fourth columns calculate the amount of land that would be consumed to accommodate the new employment, assuming a standard of 10 industrial employees per acre and 22 commercial employees per acre. The final column provides the total amount of acreage needed to accommodate both industrial and commercial development.

Table 2.10 presents the zoning capacity at full buildout for residential development. The first two columns

include a calculation of the average residential densities allowed by zoning both inside and outside UGAs for each municipality. The third and fourth columns indicate the number of housing units that can be accommodated on residentially zoned buildable land (or agricultural/conse-
 vation zoned land that permits residential development) inside and outside UGAs. The final two columns represent the amount of acreage that would be consumed inside and outside UGAs at full residential buildout.

Table 2.11 presents a similar zoning capacity analysis for commercial and industrial development at full buildout. The first two columns include the capacity, in square feet, of available buildable industrially or commercially zoned land inside and outside UGAs. The capacity is calculated by multiplying the square footage of each property by the maximum percentage of impervious surface allowed by each zoning district. The third column includes the total capacity for industrial and commercial development in acres.

Table 2.12 examines the capacity for residential development in all existing and proposed Designated Growth Areas (DGAs – include Urban and Village Growth Areas) for the region as a whole compared with 2030 projections for new housing units. This table includes calculations for the existing Goodville Village Growth Area in East Earl Township and the proposed Bowmansville and Five-pointville Village Growth Areas in Brecknock Township, whereas previous tables were based on existing UGAs

only. The first row indicates the total amount of available buildable land that is residentially zoned (including agricultural / conservation zoning that allows for residential development) in the region. The second row shows the number of units that could be accommodated based on the average densities in each municipality's DGA(s). The average allowable density for the region is calculated by adding the number of units that could be accommodated by zoning based on each municipality's average density inside DGAs. An average density was not calculated for the region. The third row indicates the total number of projected units for the region based on 2030 LCPC housing unit projections. The last row calculates the difference between capacity (row 2) and projected units (row 3). As indicated in the last row, the region's DGAs have capacity under existing zoning to absorb 3,806 more units than the 2030 LCPC projections.

Table 2.13 looks at the capacity for industrial / commercial development in existing and proposed DGAs for the region as a whole compared with 2030 projections for employment. The first row indicates the total amount of available buildable land that is zoned industrial or commercial in the region. The second row shows the total acreage of development that could be accommodated based on maximum impervious coverage in each municipality's zoning districts. The third row indicates the total acres of land needed to accommodate LCPC 2030 employment projections (from Table 2). The last row shows

the difference between capacity (row 2) and projected 2030 land demand (row 3). As indicated in the final column, there does not appear to be enough capacity in the region's DGAs to accommodate projected industrial and commercial employment. However, there are areas with capacity located outside of the existing DGAs. For example, there is likely additional capacity in Brecknock Township, where an industrial area is proposed, and at the Conestoga Wood Specialties site in East Earl Township.

Growth Analysis Summary

The future growth analysis indicates that the region as a whole has capacity for new residential development inside existing and proposed DGAs to accommodate projected growth through 2030 and beyond. In addition, there seems to be sufficient capacity for new commercial and industrial development in the region to accommodate projected employment. The Future Land Use Plan (Chapter 5) is designed to achieve the appropriate balance and distribution of residential and commercial / industrial development to accommodate future growth while protecting valued resources.

Table 2.8 – Projected Residential Growth and Land Consumption

Municipality	2030 Projected Additional Dwelling Units	85% of 2030 Additional Dwelling Units	15% of 2030 Additional Dwelling Units	Average Allowable Density Inside UGA	Average Allowable Density Outside UGA	Acres of Land Consumed Inside UGA (85% of new units)	Acres of Land Consumed Outside UGA (15% of new units)
Brecknock Township	946	804	142	NA	1.65	NA	575
Caernarvon Township	475	403	71	NA	.71	NA	669
Earl Township	459	390	69	4.06	1.26	96	55
East Earl Township	268	228	40	7.59	.82	30	49
Terre Hill Borough	31	26	5	5.15	NA	5	NA
ELANCO Totals	2,178					131	1,348

Source: Lancaster County Planning Commission

Notes:

1. 2030 additional dwelling units based on county housing growth projections through 2030.
2. Targeted dwelling units based on county target of 85% of total dwelling units inside and 15% outside Urban Growth Areas.
3. Average allowable densities based on existing zoning.
4. Density for ELANCO total is the median of the municipal averages.
5. Brecknock and Caernarvon Townships do not have UGAs, therefore density inside UGA is noted as NA and all development occurs outside UGA.

Table 2.9 – Projected Industrial / Commercial Growth and Land Consumption

Municipality	2030 Additional Industrial Employment	2030 Additional Service Commercial Employment	Industrial Land Area Required at 10 Employees/ Acre	Service / Commercial Land Area Required at 22 Employees/ Acre	Total Commercial / Industrial Land Area Required (acres)
Brecknock Township	43	335	4	15	20
Caernarvon Township	102	193	10	9	19
Earl Township	149	2,782	15	126	141
East Earl Township	256	2,234	26	102	127
Terre Hill Borough	7	163	1	7	8
ELANCO Totals	557	5,707	56	259	315

Source: Lancaster County Planning Commission

Notes:

1. 2030 industrial and service commercial based on county employment growth projections through 2030.
2. Numbers may not add up due to rounding.

Table 2.10 – Zoning Residential Capacity at Full Buildout

Municipality	1. Average Density Inside UGA	2. Average Density Outside UGA	3. Capacity for New Units Inside UGA	4. Capacity for New Units Outside UGA	5. Acres Consumed Inside UGA	6. Acres Consumed Outside UGA
Brecknock Township	NA	1.65	NA	2,105	NA	1,279
Caernarvon Township	NA	.71	NA	1,742	NA	2,456
Earl Township	4.06	1.26	1,376	506	339	403
East Earl Township	7.59	.82	1,707	819	225	994
Terre Hill Borough	5.15	NA	270	NA	52	NA
ELANCO Totals			3,353	5,172	617	5,132

Source: Wallace Roberts & Todd, LLC

Notes:

1. Average density inside UGA is derived from averaging the densities permitted in all zoning districts located within Urban Growth Areas.
2. Average density outside UGA is derived from averaging the densities permitted in all zoning districts located outside of Urban Growth Areas.
3. Capacity for new units inside UGA is the number of housing units that could be accommodated at full buildout according to the average density permitted by zoning in Urban Growth Areas.
4. Capacity for new units outside UGA is the number of housing units that could be accommodated at full buildout according to the average density permitted by zoning outside Urban Growth Areas.
5. Acres consumed inside UGA is the acreage that would be consumed by residential development at full buildout according to the average density permitted by zoning.
6. Acres consumed outside UGA is the acreage that would be consumed by residential development at full buildout according to the average density permitted by zoning.

Table 2.11 – Zoning Capacity at Full Buildout – Commercial / Industrial

Municipality	Capacity for New Industrial / Commercial Development Inside UGA (sq. ft)	Capacity for New Industrial / Commercial Development Outside UGA (sq.ft.)	Total Capacity for New Industrial / Commercial Development (acres)
Brecknock Township	0	879,412	20.2
Caernarvon Township	0	268,794	6.2
Earl Township	5,312,958	0	122
East Earl Township	2,384,633	2,007,976	100.8
Terre Hill Borough	88,398	0	2
ELANCO Totals	7,785,989	3,156,181	251

Source: Wallace Roberts & Todd, LLC

Note:

1. Capacity for industrial and commercial development inside UGAs is derived from multiplying the square footage of each industrially or commercially zoned property by the maximum impervious coverage allowed by the zoning district.

Table 2.12 – Regional Designated Growth Area Residential Capacity Analysis

Residentially Zoned Acres in ELANCO DGAs	1,322
DGA Zoning Capacity for Housing Units at Average Allowable Densities	5,987
LCPC 2030 Housing Projections – Additional Units Needed by 2030	2,178
DGA Surplus Capacity compared to LCPC 2030 Housing Projections	3,806

Source: Wallace Roberts & Todd, LLC

Notes:

1. This table includes all existing and proposed DGAs in the region, including the existing Goodville Village Growth Area in East Earl Township and the proposed Bowmansville and Fivepointville Village Growth Areas in Brecknock Township.
2. Average allowable density for the region is calculated by adding the number of units that could be accommodated by zoning based on each municipality's average density inside DGA's. An average density was not calculated for the region.

Table 2.13 - Regional Designated Growth Area Industrial/Commercial Capacity Analysis

Industrial / Commercial Zoned Acres in ELANCO DGAs	265
DGA Zoning Capacity for Industrial / Commercial Development in Acres	188
LCPC 2030 Employment Projections – Land Demand Needed by 2030 in Acres	315
ELANCO Industrial / Commercial Land Deficit (Acres) for 2030	-127

Source: Wallace Roberts & Todd, LLC

Notes:

1. This table includes all existing and proposed DGAs in the region, including the existing Goodville Village Growth Area in East Earl Township and the proposed Bowmansville and Fivepointville Village Growth Areas in Brecknock Township.
2. Capacity for the region is calculated by adding the acreage of development that could be accommodated by zoning based on each zoning district's maximum impervious coverage inside DGAs. An average maximum coverage was not calculated for the region.
3. While this table shows an Industrial/Commercial Land Deficit, there are areas, such as Conestoga Wood Specialities, with capacity outside of the DGAs.

3. Vision, Goals, and Initiatives

The Vision Statement, Goals, and Initiatives introduced in this chapter were developed in working sessions with the ELANCO Steering Committee. In developing them, the Steering Committee solicited input from public and stakeholders within the region, including the farming and Plain Sect communities, New Holland Borough, social organizations, business and development interests, neighborhood leaders, and fire and safety organizations. The Vision Statement and related goals and initiatives were formulated with existing conditions, population, and land use trends as a reference point. The goals and initiatives outlined in this chapter are addressed in further detail in the elements that follow and in the final section of the Plan - Implementation.

3.1 Vision Statement

In the Vision of the ELANCO Region in 2030, ELANCO is a **distinctive and prosperous agricultural community**. This future derives from three fundamental attributes:

- Rural and small town character
- Unique agricultural economy
- Cultural heritage and way of life

In this vision of the future, quality of life is defined by the following valued community characteristics:

Rural and Small Town Character

- Valued open spaces, natural resources and rural landscapes are protected and preserved throughout the region.
- Historic rural towns, such as Bowmansville, Fivepointville, Churchtown, Hinkletown, Goodville, and Martindale, are preserved and revitalized. The commercial areas serving them continue to attract investment.
- The transportation system in the region is efficient and safe, with a well-connected road network, capacity for future traffic, and accommodation of all modes of travel.



- Growth is accommodated in the region through policies and regulations that direct development to areas where the infrastructure (water, sewer, transportation) can best support it.
- New and existing neighborhoods offer a range of lifestyle and housing choices.
- New development is designed to respect the historic and rural character of the region and provide citizens with convenient access to services and facilities.

Unique Agricultural Economy

- Productive farmland and land with prime agricultural soils is **preserved and protected**.
- **Agricultural productivity** continues to be among the highest in the world.
- The **agricultural economy** is sustainable and adaptable to changing markets.
- Agricultural practices are **environmentally sensitive**, using practices that protect air, soil, and water resources.
- **Development and tourism** are accommodated without threatening the unique agricultural landscape or economy.

Cultural Heritage and Way of Life

- **Cultural and historic resources** in the region are identified and protected.
- **Scenic landscapes** are identified and preserved along regional highway corridors.
- The **diversity of cultures** is respected, accommodated, and celebrated throughout the region.
- **Development and tourism** are accommodated without impacting the cultural diversity of the region.

3.2 Key Initiatives, Goals, and Actions

Three key initiatives are proposed to focus the ELANCO region's efforts to achieve the Vision Statement:

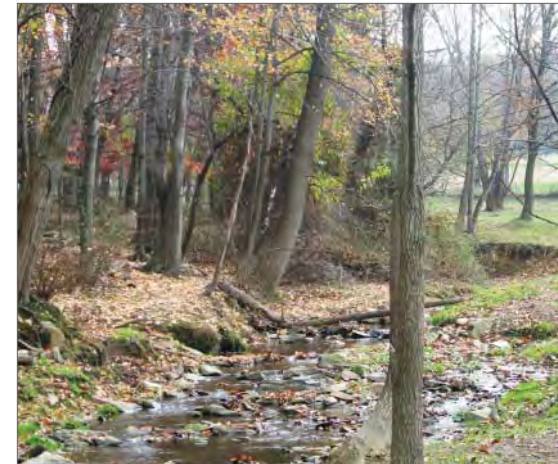
- **Preserving the Rural Landscape**
- **Strongly Controlling Growth**
- **Working Together**

Goals and examples of Comprehensive Plan actions in support of these initiatives are presented below.

Initiative: Preserving the Rural Landscape

Goals

- Protect valuable agricultural, natural, and historic resources.
- Preserve prime agricultural soils.
- Sustain the agricultural economy and allow it to adapt.
- Promote environmentally sensitive agricultural practices.
- Preserve scenic landscapes along the region's roadways.
- Accommodate development and tourism without threatening the rural landscape or culture.
- Design new development to respect the character of the region and provide convenient access to services.
- Revitalize the region's historic, rural towns.
- Respect the diversity of cultures in the region.



Actions

- Identify and prioritize agricultural and natural resources that should be targeted for preservation through actions such as transfer of development rights, purchase of development rights, and acquisition.
- Maintain and strengthen effective agricultural zoning and consider other regulating mechanisms (e.g., natural resource protection ordinances, conservation development) to protect rural resources.
- Coordinate with the LCPC and the Highlands Coalition to preserve the Welsh Mountain area.
- Prioritize historic resources, identify villages and communities for historic district designation, and create incentives for preservation or adaptive reuse.

- Nominate scenic roadways (Routes 23, 322, 625, 897) for the County Heritage Byways Program.
- Strengthen zoning in rural areas for development not related to rural agricultural activities.
- Enact regulations to support diverse farm production (e.g. farm based business ordinances, agri-tourism ordinances, etc.).

Initiative: Strongly Controlling Growth

Goals

- Protect the region's important open spaces, natural resources, and rural landscapes.
- Sustain the agricultural economy and allow it to adapt.
- Accommodate growth where infrastructure can best support it.
- Promote new development to include:
 - » Mixed uses and densities
 - » Preservation of natural and historic resources
 - » Convenient access to services
 - » Non-auto, transportation options
- Encourage commercial and industrial development in the region's Urban Growth Areas.

Actions

- Concentrate the majority of new development in Designated Urban and Village Growth Areas (DGAs), with limited rural development permitted in and near existing developed rural communities, to prevent sprawl development patterns.
- Apply design standards to promote new development that is compatible with the character of existing towns, villages, and crossroad communities.
- Focus major infrastructure improvements (roads, sewer, water, etc.) in DGAs to contain development.
- Where roadway improvements are planned outside DGAs, apply aggressive land preservation policies in the surrounding landscapes and at proposed access points.

Initiative: Working Together

Goals

- Promote cooperation among municipalities and the County to preserve the rural landscape, control growth, and create a strong regional economy.
- Encourage a regional approach in setting policy for future land use decisions, infrastructure improvements, resource protection, and provision of community facilities and services.
- Promote sustainable and efficient municipal spending and sharing of resources.



Actions

- Enter into an Intergovernmental Cooperative Planning and Implementation Agreement to establish processes for regional growth management.
- Adopt a future land use map for the region to establish agreement on future development in the region.
- Plan for and implement major infrastructure improvements on a regional basis. Include input from the County and municipalities that are adjacent to but outside the ELANCO region.
- Explore the possibility of sharing the provision of some community services (fire and police protection, parks, emergency services, etc.) for cost and service efficiency.

4. Agricultural, Natural, and Historic Resources

4.1 Overview

The ELANCO region's agricultural, natural and historic assets have played a major role in shaping human settlement. The rich limestone soils of the Mill Creek and Conestoga Valleys have attracted and supported generations of farmers, sustaining a diverse cultural setting that includes the Amish and Old Order Mennonite communities. In addition to farming, commercial opportunities related to the natural environment, including food processing, milling, and mineral extraction, have shaped the historic towns and villages throughout the region. The agricultural, natural, and historic assets of the region will also influence the intensity and pattern of its future land use. Understanding these assets and how they are part of an interrelated system is essential to creating a plan for the future that balances resource conservation with sustainable growth.

The Agricultural, Natural, and Historic Resources Element identifies the strengths and issues related to these resources, establishes goals for each resource, and provides action strategies to accomplish these goals.

4.2 Strengths and Issues

Agricultural Resources

Figure 4-1 (Agricultural Resources) illustrates the spatial distribution of the region's agricultural assets, including prime agricultural soils¹ and soils of statewide significance², farms that have been permanently preserved through easements, and Agricultural Security Areas.

Agricultural Security Areas

Under the PA Dept. of Agriculture's Agricultural Security Area Program, participating farmers are entitled to special consideration from local and state government agencies, and protection from "nuisance" challenges, thus encouraging the continuing use of the land for productive agricultural purposes. The process of establishing an Agricultural Security Area is initiated by petition of owners of productive farmland totaling at least 250 acres. Location with an Agricultural Security Area is a condition of eligibility for purchase of development rights.

The strengths and issues that have been identified for agricultural resources include the following:

Strengths:

- The ELANCO region has approximately 36,500 acres of agricultural land (60% of the region's land area). Nearly all of this farmland consists of prime farmland soils and about 22% (8,000 acres) consists of farmland of statewide significance.
- Of the region's agricultural land, about 48% (17,600 acres) is held in Agricultural Security Areas.
- All townships in the region have adopted effective agricultural zoning regulations.
- ELANCO's agricultural landscapes provide breathtaking scenic vistas for residents and visitors and are considered one of the primary assets in the region.
- Agricultural production contributes significantly to the economy and the overall character of the region.

1. Prime farmland soils are defined by the USDA as land best suited to food, feed, forage, fiber, and oilseed crops and produces the highest yields with minimal inputs of energy and economic resources.

2. Soils of statewide significance are predominantly used for agricultural purposes within a given state and are highly productive, but have some limitations that reduce their productivity or increase the amount of energy and economic resources necessary to obtain productivity levels similar to prime farmland soils



Issues:

- Development has occurred in agricultural areas, resulting in fragmentation of agricultural lands and impacts on farming operation and viability.
- Increasing growth pressure threatens the agricultural economy, as when new residential development and farm operations come into conflict.
- Some land zoned for agriculture allows suburban density (1-10 acre units) residential development.
- Of the approximately 36,500 acres of farmland in the region, only 5% (1,850 acres) are permanently preserved through agricultural easements.

Natural Resources

Figure 4-2 (Natural Resources) provides an inventory of key natural assets in the region, including steep slopes, woodlands, the Welsh Mountain area, and “Natural Gems” identified by the Lancaster County Conservancy. Natural water features are inventoried in Figure 4-3 (Hydrologic Resources) and include rivers and streams, floodplains, wetlands, hydric soils, major watersheds and sub-watersheds.

Natural Gems

The Lancaster County Conservancy is a nonprofit organization dedicated to preserving and protecting natural lands and open spaces in Lancaster County. In 2004 the Conservancy completed a study identifying “natural gems” that should be considered priorities for preservation because of their outstanding natural habitat value. Natural gems were identified based on GIS analysis of seven factors: surface water quality and quantity, land cover, geologic formations, presence of rare plants or animals, proximity to already preserved parcels, and special designations (national natural landmarks, scenic resources).

The only “natural gem” identified in the ELANCO region is the New Holland Reservoir Watershed. The Lancaster County Conservancy is currently working with the New Holland Authority to permanently preserve this valuable regional resource that is located in both East Earl and Salisbury Townships. Further, East Earl Township is considering revising its zoning ordinance to create a special zoning district that will limit development options available within this watershed.

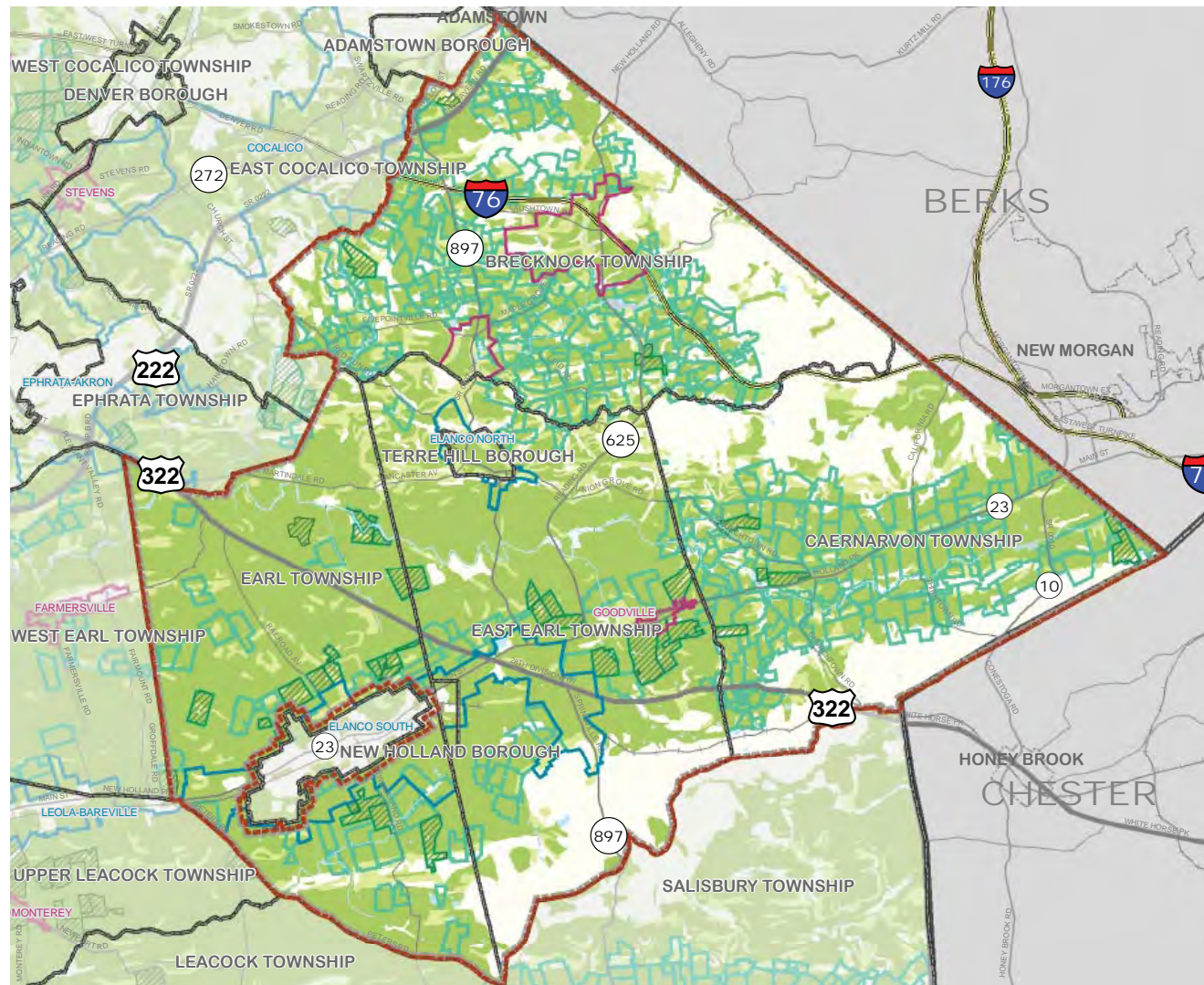
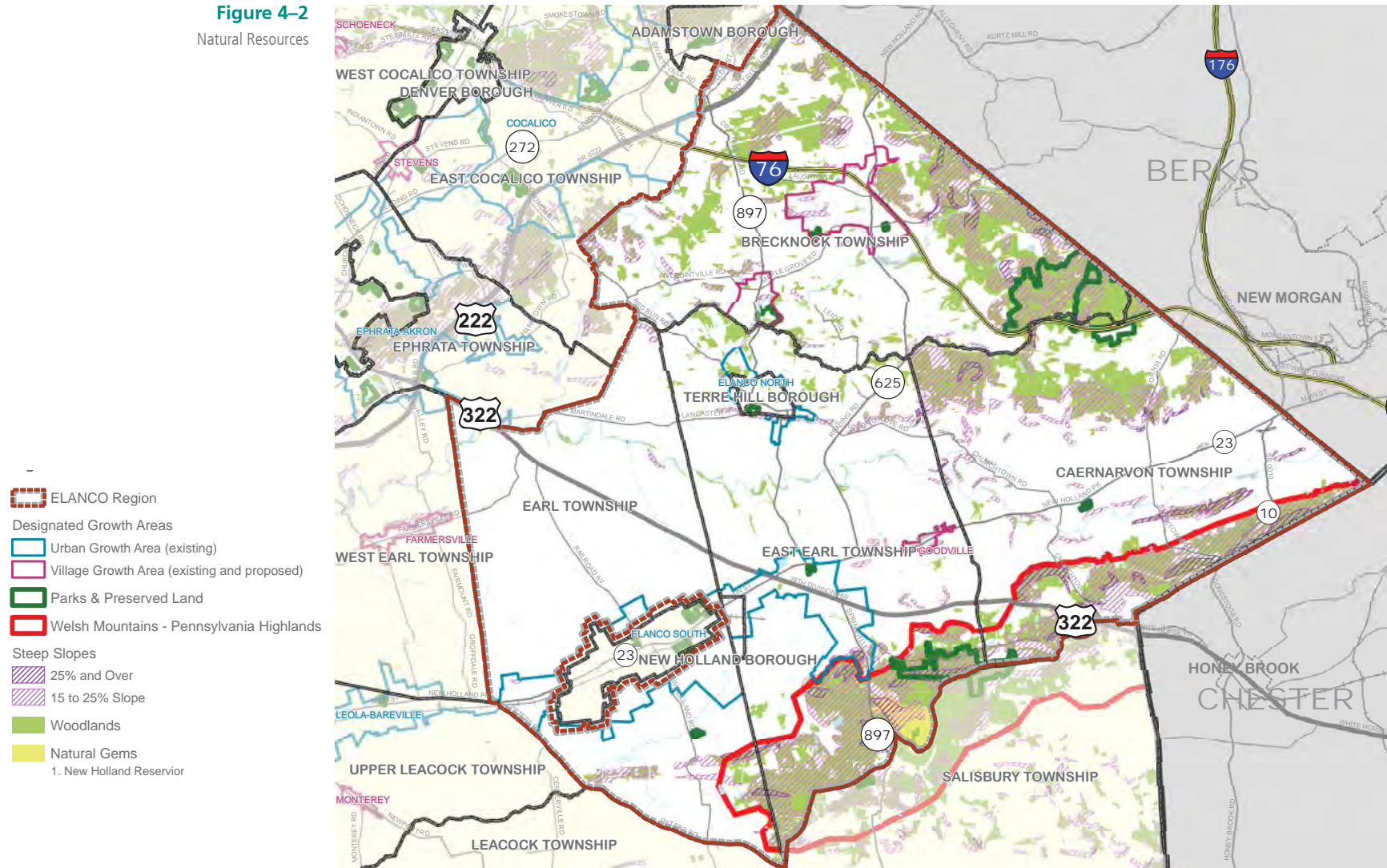


Figure 4-1

Agricultural Resources

- ELANCO Region
- Designated Growth Areas
 - Urban Growth Area (existing)
 - Village Growth Area (existing and proposed)
- Agricultural Easements
- Agricultural Security Areas
- Prime Agricultural Soil
- Soils of Statewide Importance

Figure 4-2
Natural Resources



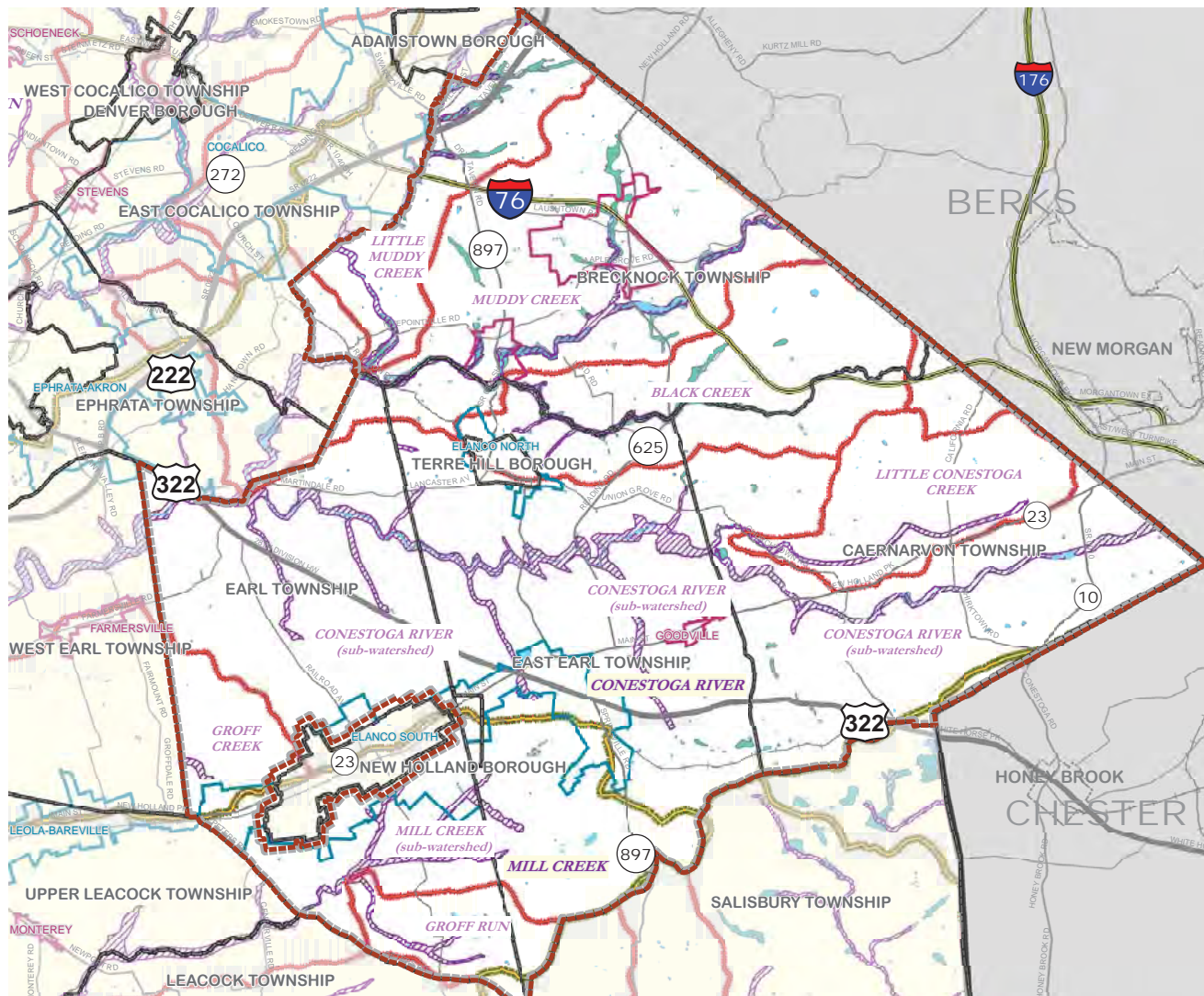


Figure 4-3

Hydrologic Resources

- ELANCO Region
- Designated Growth Areas
 - Urban Growth Area (existing)
 - Village Growth Area (existing and proposed)
- Rivers, Streams, Waterbodies
- Major Watersheds
- Sub-Watersheds
- 100 Year Floodplain
- Wetlands
- Hydric Soils

The strengths and issues that have been identified for these resources include the following:

Strengths:

- Natural landscapes contribute to the scenic quality of the ELANCO region for residents and visitors.
- Over 2,200 acres of parkland, game preserves, and other natural areas are permanently preserved in the region.
- Welsh Mountain has been identified as an area of high conservation value by the Highlands Coalition.³
- Brecknock, Caernarvon, and East Earl Townships have adopted conservation zoning districts to protect concentrations of woodlands and steep slopes in the region.
- The region's two major watersheds, Conestoga River and Mill Creek, provide water sources and drainage for an extensive system of sub-watersheds and scenic natural tributaries.

Issues:

- Development has occurred in natural resource areas, resulting in visual impacts on the landscape and resource fragmentation. Some of the region's conservation zoning districts allow residential development that can fragment forested areas.
- Most land on Welsh Mountain and other forested areas within the region is privately owned and unprotected. These areas are experiencing growth pressure from nearby high growth areas.
- Farm operations have negative impacts on stream and groundwater quality, including pollution from animal waste, fertilizers, and pesticides.
- The Conestoga and Mill Creek Watersheds and their tributaries have been identified as impaired by the Pennsylvania Department of Environmental Protection due to excess nutrients and sediments from agricultural practices. The Conestoga River and its tributaries contribute the highest nutrient loads of all the nontidal rivers in the Chesapeake Bay drainage area.⁴



3. Established in 1988, the Highlands Coalition seeks to protect and enhance the sustainability of natural and human communities in the Highlands region of Pennsylvania, New Jersey, New York, and Connecticut.

At a regional level, the Coalition works to secure federal and state funding for land protection and to foster regional approaches to growth management. At the local level, coalition members work with planning boards and community groups to understand the values of the Highlands and incorporate them into their decision making on land use and development projects. Welsh Mountain has been identified as part of the Pennsylvania Highlands Region.

4. "Watershed Restoration Action Strategy (WRAS), State Water Plan Subbasin 07J, Conestoga River", PA DEP, September, 2003.

Historic Resources

Figure 4-4 (Historic Resources) indicates recognized historic assets in the region, including properties listed on the National Register of Historic Places (National Register) and potential historic districts that have been identified as eligible for listing on the National Register by various studies. It should be noted that, given the region's rich history, additional valuable resources exist that have not been formally identified to date.

The strengths and issues that have been identified for these resources include the following:

Strengths:

- The ELANCO region has a rich and diverse cultural heritage, most notably because of the Plain Sect Communities, which maintain traditional values and a rural way of life. This heritage is central to the region's identity and an underpinning of Lancaster County's tourism industry.
- The ELANCO region contains a number of historic villages and towns, each with its own unique characteristics.
- The ELANCO Region has eleven properties listed on the National Register (See Figure 4-4).

- The Churchtown Historic District, Conestoga Rural Historic District, and the Mill Creek Rural Historic District have been determined to be eligible for National Register listing.
- Other historic districts in the region are under study for eligibility for inclusion in the National Register, including the New Holland Historic District.

Issues:

- The design and pattern of most new development is out of context with the rural and historic character of the region.
- Growth pressures, including those generated by potential Route PA 23 improvements, could impact the region's scenic landscape.
- Although there are several potential historic districts in the region, including two under study for the National Register, none have been adopted. Caernarvon Township does have a village zoning district for Churchtown that is intended to protect the historic character of the village.

4.3 Agricultural, Natural, and Historic Resource Goals

The goals for agricultural, natural and historic assets are presented below and provide general statements indicating the desired direction for the region over the next 25 years.

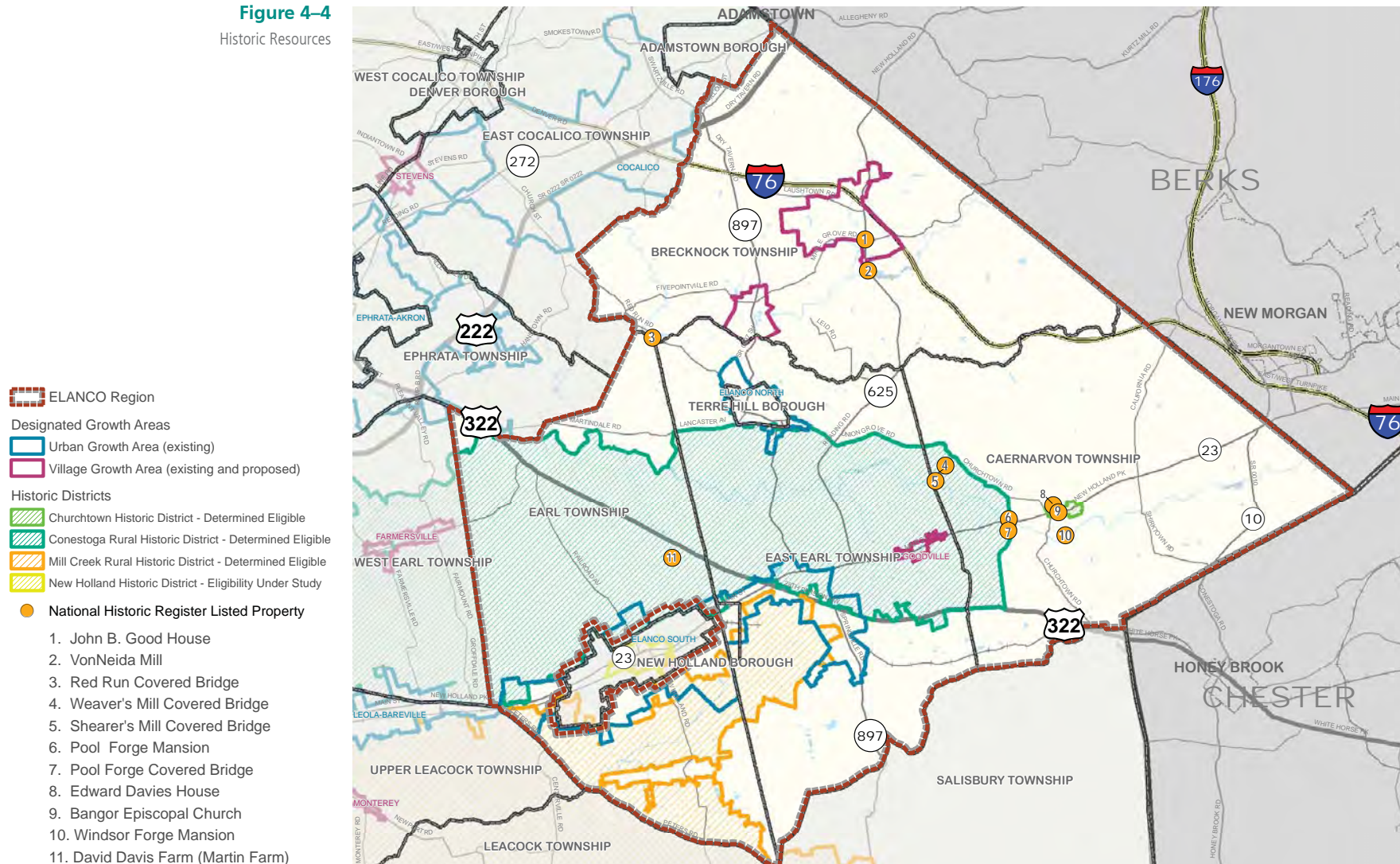
Agricultural Resource Goals

- Valued agricultural land and rural landscapes are protected throughout the region.
- Productive farmland and prime agricultural soils are preserved.
- The agricultural economy is sustainable and adaptable to changing markets.
- Development and tourism are accommodated without threatening the region's unique agricultural landscape and agricultural economy.

Natural Resource Goals

- Valued natural resources and landscapes are protected throughout the region.
- Scenic landscapes are identified and preserved along regional highway corridors.
- The quality of the region's water resources, including rivers, streams, and groundwater, is excellent.

Figure 4-4
Historic Resources



- Agricultural practices are environmentally sustainable, using practices that protect air, soil, and water resources.
- Development and tourism are accommodated without threatening natural features such as woodlands, wetlands, stream corridors, and steep slopes.

Historic Resource Goals

- Valued cultural and historic resources in the region are identified and protected.
- Historic rural towns, such as Bowmansville, Five-pointville, Churchtown, Hinkletown, Goodville, and Martindale, are preserved, and the commercial areas serving them revitalized.
- New development is designed to respect the historic and rural character of the region and provide citizens with convenient access to services and facilities.
- The diversity of cultures is respected, accommodated, and celebrated throughout the region.
- Development and tourism are accommodated without threatening historic resources and cultural traditions.

4.4 Agricultural, Natural, and Historic Resource Strategies

The following action strategies provide policy and regulatory direction for the municipalities in the region to pursue in order to implement the agricultural, natural, and historic resource goals.

Agricultural Resource Strategies

- Preserve land in agricultural resource areas shown on the Future Land Use Map through actions such as transfer of development rights, purchase of development rights, conservation easements, and acquisition.
- Maintain and strengthen effective agricultural zoning in agricultural resource areas.
- Strengthen the agricultural industry by allowing for diverse farm production. Tools to achieve this strategy may include farm based business ordinances, agri-tourism ordinances, and local right-to-farm ordinances.
- Enact conservation development options to allow development on smaller lots while maintaining large tracts of agricultural land, particularly at the edges of designated growth areas.

Natural Resource Strategies

- Preserve land in natural resource areas shown on the Future Land Use Map through actions such as transfer of development rights, purchase of development rights, conservation easements, and fee simple land acquisition.

Transfer of Development Rights (TDR)

A TDR ordinance allows property owners in designated sending areas (e.g., valuable agricultural or natural resource lands) to sell development rights to property owners in designated receiving areas (e.g., an Urban Growth Area). Owners purchasing the development rights are allowed to develop their properties at a higher density than would otherwise be permitted under the existing zoning. Warwick and West Hempfield Townships have had the most active TDR ordinances in Lancaster County to date. Since 1991, Warwick's program has successfully preserved nine farms totaling more than 790 acres through the transfer of development rights to a Campus Industrial Zone.



- Coordinate with the LCPC and the Highlands Coalition to protect the Welsh Mountain area. Maintain and strengthen effective conservation zoning in natural resource areas.
- Enact conservation development options to allow development on smaller lots while maintaining large tracts of open space.
- Adopt natural resource protection ordinances as overlays to existing zoning to protect specific natural resources from encroachment. Natural resources that can be protected by this type of ordinance include:
 - » Floodplain areas
 - » Riparian (river and stream) corridors
 - » Steep slopes
 - » Woodlands
 - » Groundwater recharge areas
 - » Wetlands
- Develop watershed management plans to restore and improve the water quality of the region's watersheds.
- Work with farmers to improve surface water quality through actions such as fencing of livestock and establishment of natural vegetation as buffers along streams.
- Encourage the formation of municipal or multi-municipal Environmental Advisory Councils.⁵
- Create a Green Infrastructure Plan, in coordination with the Lancaster County Green Infrastructure Plan, to focus on protecting and enhancing natural resources as part of a regional green infrastructure system. This may include planning for the following elements:
 - » Greenways and Open Space
 - » Parks and Recreation
 - » Regional Landscape Protection
 - » Green Features in Existing and
 - » New Developments
 - » Bicycle and Pedestrian Network
 - » Watershed Protection and Enhancement

Green Infrastructure

Green infrastructure has been defined as our “natural life support system.” The Lancaster County Planning Commission is preparing a Green Infrastructure Plan as an element of the County’s Comprehensive Plan. The plan envisions a network of natural areas, green spaces, and greenways in rural and urban parts of Lancaster County that provides essential environmental, community health, and economic benefits. Examples of these benefits include natural resource protection, energy conservation, improved water and air quality, recreation, increased property values, and reduced costs of engineered “gray infrastructure.”

5. Authorized by state statute, Environmental Advisory Councils are appointed groups of three to seven citizens that advise the local planning commission, park and recreation board, and elected officials on the protection, conservation, management, promotion, and use of natural resources within the jurisdiction.

Historic Resource Strategies

- Prioritize key historic and cultural resources for preservation actions such as historic district designation, National Register listing, and incentives for adaptive reuse of existing historic structures.
- Identify historically significant villages and communities for potential historic district designation. Develop historic district design standards to ensure preservation of historic character.
- Apply design standards in areas not designated as historic districts for new development that is compatible with the character of existing towns, villages, and rural landscapes.
- Identify and designate roads for the Lancaster County Heritage Byways Program to protect scenic landscapes along key highway corridors. These may include PA 23, US 322, PA 625, and PA 897.

Heritage Byways

In 2008 the LCPC is initiating a program to designate significant Lancaster County roads as "Lancaster County Heritage Byways." This program is intended to recognize and promote protection of roads that have "intrinsic qualities" (i.e., significant archaeological, cultural, historic, natural, recreational, and/or scenic resources). The program recognizes two types of byways. "Tourism Development Byways" combine resource preservation and conservation with heritage tourism marketing and promotion. "Preservation Byways" focus on resource preservation and conservation and will not be marketed to visitors. The six-step designation process includes preparation of a Corridor Management Plan specifying procedures, controls, operational practices, and administrative tools to protect and enhance the byway.

5. Land Use

5.1 Overview

The land use pattern in the ELANCO region has been evolving for centuries. Established in 1729 as Pennsylvania's fourth county, the first permanent European settlers of Lancaster County were Mennonites who arrived in the early 18th century. Prior to European settlement, eastern Lancaster County was settled by Native American tribes at various times spanning thousands of years. When William Penn arrived at the Susquehanna Valley areas in 1684, most of Lancaster County's inhabitants were members of the Conestoga tribe; previous tribes inhabiting the area included the Susquehannock, Iroquois, Conoys, and the Pequehans. Prime agricultural soils drew European settlers to the area even before it was established as Pennsylvania's first "western county" in 1729. Nearly twenty years earlier, a group of Swiss Mennonites settled just southeast of present-day Lancaster City, followed by French and Scottish immigrants. The migration of Europeans into the region continued with English and German groups, generally employed as farmers or skilled artisans, who settled along a horizontal band through central Lancaster County in the early 1700s. At the same time, Welsh ironworkers established settlements in areas which later become Caernarvon, Brecknock and Lampeter Townships.¹

For over 250 years, agriculture has been the predominant land use in the region. The rich limestone soils of the Mill Creek and Conestoga valleys have supported generations of farmers. Welsh Mountain is the region's most heavily wooded area and the present location of the New Holland Reservoir. From the early agricultural settlements and mill towns to today's diverse landscape of farmland, industry, villages, and suburban subdivisions and shopping centers, the land use pattern is constantly changing and adapting to external influences. Examples of these influences include changes to the transportation network, infrastructure improvements, access to employment centers, technological advances, and changing lifestyle preferences. While the cultural traditions and attachment to the land of the Plain Sect communities have served to counteract these influences in rural parts of the region, their effects are clearly evident in the region's growth areas, along roadway corridors such as PA 23 and US 322, and in scattered residential development in other parts of the region. Pennsylvania's Municipalities Planning Code limits the ability of local municipalities to control the total amount of growth and development. However, it does allow municipalities to control the pattern of new development (i.e., where it occurs) and the form that it takes (i.e., what it looks like).

In the 1990s, Lancaster County and its communities undertook a comprehensive growth management plan to protect the historic and agricultural landscape by developing new policies to manage land use patterns and control growth. In particular, the County and municipalities adopted Urban Growth Areas (UGAs) and Village Growth Areas (VGAs) as a way to direct growth to areas where infrastructure can support it. The 2006 Growth Management Element Update includes new Urban Growth Area and Rural Strategies intended as a framework for municipalities to manage development impacts at the regional and local levels. The Update introduces new concepts



1. "History of Lancaster County: Diversity of People, Ideas and Economy", John Ward Wilson Loose, L.C.H.S. President Emeritus, Lancaster County Historical Society, <http://www.lancasterhistory.org>

such as Designated Rural Areas, Rural Centers, and Rural Business Areas, which are described later in this chapter. The Update also increases the target for the percentage of total development occurring in UGAs from the previous target of 80% set by LCPC to 85%.

The ELANCO Land Use Element is intended to be consistent with the Growth Management Element Update, including application of Urban Growth Area and Rural Strategies at the regional level. The ELANCO region, however, has unique land use and growth patterns and transportation and infrastructure issues that require that the countywide framework be tailored to the region. Rural Resource Areas (Agricultural and Conservation) and several types of Rural Centers are designated in this Land Use Element which reflects the unique vision for the region.

The Land Use Element describes the strengths and issues related to land use patterns in the region, establishes a set of land use goals, provides a Future Land Use Map to illustrate the goals and vision for the region, and identifies action strategies to implement the future land use vision.

5.2 Strengths and Issues

Figure 5-1 (Existing Land Use) illustrates land use in the ELANCO region. Basic land use categories include residential, commercial, institutional, agricultural, and industrial. More specific classifications, such as cemetery and golf course, are also included in the existing land use analysis. Table 5.1 summarizes the total acreage for each land use classification. Zoning categories for each municipality have been grouped and generalized to create Figure 5-2 (Existing Zoning) using the zoning lexicon developed by LCPC. Each zoning lexicon category combines multiple districts in the municipalities.

A comparison between existing land use and zoning reveals that while the majority of the region is zoned for agriculture, non-agricultural land uses (e.g., single-family residential, commercial, and industrial uses) are scattered throughout the region in agriculture zones. While the majority of recent development has occurred in and around existing designated growth areas, scattered development outside of those areas has also occurred. Figure 5-3 illustrates recent development activity based on LCPC growth tracking data for 1994-2002 (the latest information available) and analysis of subdivision applications in 2005 and 2006.

Table 5.1 – Existing Land Use in the ELANCO Region

Land Use Category	Acres	Percentage of Total Land Use
Agriculture	35,368.1	60%
Cemetery	18.8	0%
Commercial	2,445.1	4%
Forestry	4,744.2	8%
Golf Course	110.8	0%
Industrial	1,573.4	3%
Institutional Private	570.8	1%
Institutional Public	437.4	1%
Residential	7,256.8	12%
Recreation	1,593.9	3%
Transportation-Utility	616.4	1%
Vacant	4,514.6	8%



In Earl, East Earl and Caernarvon Townships, areas zoned for agriculture contain light industrial, residential, and commercial uses, in addition to agriculture. Rural residential zoning districts (less than 1 dwelling unit per acre) are concentrated in the southern portion of the ELANCO region and in central Brecknock Township. In addition, nearly one-third of Caernarvon Township is zoned for rural residential land use. Forestry and related land uses comprise about 8% of the land use in the region, of which a large concentration is found in Brecknock Township. While a portion of Brecknock Township is zoned for open space, large-lot residential development is permitted in this zone and significant residential and commercial uses exist in addition to forestry and related activities.

The land use and growth patterns in ELANCO influence and are influenced by those of adjacent counties. The existing land use patterns in Berks County, which borders the ELANCO region on its northeast boundary, are generally open space and agriculture with scattered residential development, with the exception of more intense commercial development in Morgantown along the PA 23 Corridor. Land uses near the western Chester County line are generally agricultural with areas of woodlands existing along stream corridors. Both counties have smart growth/growth management type policies in place. In Berks County, the Morgantown area adjacent to Lancaster County is designated as a Future Growth Area, indicat-

ing growth trends adjacent to ELANCO along the PA 23 corridor will likely continue. A major planned community is proposed in New Morgan, within approximately one mile of the Caernarvon Township line. Chester County has designated the general areas east of Lancaster County as Rural and Natural Landscapes, the intent of which is to preserve rural character, agriculture, natural resources, wetlands, and steep slopes.

Key strengths and issues related to land use and zoning in the ELANCO region are listed below.

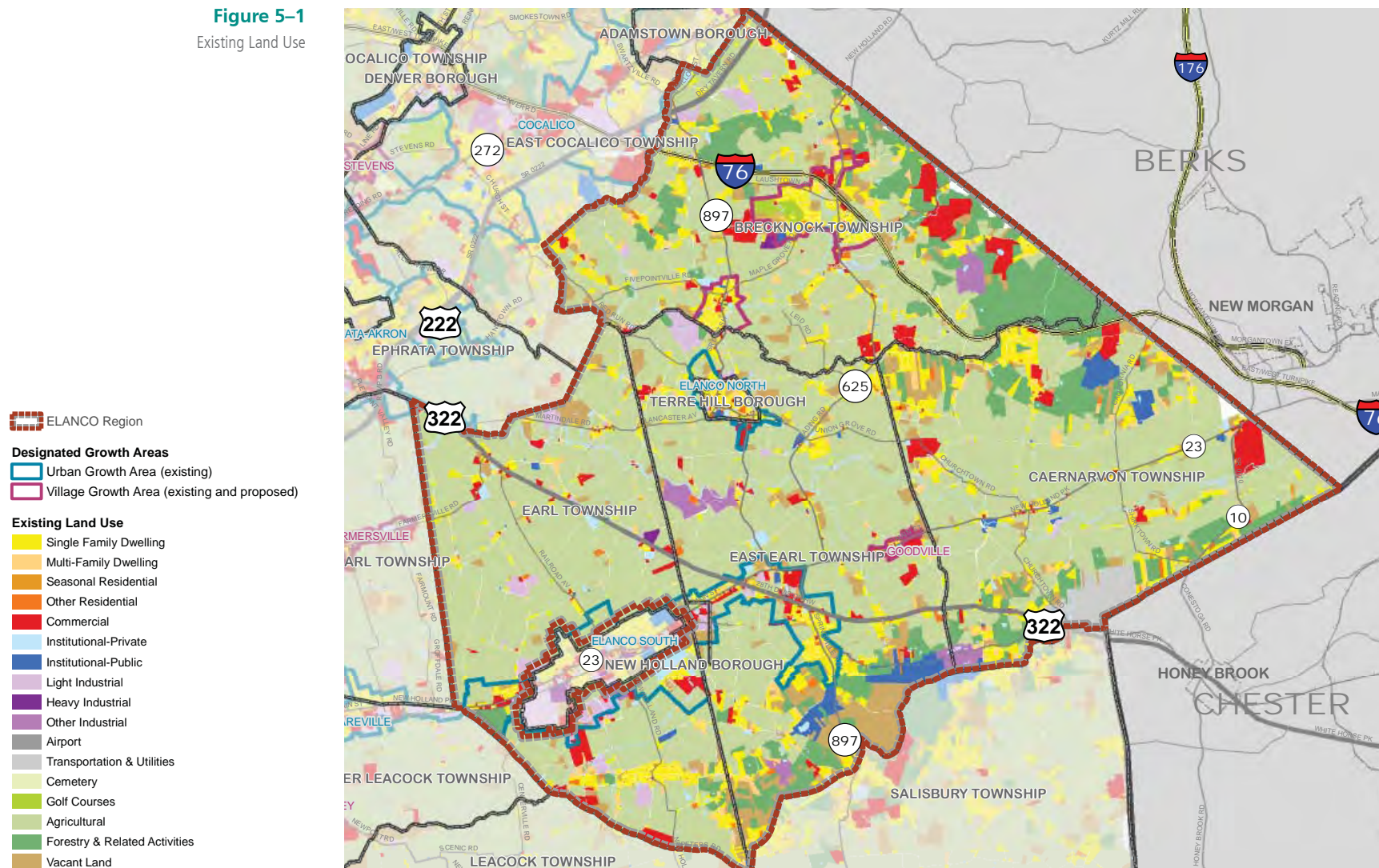
Strengths

- Agricultural land accounts for about 60% of the region's land use, contributing to the special landscape and character of the region.
- Most proposed and recent development has occurred in Designated Growth Areas (DGAs) or near existing development.
- According to buildable land capacity analysis, the region has more than enough buildable land in existing and proposed DGAs to accommodate new residential development over the next 25 years (see Chapter 2).

Issues

- Development activity generated by building permit and subdivision data indicate that recently constructed and currently planned housing units will exceed the County's projections for 2010.
- Most new development has occurred or is proposed in DGAs or near existing development. However, significant development has also occurred in agricultural and natural resource areas.
- The design and pattern of most new development is out of context with the rural and historic character of the region.
- Drivers of growth, including proposed transportation improvements, proposed sewer service expansion, and current zoning are not always consistent with DGAs.
- Development pressures from neighboring growth areas in Chester and Berks Counties, along with the proximity of the region to Pennsylvania Turnpike interchanges, have the potential to further impact the region's land use pattern without proper growth management controls in place.

Figure 5-1
Existing Land Use



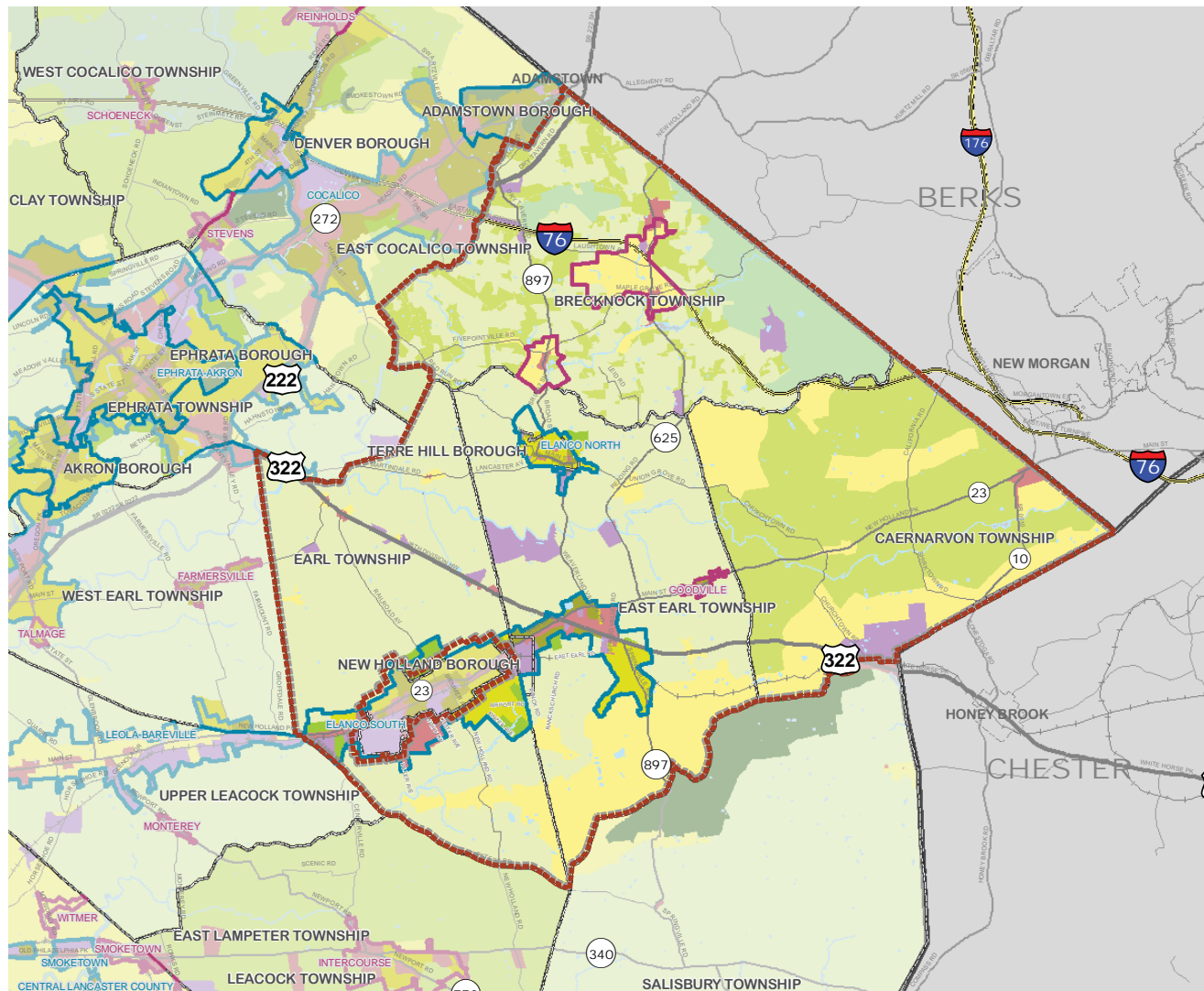
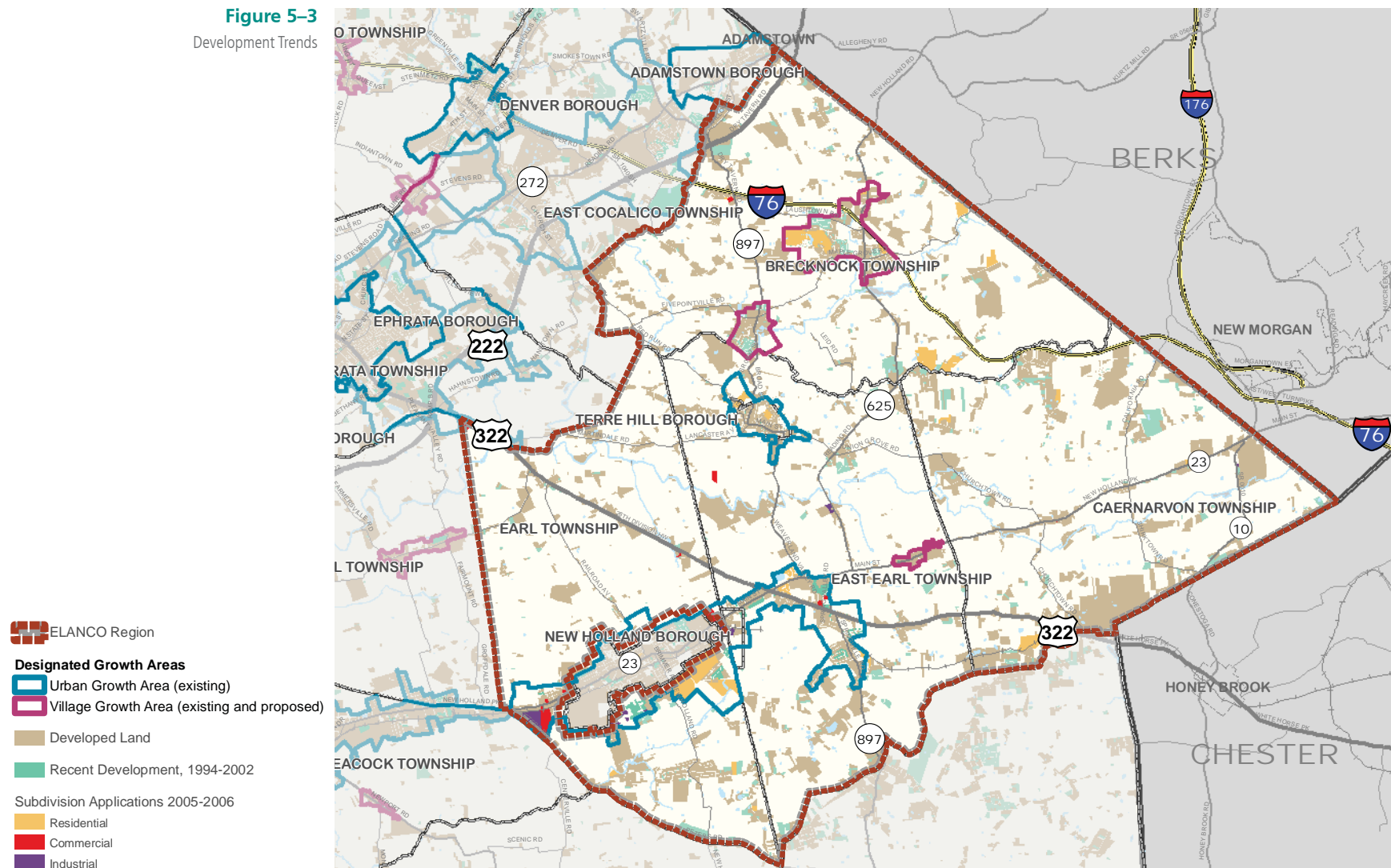


Figure 5-2

Existing Zoning

Figure 5-3
Development Trends



5.3 Land Use Goals

The goals for land use are presented below and provide general statements indicating the desired direction for the region over the next 25 years.

- Valued open spaces, natural resources, and rural landscapes are protected and preserved throughout the region.
- Productive farmland and land with prime agricultural soils is preserved and protected.
- The agricultural economy is sustainable and adaptable to changing markets.
- Growth is accommodated in the region through policies and regulations that direct development to areas where infrastructure (water, sewer, transportation) can best support it.
- New development incorporates mixed uses and densities, conserves natural, historic, and agricultural resources, provides citizens with convenient access to services and facilities, and encourages convenient alternatives to automobile use.
- Commercial and industrial development is encouraged to provide employment opportunities and a solid tax base for the region. Development is designed and strategically located in Urban Growth Areas to minimize impacts on regional traffic and the rural landscape.

5.4 Future Land Use

Figure 5-4 (Future Land Use) illustrates the generalized future land use plan for the ELANCO region, providing an overall physical framework for implementing the regional land use goals.

The Future Land Use Map incorporates the growth management framework concepts from the Growth Management Element Update, including Urban and Village Growth Areas and Designated Rural Areas, as well as generalized land use categories, which are described below.

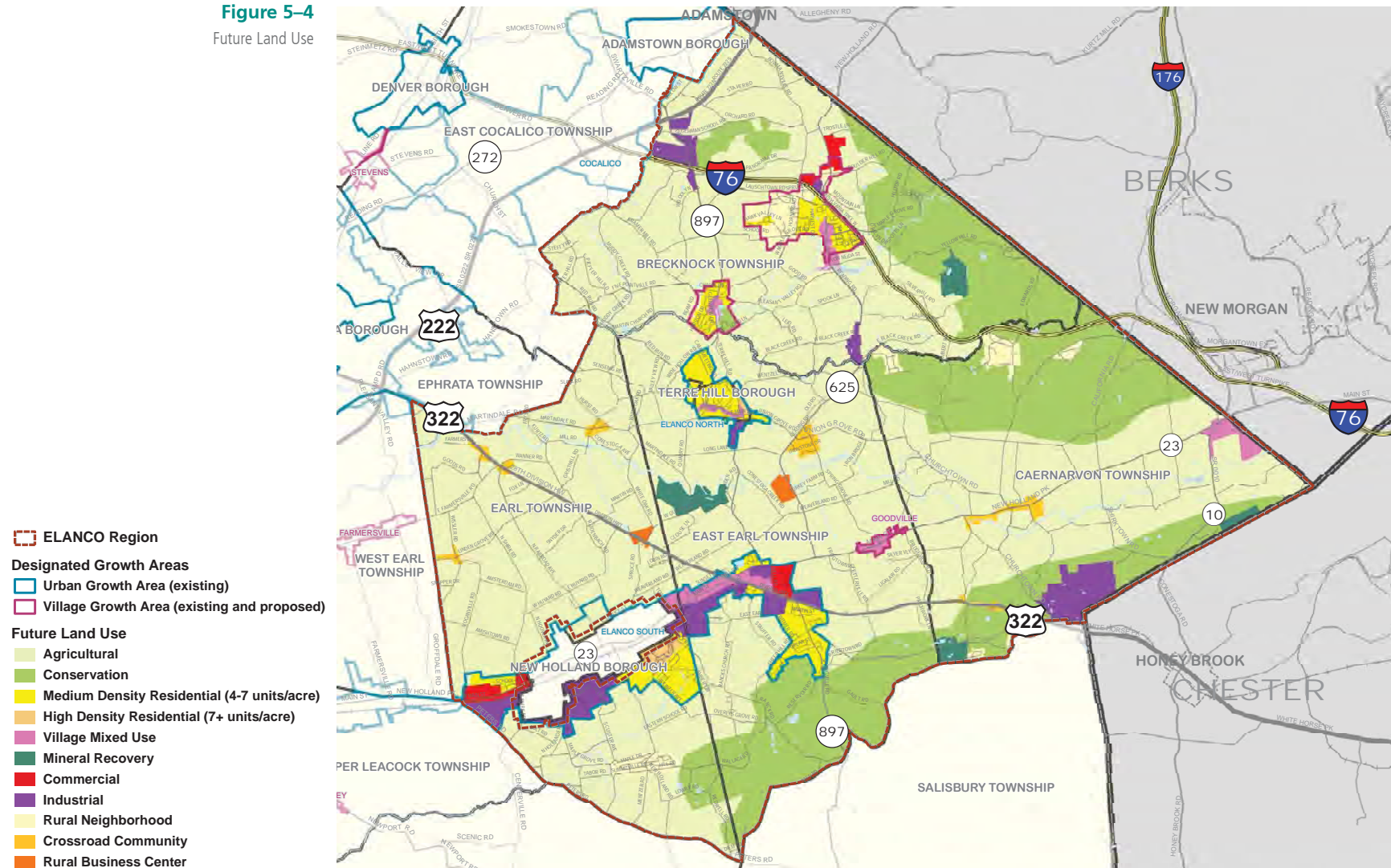
Urban Growth Areas

As indicated in Figure 5-4 (Future Land Use), there are two Urban Growth Areas (UGAs) in the ELANCO region: ELANCO North and ELANCO South. A UGA is an area that is designated as appropriate for future development and includes a city or borough as its center, developed portions of townships, and enough development capacity to meet future land use needs over a 25-year period without constraining the development market. Development in UGAs should be provided with a full range of public infrastructure and services, including both public sewer and public water service. In addition, development in UGAs should occur at densities and intensities high enough to maximize the use of land and infrastructure.

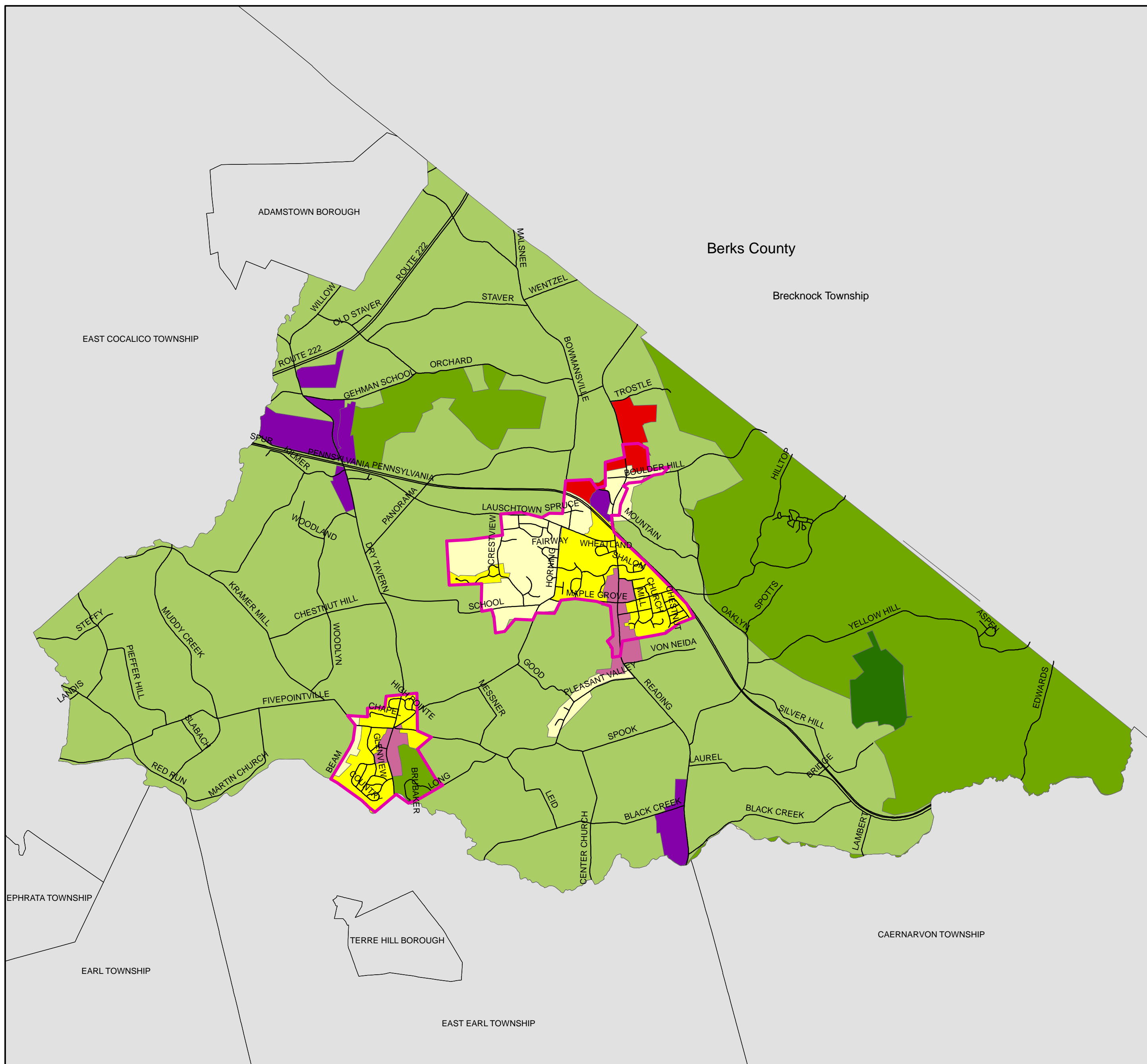
As indicated on Figure 5-4, UGAs consist of medium and high density residential, village mixed use, commercial and industrial uses as described under the Future Land Use Map – Land Use Categories that follow.




Figure 5-4
Future Land Use



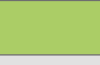





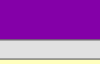

Brecknock Township Future Land Use Map



Brecknock Township

 Village Growth Area (Proposed)

Future Land Use

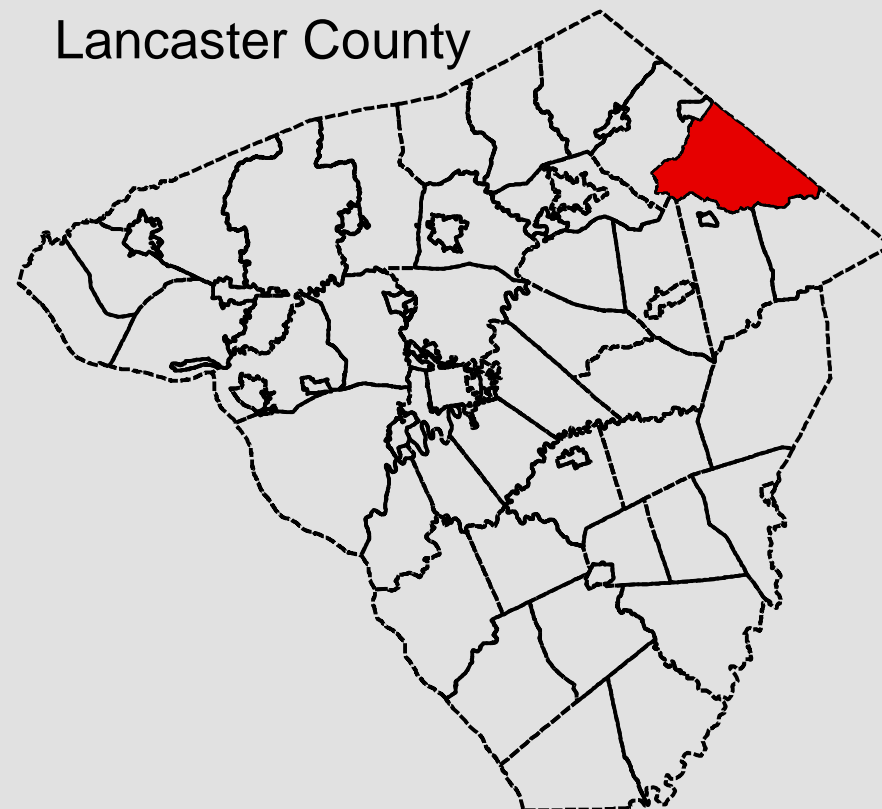
-  Agricultural
-  Conservation
-  Medium Density Residential
-  Village Mixed Use
-  Mineral Recovery
-  Commercial
-  Industrial
-  Rural Neighborhood



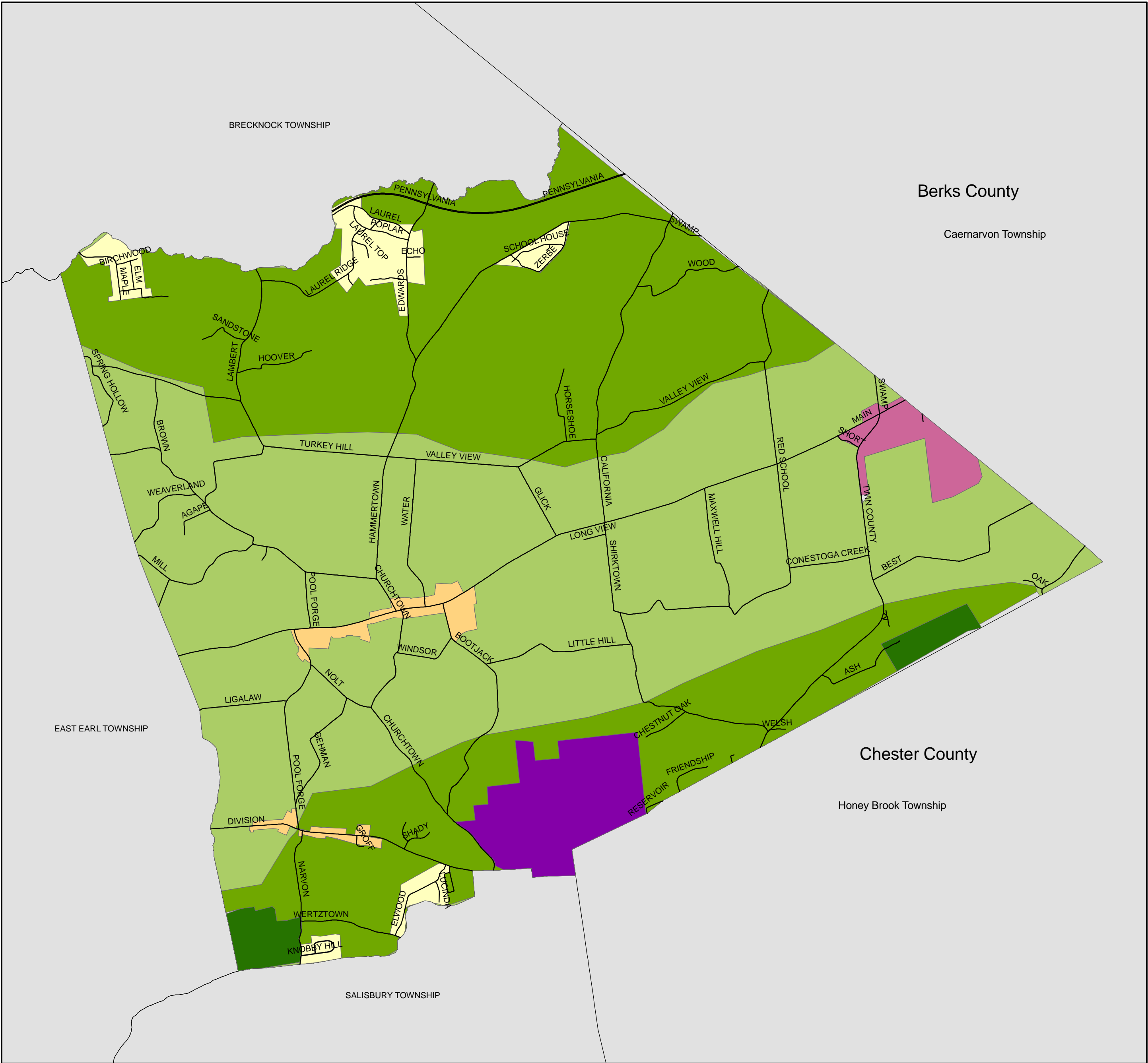
ELANCO Region Comprehensive Plan

June 2008

Lancaster County



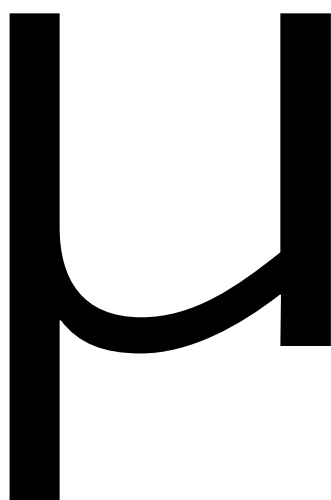
Caernarvon Township Future Land Use Map



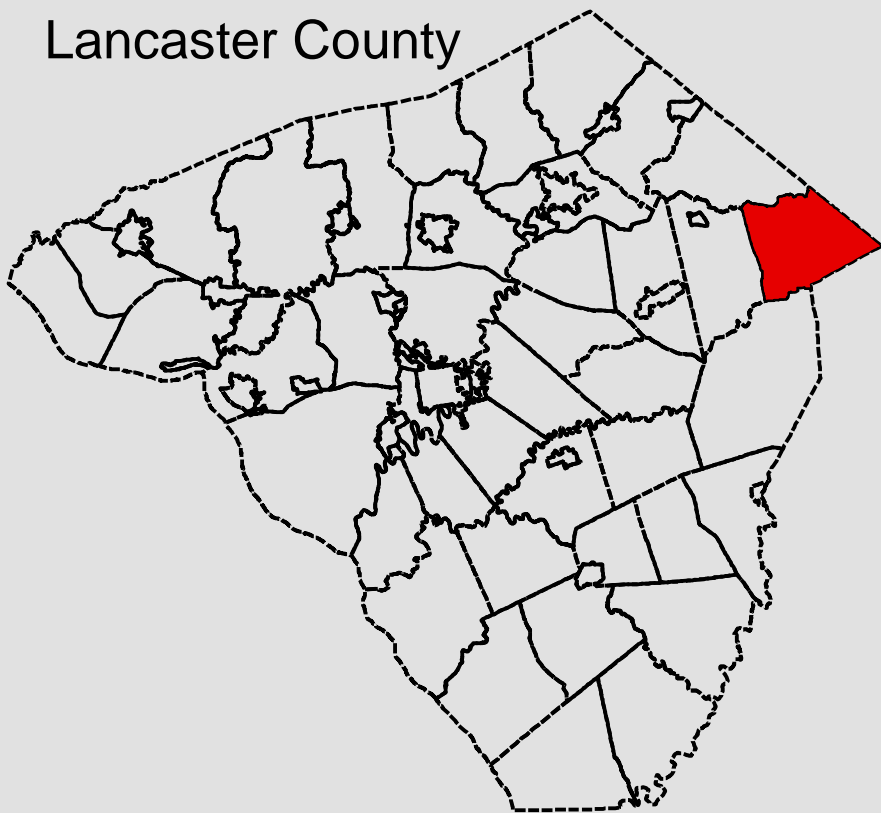
Caernarvon Township

Future Land Use

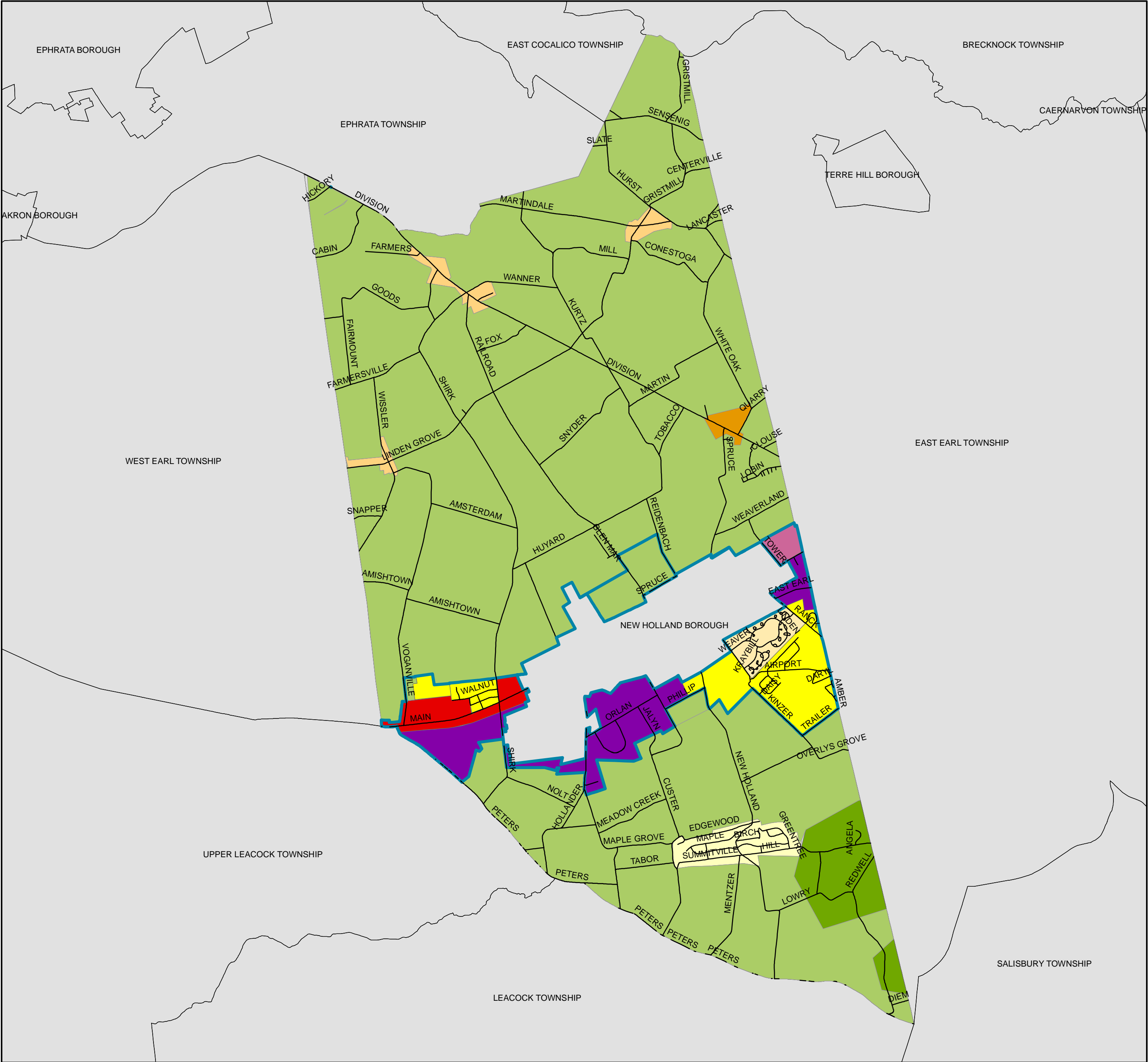
- Agricultural
- Conservation
- Village Mixed Use
- Mineral Recovery
- Industrial
- Rural Neighborhood
- Crossroad Community



Lancaster County



Earl Township Future Land Use Map



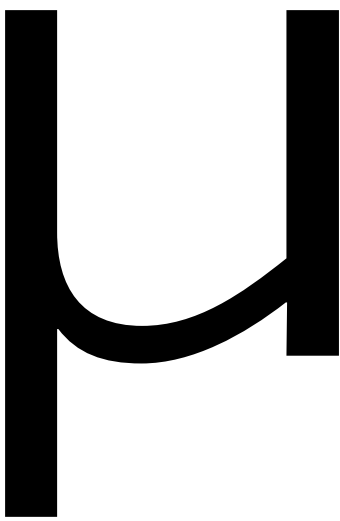
Earl Township

Designated Growth Areas

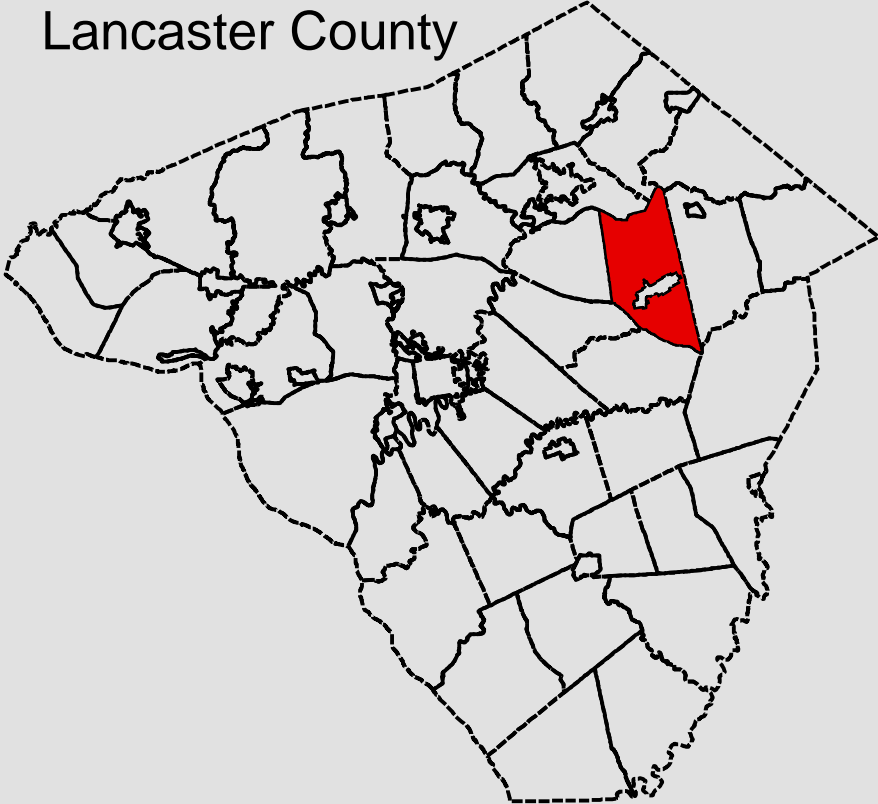
Urban Growth Area
(Existing and Proposed)

Future Land Use

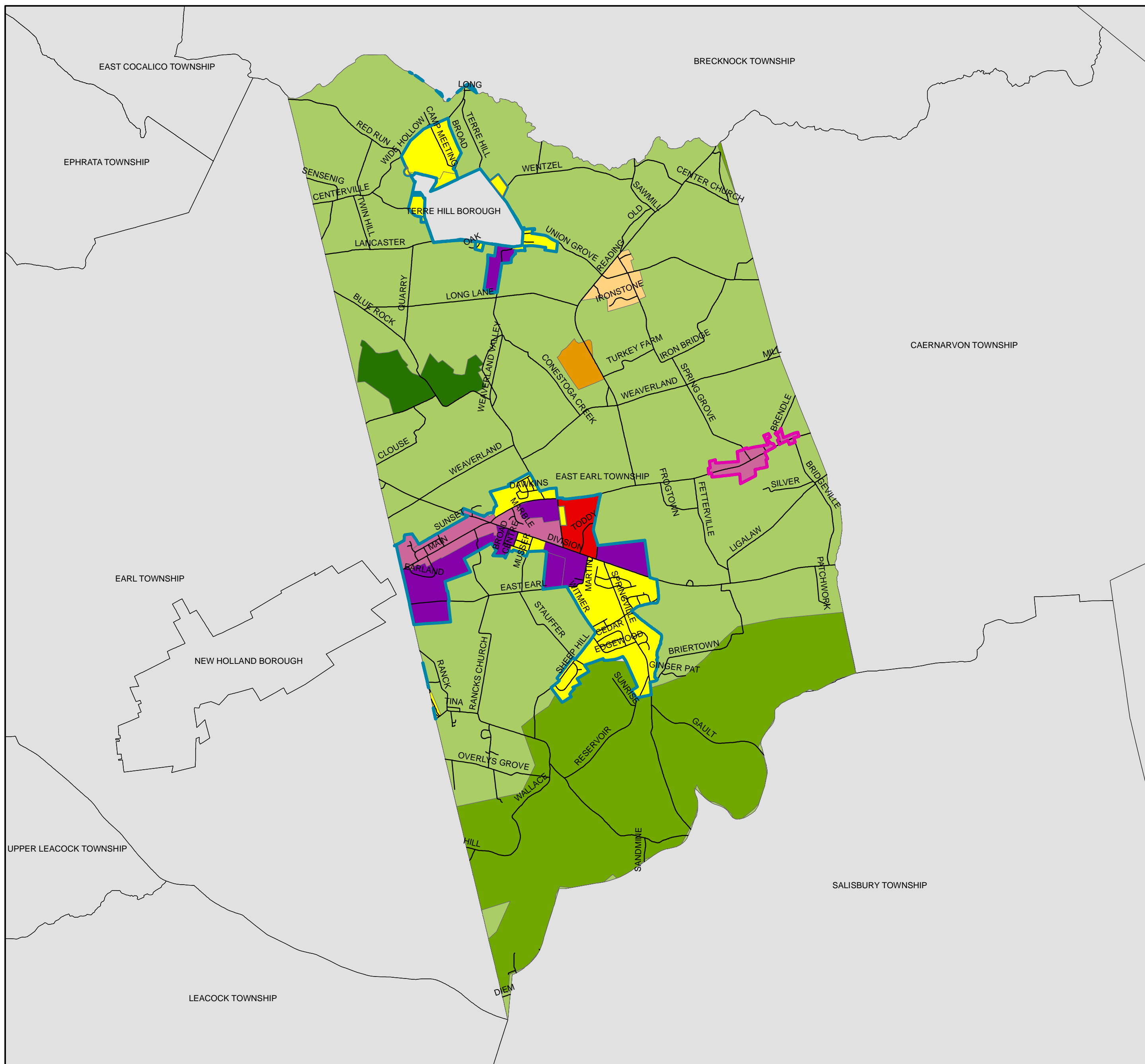
- Agricultural
- Conservation
- Medium Density Residential
- High Density Residential
- Village Mixed Use
- Commercial
- Industrial
- Rural Neighborhood
- Crossroad Community
- Rural Business Center



Lancaster County



East Earl Township Future Land Use Map



East Earl Township

Designated Growth Areas

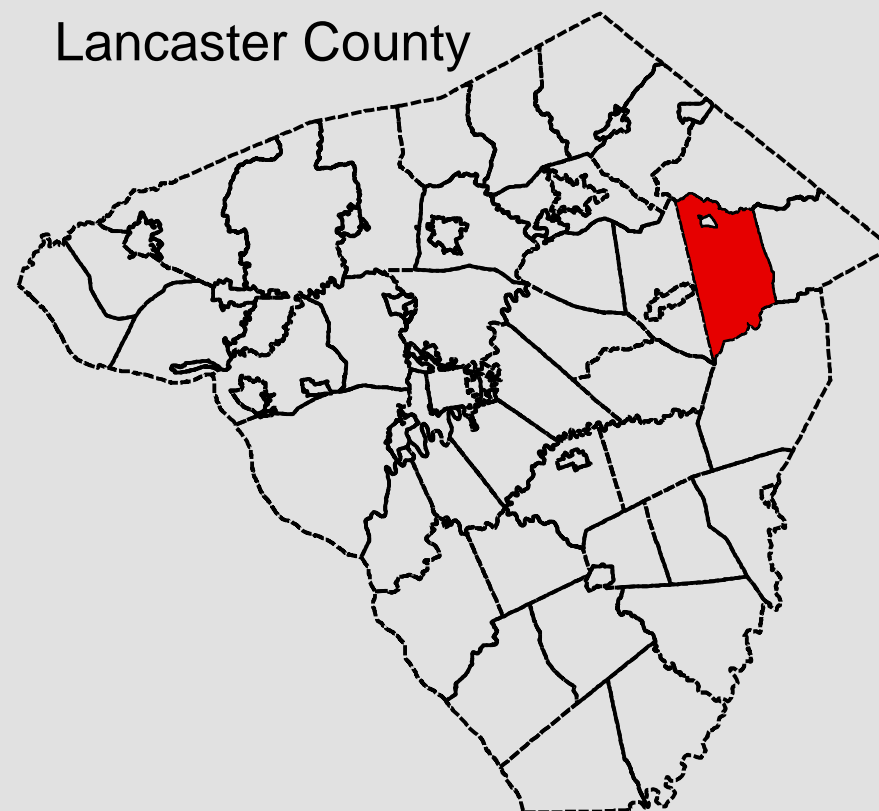
- Urban Growth Area (Existing and Proposed)
- Village Growth Area (Existing)

Future Land Use

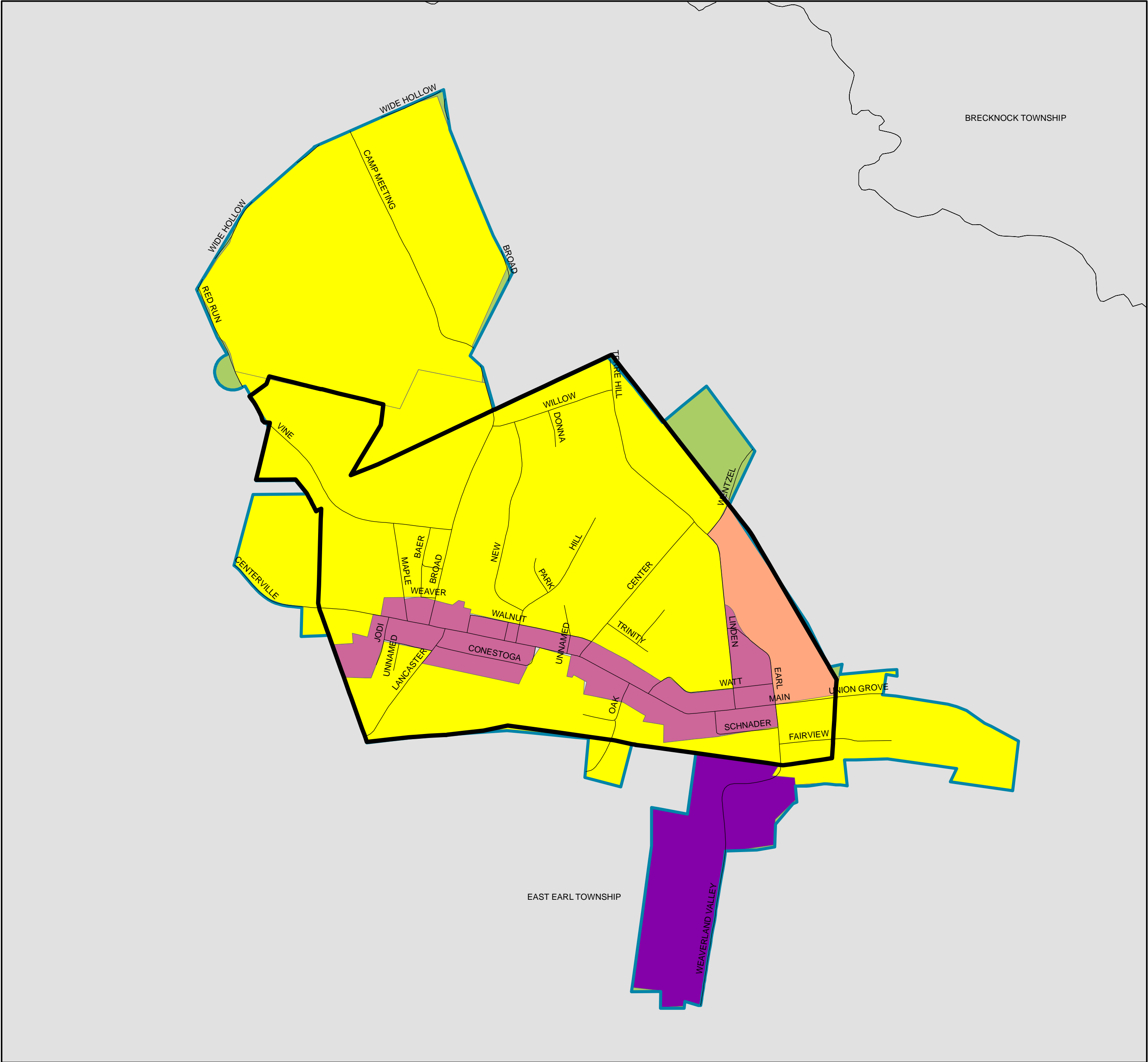
- Agricultural
- Conservation
- Medium Density Residential
- High Density Residential
- Village Mixed Use
- Mineral Recovery
- Commercial
- Industrial
- Crossroad Community
- Rural Business Center



Lancaster County



Terre Hill Borough Future Land Use Map

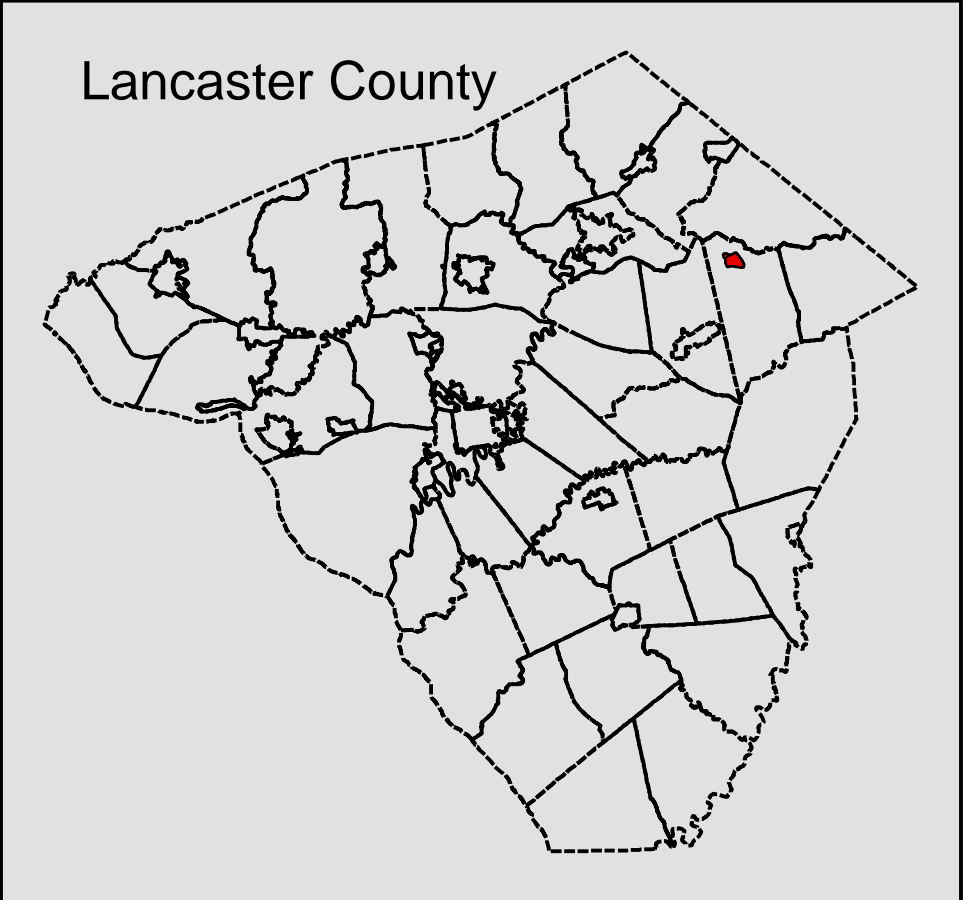


Terre Hill Borough

- Terre Hill Borough
- ELANCO North DGA

Future Land Use

- Agricultural
- Medium Density Residential
- High Density Residential
- Village Mixed Use
- Industrial



Village Growth Areas

A Village Growth Area (VGA) is an area that is designated as appropriate for future development and includes a traditional village core, adjacent developed portions of a township, and additional land to absorb a portion of a township's future land use needs. Infrastructure improvements may or may not be encouraged in VGAs, depending on the ability of the individual area to support it. As indicated in Figure 5-4, the ELANCO region currently has one adopted VGA: Goodville in East Earl Township. Two additional VGAs are proposed in the region: Bowmansville and Fivepointeville in Brecknock Township.

Designated Rural Areas

Designated Rural Areas are areas within which agricultural and natural resources are to be preserved and rural character and a rural way-of-life are to be sustained. Designated Rural Areas include those land use categories listed as agricultural and conservation as defined below.

Designated Rural Areas may also include rural centers, which allow a limited amount of development near existing developed areas, but do not encourage additional infrastructure. The three types of rural centers included in Figure 5-4 (Future Land Use) are Crossroads Communities, Rural Business Areas, and Rural Neighborhoods and are described in Table 5.2.



Table 5.2 – Future Land Use Map - Land Use Categories

Agriculture	Land that is used primarily for agricultural purposes. Residential and other uses are incidental to the farm operation.
Conservation	Land that primarily consists of natural features such as steep slopes, woodlands, and other natural habitats. Development is not prohibited but is limited to protect natural resources.
Medium Density Residential	Land that is designated for single or two-family residential development at densities of between four and seven units per acre.
High Density Residential	Land that is designated for single, two or multi-family residential development at densities of seven units per acre or more.
Village Mixed Use	Land that is developed as a mixture of residential and commercial uses. Such development typically occurs in a denser, compact, walkable form.
Commercial	Land that is developed for commercial sale of goods and services, including retail and wholesale establishments, personal service shops (dry cleaning, beauty salons, restaurants, etc.) and service related offices (medical, dental, travel, financial, real estate, etc.)
Industrial	Land that is developed for the manufacture, assembly, and distribution of goods and related office use.
Mineral Recovery	Land that is used for the extraction of minerals from the ground, including quarries and mines.
Crossroads Communities	An existing traditional compact settlement with a distinct identity in a rural area, typically at a crossroads. Often has a central gathering place and may have a few supporting commercial uses. Where appropriate, these communities may be the focus of limited development as an alternative to rural sprawl. As indicated on the Future Land Use map, Crossroads Communities in the ELANCO region include Churchtown, Beartown, Union Grove, Martindale, Hinkeltown, and Vogansville.
Rural Business Areas	Commercial or industrial development that is typically related to the agricultural and rural economy. Such development is meant to promote development that is consistent with rural character. Rural Business Centers are not intended to stimulate growth in rural areas, but to “capture” development that would otherwise occur as rural sprawl. As indicated on the Future Land Use map, three Rural Business Areas are proposed in the region, including one each in Brecknock, East Earl, and Earl Townships. Mineral recovery sites can also be categorized as Rural Business Areas.
Rural Neighborhoods	Areas of existing residential development or subdivisions with undeveloped lots or adjacent land that would be appropriate to accommodate a portion of a township’s future land use needs. The purpose of Rural Neighborhoods is to focus future residential development in areas where it already exists. Rural Neighborhoods should be limited in scope and developed in a compact pattern with a defined edge. As indicated on the Future Land Use map, three Rural Neighborhoods have been identified in the region, one each in Brecknock, Caernarvon, and Earl Townships.

Traditional Neighborhood Development

Traditional Neighborhood Development (TND) ordinances promote compact, mixed-use, pedestrian-friendly development patterns modeled after traditional American towns as an alternative to conventional zoning. Typical TND characteristics include interconnected streets, street design focused on creating a pedestrian-friendly environment, buildings close to the sidewalk, and a mix of uses, including diverse housing types and a central core of retail and community-serving uses within convenient walking distance of the surrounding neighborhood. TND ordinances typically include more specific design standards than conventional zoning.

Figure 5-5 – Traditional Neighborhood Development Examples



Eagleview, Chester County, PA



Florin Hill, Mt. Joy, PA



Mixed-Use Village, Boulder, CO



Lantern Hill, Doylestown, PA

5.5 Land Use Strategies

The following action strategies provide policy and regulatory direction for the municipalities in the region to implement the land use goals and map. These strategies reflect the consensus of the 22-member Steering Committee. As part of the planning process, the Committee gathered input from citizens, stakeholders, and elected officials in developing the plan.

- Adopt a new Future Land Use map for the region that is based on the Lancaster County Growth Management Framework map and modified to meet the specific needs of the ELANCO region.
- Concentrate the majority of new development in Urban Growth Areas (UGAs). The Lancaster County Growth Management Element recommends that at least 85% of new residential growth should occur in UGAs. If this target is achieved, sufficient capacity for new development is available in ELANCO's UGAs through 2030.
- Adopt new Village Growth Areas (VGAs), as identified on the Future Land Use Map, in Brecknock Township to accommodate a portion of growth in rural areas, near existing development and infrastructure.
- Enact regulations, standards, and other strategies to ensure that new development in Designated (Urban and Village) Growth Areas (DGAs) maintains and complements the historic and rural character of existing settlements. Such strategies may include Traditional Neighborhood Development (TND) districts, historic districts, standards for mixed-use development, and infill development standards. Figure 5-5 (Traditional Development Patterns) illustrates examples of these types of development.
- Establish Rural Centers (Rural Neighborhoods, Crossroad Communities, and Rural Business Centers), as identified in Figure 5-4 (Future Land Use), to accommodate a small amount of infill growth in rural areas as opposed to promoting sprawl development patterns.
- Adopt zoning changes that implement the development pattern proposed in Figure 5-2 (Future Land Use), particularly limiting areas outside DGAs and rural centers to agricultural use, conservation of natural resources, and limited rural development.
- Examine differences in zoning categories in adjacent municipalities and make amendments where needed to improve consistency with the Future Land Use Map.
- Focus infrastructure improvements (roads, sewer, water, etc.) in Urban and, to a lesser extent, Village Growth Areas, to contain development.
- Where roadway improvements are planned outside DGAs, apply aggressive land preservation policies to the surrounding landscape and with a particular focus on proposed access points (also see Chapter 7. Transportation).

6. Housing

6.1 Overview

An important factor in the success of the ELANCO region's planning efforts will be the location and supply of housing for its residents. ELANCO's residents' economic standard and quality of life will be significantly impacted by both the availability and affordability of housing. According to the region's growth projections, 2,178 new dwelling units will be needed to house its year 2030 population of approximately 30,820 persons (see Table 2.8).

The implications of housing for future land use are also a significant planning issue for ELANCO. Housing is the second largest land use in the region, covering 7,200 acres, and it is projected that approximately 1,500 acres of additional land will be needed to meet future housing demand. Often farmland is used for new residential development due to its few natural constraints and high suitability for building construction. In order for ELANCO to achieve the priority of preserving agriculture set by the Steering Committee and the region's citizens, new housing development will need to be strongly managed.

This element describes strengths and issues related to ELANCO's housing, establishes goals, and provides a series of action strategies to address ELANCO's housing needs for all income levels and age groups.

6.2 Strengths and Issues

The ELANCO region's housing sector is very strong. It is estimated that in 2008 the region will exceed LCPC's 2010 projections by about 1,450 dwelling units. Also, in 2000 all the municipalities in the region except Terre Hill Borough exceeded Lancaster County's median home value of \$121,000. The strong housing market presents both strengths and issues as identified below.

Strengths

- The ELANCO region has capacity for new residential development in the region's existing and proposed Designated Growth Areas (DGAs) to accommodate projected growth through the year 2030. The estimated surplus capacity compared to LCPC projections, is slightly over 3,800 units.
- Land use regulations in ELANCO accommodate various housing types from multi-family housing to single-family dwellings, particularly in DGAs, to meet diverse market demand and income levels.
- Home prices are lower in ELANCO than in communities east of the region in the Philadelphia metropolitan area, which is likely causing increased development pressure and price appreciation.

- Homeownership rates in the region are significantly higher than the national average, creating a very stable housing environment. Brecknock and Caernarvon Townships had uniquely high homeownership rates of 85% and 97% in 2000.





Issues

- Significant agricultural and natural resource lands in the region, over 800 acres, were consumed for new residential development between 1994 and 2002 (the most recent period for which figures are available). This trend negatively impacts farming operations and natural systems.
- Brecknock and Caernarvon Townships do not currently have any DGAs to accommodate projected growth. Brecknock Township is considering (and this plan recommends) adoption of Village Growth Areas for Bowmansville and Fivepointville.
- The convergence of the aging “Baby Boom” generation (persons born between 1946 and 1964) and their children the “Millennials” (persons born between 1977 and 1996) becoming young adults over the next 20 years will increase the demand for more compact forms of housing. Many Baby Boomers will be downsizing and their children will be seeking starter homes, which will increase demand for single-family attached and multi-family housing styles to match their incomes and lifestyles.
- Connecting new developments to the infrastructure network of existing communities should be done more cooperatively.
- Greater numbers of the Plain Sect population in the region are not involved in farming, but these non-farming members often wish to live in close proximity to their rural community. Additional dwellings on farmsteads and in the surrounding countryside for this non-farming population will affect the rural character of these communities over time.
- Housing affordability is an issue for the region. Home values in most of its communities were out of reach financially for a family with Lancaster County’s median household income of \$45,000 in 2000. This creates a challenge for lower-wage workers in ELANCO who are an important part of its economy, but have to travel outside the region to find more affordable housing options. The small amount of rental housing available in the region contributes to this issue.

6.3 Housing Goals

The following housing goals provide general statements indicating the desired direction for the ELANCO region over the next 25 years.

Housing Goals

- Meet ELANCO's housing needs as a regional effort, instead of within each individual municipality.
- Maintain and promote revitalization of existing residential neighborhoods and villages.
- Concentrate new housing in DGAs.
- Encourage pedestrian-oriented, residential neighborhoods that foster a sense of community and provide citizens with convenient access to services and facilities.
- Accommodate housing opportunities for a range of income levels and age groups, including rental as well as ownership options.
- Promote the design of new development to respect the historic and rural character of the region.

6.4 Housing Strategies

The following action strategies provide policy and regulatory direction for the municipalities in the region to pursue to implement the housing goals.

- Create a regional transfer of development rights (TDR) program to direct new housing into DGAs from rural resource areas.
- Adopt effective conservation zoning, where appropriate, to allow development on smaller lots while maintaining large tracts of agricultural land and/or open space.
- Apply design standards in areas not designated as historic districts for new development that is compatible with the character of existing towns, villages, and rural landscapes.
- Require mixed housing types and flexible land use regulations in order to promote housing diversity and convenient services for residents. This may include enactment of "cottage" zoning districts that would require a certain percentage of units to be smaller.
- Offer development incentives, such as density bonuses, for innovative design of new developments, infill housing in boroughs and villages, and affordable housing opportunities.
- Require new neighborhoods in the region to be connected by several roadways and pedestrian paths to adjacent residential areas to improve safety, lower vehicular congestion, and promote walkable communities.
- Consult with the Plain Sect community on the possibility of an initiative to address the housing needs of non-farming members. This initiative would create rural villages where these members could live and pursue their trade or craft. Using a TDR program or conservation zoning in combination with a non-profit organization that works closely with the Plain Sect community could provide an implementation struc-



ture to locate and manage the trade villages in these rural communities.

- Encourage businesses in the region to offer worker housing benefits to make local housing more affordable and reduce transportation costs.

7. Transportation

7.1 Overview

The existing transportation system in the ELANCO region is rooted in a historic network of turnpikes and highways that connect villages with larger centers. Rural roads provide access to the farms and hamlets between the major corridors. In the villages and urban areas, buildings are typically constructed to the right-of-way. In rural areas, there is little need for multi-lane roadways. For these reasons, there are few roads with more than two lanes in the ELANCO region.

The roadway functional classifications for Lancaster County are shown in Figure 7-1 (Roadway Functional Classification). Capacity and character are two attributes which define thoroughfares. The Functional Classification system is based on capacity in terms of level of service, speed, and access. All streets and highways are grouped into one of three functional classifications: Arterials, Collectors, or Locals according to the capacity and degree of access that they allow. The general functional system as defined by the US Department of Transportation is presented in Table 7.1. As shown in Figure 7-1, the Lancaster County Planning Commission further divides the classifications into major and minor arterials and major, minor, and local collectors.

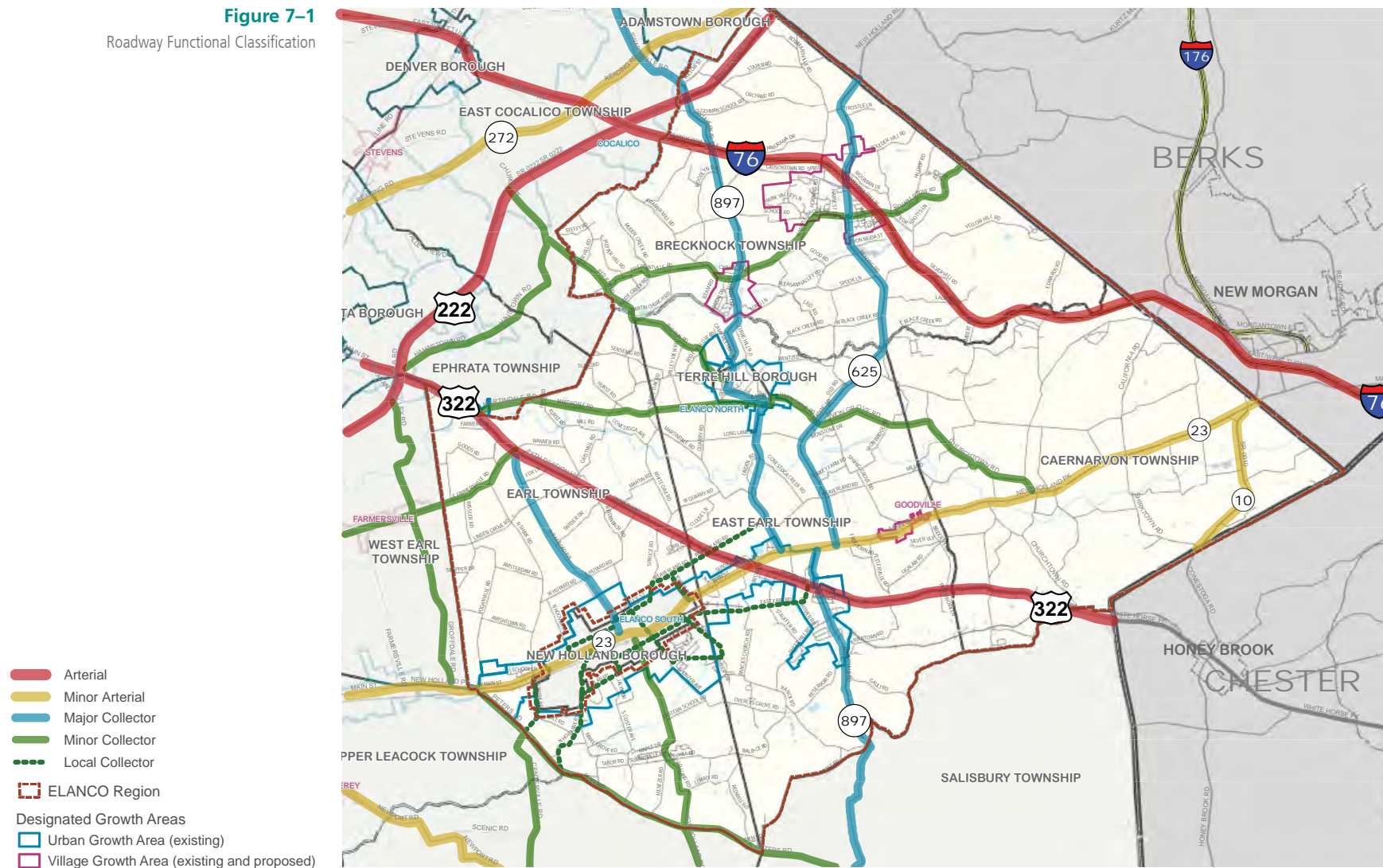
Table 7.1 Roadway Functional Classification

Arterial	Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control. Arterials provide state-wide or interstate travel routes. Minor arterials provide a connection between highway arterials and major collectors and are generally designed for relatively high speeds with minimum travel interference.
Collector	Provides a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials. In a rural system, collector routes generally serve intracounty travel and constitute routes with shorter travel distances. Major collectors provide service between boroughs and to urban areas not directly served by the arterial system. They also link local traffic generators, such as schools or hospitals, with nearby towns. Minor collectors bring traffic from the local roads to the smaller communities and provide service to traffic generators not already linked by major collectors.
Local	Consists of all roads not defined as arterials or collectors; primarily provides access to land with little or no through movement. Local roads provide service to travel over relatively short distances and slower speeds as compared to collectors and arterial systems.

Source: US Department of Transportation, Federal Highway Administration. (<http://www.fhwa.dot.gov>)

Figure 7-1

Roadway Functional Classification



The road network in the ELANCO region serves a variety of different vehicle types, including automobiles, buses, trucks, and non-motorized vehicles such as bicycles and horse-drawn carriages. The number of non-motorized vehicles is unique to Lancaster County and directly related to the cultural heritage of its Plain Sect communities. The slow travel speeds of these modes is accepted by drivers of motorized vehicles, but the speed differential between motorized and non-motorized vehicles can lead to dangerous traffic conflicts.

The majority of congestion in the ELANCO region occurs along east-west roadways, specifically in the major corridors of PA 23 and US 322. Minor congestion also occurs along PA 897, PA 625, and New Holland Road. Part of this congestion is due to the significant population growth of Lancaster County in the past several decades, but tourism and the full-time nature of the agricultural economy lead to congestion during weekends as well. “Corridors of Concern” as defined by the Eastern Lancaster County Land Use Study, an ongoing regional planning initiative sponsored by the Lancaster County Planning Commission, are shown in Figure 7-2 (Corridors of Concern).

ELANCO is an employment destination, which leads to commuter traffic congestion. For almost ten years, PennDOT has been studying ways to mitigate traffic congestion and the impact of freight traffic through the PA 23 Traffic Relief Project. Initially, seven alternatives were proposed, including widening the existing road, building four-lane bypasses, and building two-lane bypasses, as well as a no-build alternative. Currently, the no-build and two “build” alternatives involving two-lane bypasses are under consideration. The locations of the Build Alternatives, including intersections with existing roads, are shown in Figure 7-3 and described below. The Draft Environmental Impact Statement (DEIS) is currently under development.

The more limited of the two “build alternatives” is referred to as the Bareville Connector Alternative. This alternative would enter the ELANCO region (Earl Township) from Upper Leacock Township along Peters Road south of PA 23. It would then run east from Peters Road to connect with Orlon Road at the N. Hollander Road intersection. This portion of the Bareville Connector Alternative is referred to as the “Industrial Connector” because it would serve a number of industrial uses in Earl Township and New Holland Borough.

PA 23 Traffic Relief Project - Project Needs and Goals

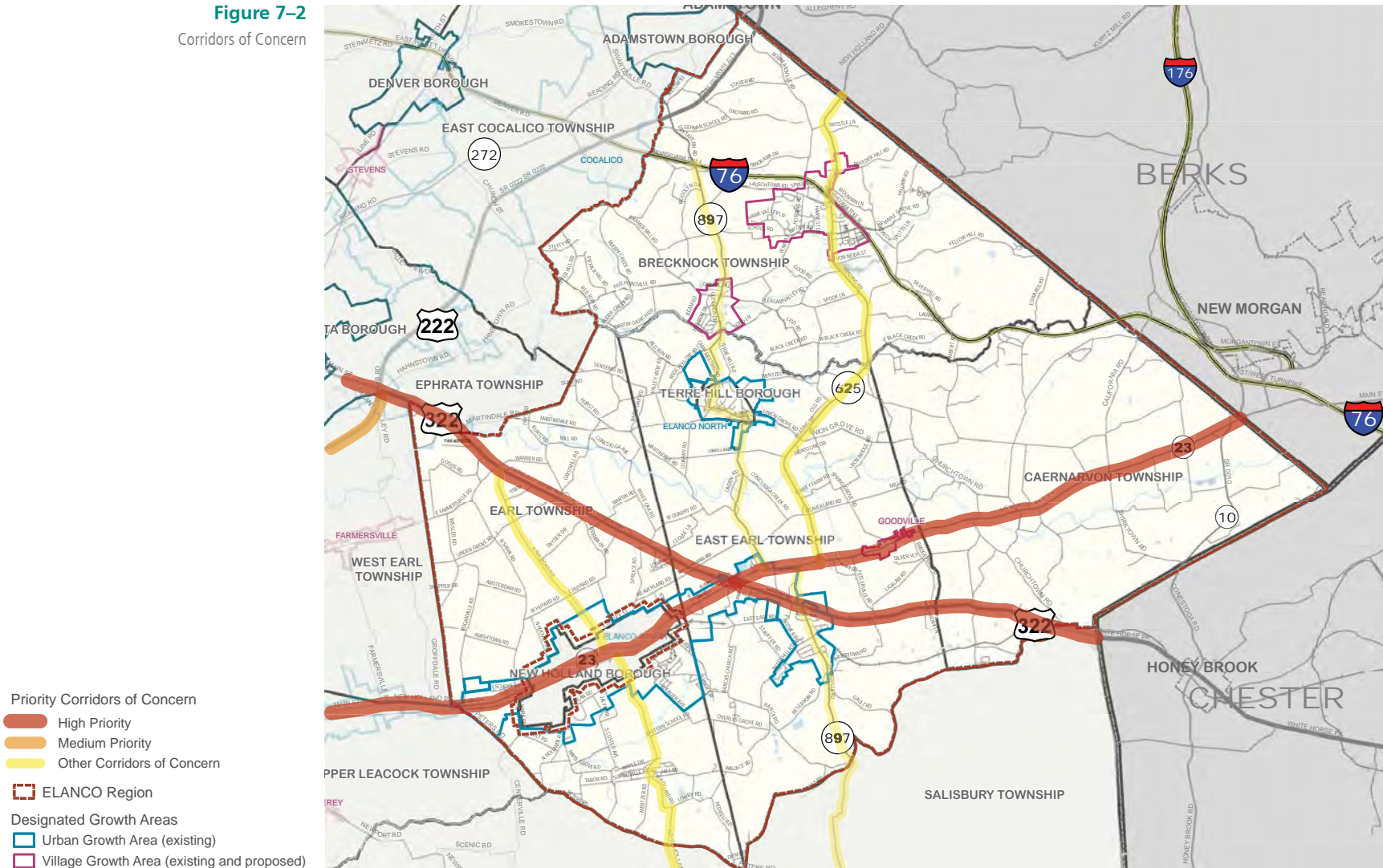
Seven “key requirements” were identified for the proposed PA 23 project as a result of a Needs Report completed in May 1999. Three of these requirements became the **Transportation Needs** for the project:

- **Improve Safety Conditions** at select intersections and roadway sections that currently exhibit high crash rates.
- **Improve Operational Efficiency** of the existing transportation system.
- **Accommodate Future Mobility Needs** for the safe and efficient movement of people and goods.

The remaining four requirements identified in the Needs Report became the Land Use and **Socioeconomic Goals** for the project:

- Preserve farmlands and protect forested lands, water resources, and scenic vistas.
- Facilitate the County’s growth management strategy.
- Support all sectors of the study area’s economy, consistent with the County’s growth management strategy.
- Preserve the viability of social subgroups with unique transportation needs.

Figure 7-2
Corridors of Concern



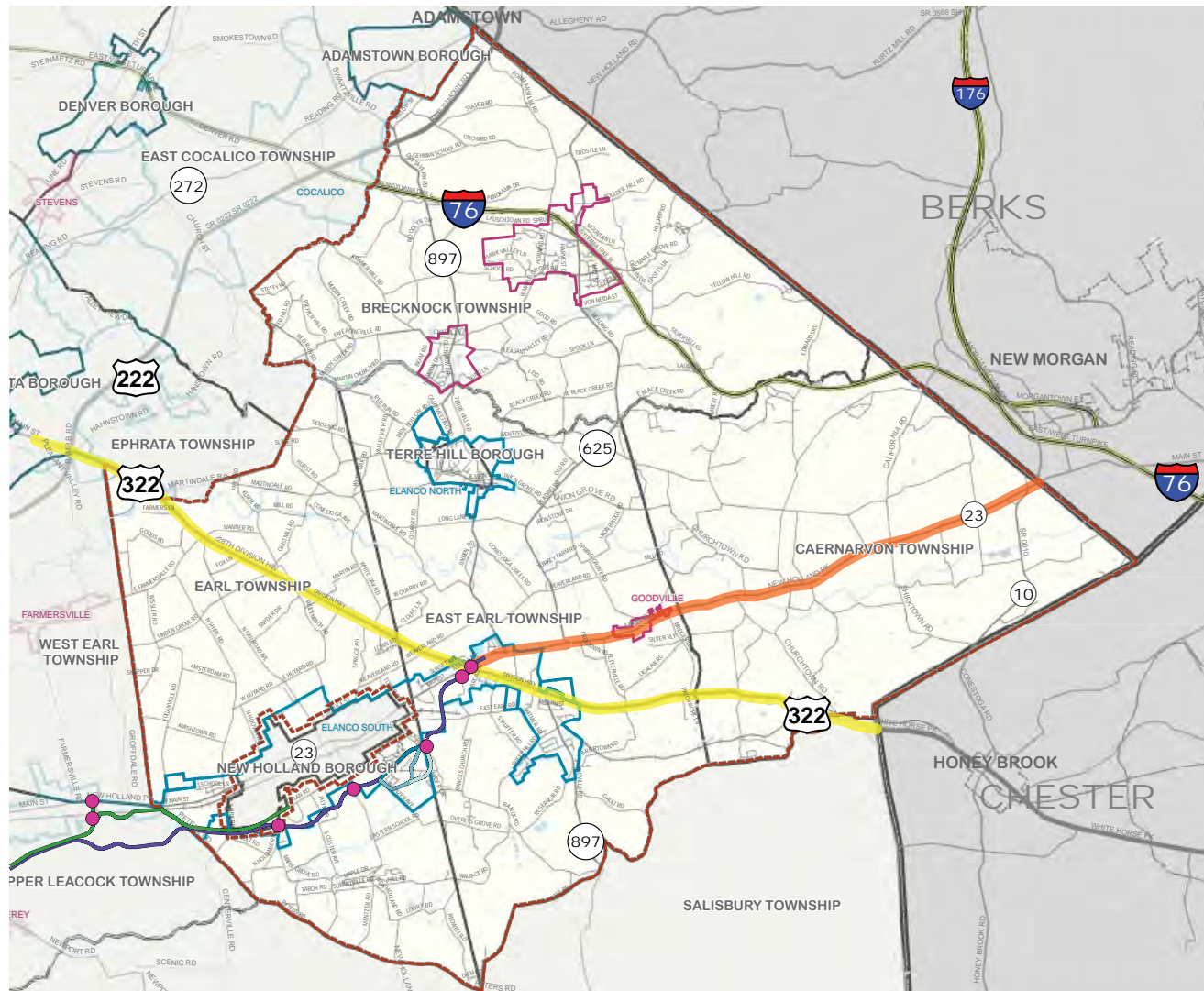


Figure 7-3
Roadway Studies

PA 23 Alternatives

- Bareville Connector
- Southern Alternative
- PA 23 Access Points

Other Study Corridors

- PA 23 Access Management and Traffic Calming Study
- US 322 Access Management Study

ELANCO Region

Designated Growth Areas

- Urban Growth Area (existing)
- Village Growth Area (existing and proposed)

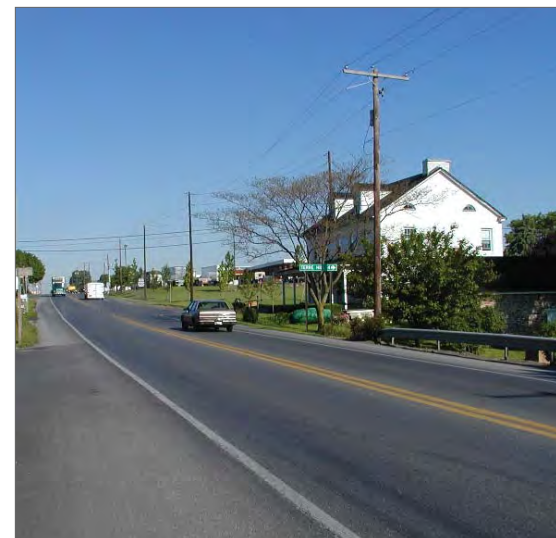
The Southern Alternative would run further south and east than the Industrial Connector. Like the Bareville Connector Alternative, the Southern Alternative would enter the ELANCO region and Earl Township along Peters Road. It would then diverge from the Bareville Alternative to the south, running east through Earl and East Earl Townships before terminating at PA 23 in the vicinity of US 322. Three separate options are under consideration for the segment between Kinzer Road and Ranck Road. Interchanges would be provided at N. Hollander Road, New Holland Road, Ranck Road, and Rancks Church Road.

As with any transportation investment, the PA 23 Build Alternatives will have significant impacts on local land uses and the environment. The Southern Alternative in particular includes several access points in the residential and farming areas to the south of New Holland Borough. This improved access has the potential to promote new housing and development as well as reduce farmland and impact air quality south of PA 23. While the goal of reducing traffic congestion on PA 23 should be pursued, it is important to ensure that the land use impacts of the bypass will not contradict the growth and preservation policies set forth by the Lancaster County Growth Management Element and the ELANCO Regional Comprehensive Plan.

The PA 23 Access Management and Traffic Calming Study for the portion of the road from Blue Ball to Morgantown was completed in 2005. This study recommended a number of strategies to reduce congestion and slow traffic through communities along the corridor. The County has also initiated the US 322 Access Management Study, a similar comprehensive traffic analysis study of US 322 from Ephrata Borough to the Caernarvon/Chester County line. The areas covered by these two studies are shown in Figure 7-3.

Access Management

Access Management is defined in the Transportation Research Board's 2003 Access Management Manual, as the "systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway." Application of the best practices of access management provides benefits for motorists, bicyclists, pedestrians, transit riders, businesses, and communities (source: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_548.pdf).





Attention should be paid to preserving the region's special character whenever transportation improvements are undertaken. Several contemporary movements in transportation and land use planning address this issue, including context-sensitive design, access management, traffic-calming, and an improved understanding of the connection between transportation and land use. These movements share in common concern for roadway **character** and **context** as opposed to focusing solely on engineering **function**. Utilizing transportation planning techniques, associated with these movements, the ELANCO transportation system of the future can preserve the region's special character while accommodating the needs of all users.

Due to a unique confluence of cultural and geographic factors, many bicyclists and pedestrians utilize the ELANCO region. Cycling is an important form of transportation for the Mennonite community. The rural beauty and gentle hills of the region make it very popular for recreational cyclists as well. However, many ELANCO roads have been engineered for automobiles without properly accommodating cyclists or pedestrians. High speed traffic and inadequate shoulders discourage many from cycling. Most of Lancaster County's pedestrian and bicycle trip destinations are located in Urban and Village Growth Areas and improved bicycle and pedestrian connections to and among these locations should be a priority.

Regional off-road, multi-use trails can be pursued to provide recreational and commuting opportunities across the region. Even when pursuing off-road trail options, it is important to reinforce cyclists' rights to share roads with cars.

Public transit service in Lancaster County is provided by Red Rose Transit Authority (RRTA). RRTA operates fixed route services in Lancaster City and throughout the County as well as on-demand paratransit and charter services. The ELANCO region is served by bus route 12, which runs between Lancaster City and New Holland on a schedule that accommodates primarily work commute trips. There are no direct connections between the ELANCO corridor and neighboring centers such as Ephrata and Morgantown in Berks County.

7.2 Strengths and Issues

Strengths and issues related to the ELANCO region's existing transportation system are presented below for roads, bicycle travel, pedestrian travel, and transit, respectively.

Roads

Strengths

- The extensive Lancaster County road network provides access to all parts of the ELANCO region.
- The road network is generally well designed to handle a large variety of vehicle types.
- With some exceptions, traffic congestion is not a major issue on the region's rural roads.

Issues

- Significant congestion (Level of Service E) occurs on two major routes – PA 23 and US 322.

Level of Service

Level of Service is a benchmark that traffic engineers use to describe how well a road or intersection handles traffic. LOS A indicates a road with little or no delay. LOS E indicates periods of long traffic delays, while LOS F indicates a road with very long traffic delays and is considered a "failing" grade.

- While the road network provides access to all parts of the region, there are few alternative routes for direct east-west travel across the ELANCO region.
- There is a high volume of freight traffic due to the area's agricultural, manufacturing, and distribution industries.
- There are conflicts between motorized and non-motorized vehicles due to the variation in speeds and lack of shoulders on many roads.
- The Route 23 Bypass has been studied for almost a decade. The DEIS is currently under development and includes consideration of two alternatives that will potentially impact land use and farmland south of New Holland Borough.
- The PA Route 23 Access Management and Traffic Calming Study highlights the need to address safety concerns in the PA 23 corridor.
- In addition to PA 23 and US 322, other corridors of concern include US 222, PA 625 and PA 897. Inappropriate land use and development along these corridors has the potential to result in problems similar to those currently experienced in the PA 23 corridor.
- Multiple driveways and access points make major roads less safe and more congested, indicating the need for access management.

Bicycle Travel

Strengths

- Many residents – especially in the Mennonite community – use the bicycle as their primary form of daily transportation.
- Bicycles produce no harmful emissions and contribute to improved public health.
- State Bicycle Route S travels through the ELANCO region, including a stretch along PA 23. This route encourages bicycle tourism.

Issues

- High-speed rural roads can be hazardous to bicyclists, especially outside of daylight hours.



- The amount of traffic on major corridors makes them unappealing to occasional bicyclists, which makes it difficult to encourage cycling as an everyday mode of transportation.
- Bicycles can create safety conflicts with faster moving traffic on major roads that have inadequate shoulders.

Pedestrian Travel

Strengths

- Walking is the most environmentally friendly form of transportation and contributes to improved public health.
- Many of the streets in villages and urban areas have sidewalks.
- Compact growth patterns make it easy to walk to nearby destinations.

Issues

- Outside of built-up areas it is often not possible to walk for daily errands.
- Some communities (e.g., Churchtown) have strong sidewalk connections while others, such as Goodville, do not.
- New developments may include internal sidewalks but they are not connected to other neighborhoods and developments.

Transit

Strengths

- Red Rose Transit offers service between New Holland and Lancaster City approximately every hour on work days. On Saturdays, service is reduced to about one bus every three hours.
- Bus service works well for commuters with 9-5 jobs in Lancaster City and the industrial locations along PA 23.

Issues

- The length of the transit service day is closely tied to employment hours. This makes it difficult for commuters to stop en route for errands and catch a later bus to complete their journey.
- All bus service in the ELANCO region is oriented along the PA 23 corridor to Lancaster City. There are no routes that connect ELANCO communities away from PA 23. Commuters traveling to other points in the county must transfer in Lancaster City, which can make a 10-minute drive into a one-hour bus ride.
- There is no transit service to Morgantown at the eastern end of the PA 23 corridor just outside the ELANCO region.

7.3 Transportation Goals

Road Goals

- Improve traffic flow and reduce congestion.
- Make the transportation network safer for all modes.
- Design and reconstruct busy roads to accommodate non-motorized vehicles.
- Ensure that road improvements are sensitive to the local context and character.
- Maintain the existing road infrastructure including bridges.

Bicycle Goals

- Encourage more bicycle use for transportation as well as recreation.



- Improve bicycle safety by:
 - » Educating drivers of cyclists' right to the road.
 - » Educating cyclists about their rights and responsibilities as vehicles.
- Develop a comprehensive bike lane network and off-road trails to supplement on-road bicycle facilities, encourage cycling, and improve bicyclist safety.

Pedestrian Goals

- Improve pedestrian safety through education, physical improvements, and traffic calming.
- Improve connectivity to make the region's communities more conducive for walking.
- Develop more pedestrian facilities, such as multi-use paths and sidewalks, to make the pedestrian environment more pleasant.

Transit Goals

- Improve transit options for trips outside of the New Holland to Lancaster City corridor.
- Make transit more accessible to the region's residents.

7.4 Transportation Strategies

Strategies to improve the ELANCO region's existing transportation system are presented below for roads, bicycle travel, pedestrian travel, and transit. Specific roadway and bicycle/pedestrian/transit improvements are shown in Figures 7-4 and 7-5, respectively. Proposed roadway improvements identified by ELANCO region municipalities are also listed in Table 7.2. The improvements include two projects previously proposed under the Lancaster County Municipal Transportation Grant Program: realignment of the PA 897/US 322 intersection in East Earl Township and intersection improvements (including a new traffic signal) at the Railroad Avenue/US 322 intersection in Earl Township.

Road Strategies

- Widen and pave shoulders of roads with non-motorized vehicle use.
- Minimize the number, location, and width of intersecting streets and driveways along Corridors of Concern through access management techniques wherever possible to improve traffic flow and safety.
- Provide turn bays at key intersections to allow turning traffic to pull out of the travel lane, thereby reducing congestion and improving traffic flow. In such cases, ensure that shoulders are maintained or expanded to

provide room for horse-drawn carriages and bicycles.

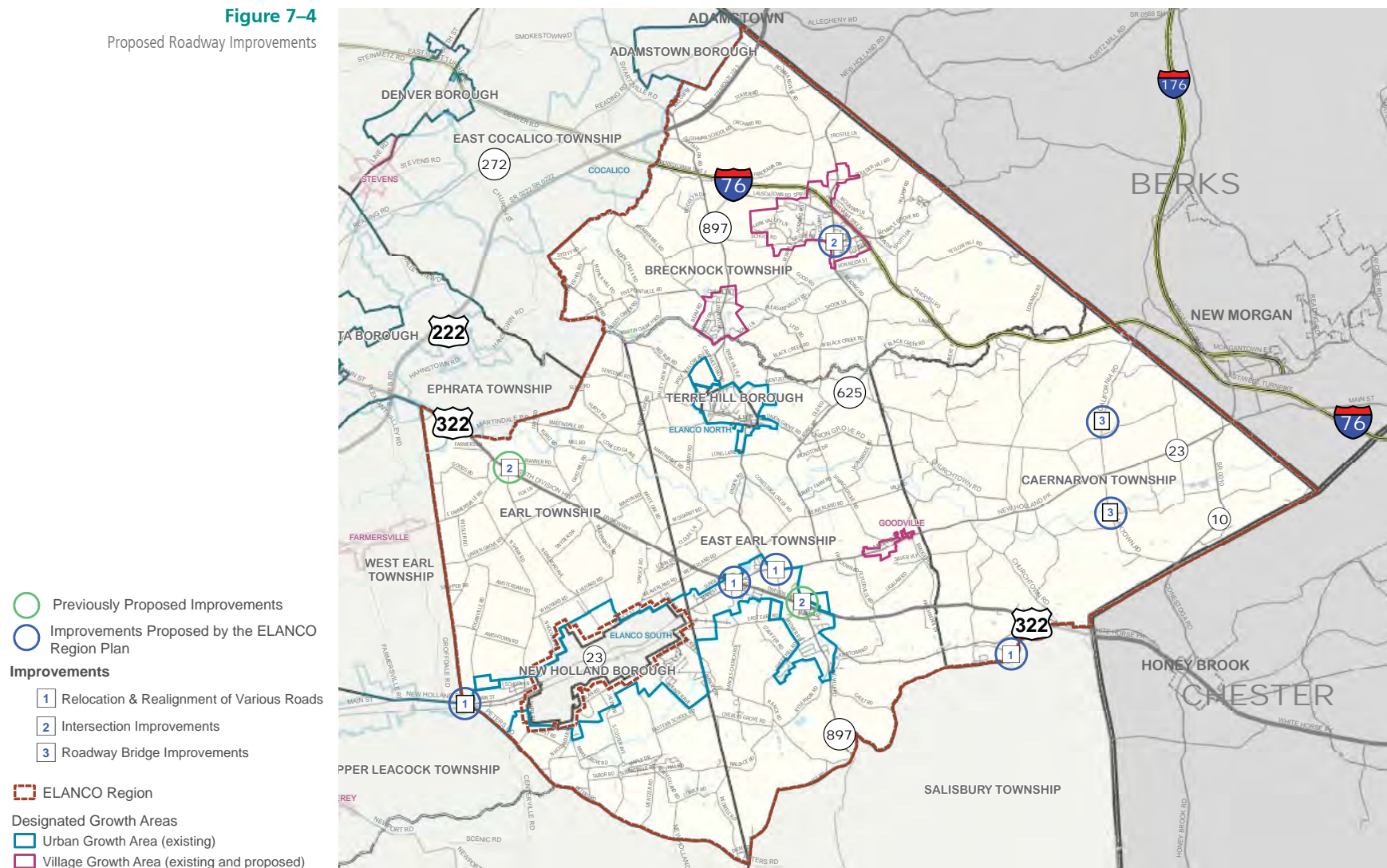
- Selectively introduce traffic calming measures throughout the ELANCO region. Traffic calming can reduce accidents and improve pedestrian and bicycle safety.
- Ensure road connectivity in the developing residential areas within the ELANCO South and North Urban Growth Areas.
- Implement an alternative for the PA 23 Traffic Relief Project that reduces congestion without inducing undesired development.
- Implement recommendations from the PA 23 and US 322 Access Management Studies.
- Relocate and realign major intersections to improve safety and traffic flow.
- Repair and upgrade deficient infrastructure such as bridges.

Table 7.2 Summary of Proposed Roadway Improvements

Municipality	Roadway Improvements
Brecknock Township	<ul style="list-style-type: none"> • Improve the PA 625 (Reading Road) and Maple Grove Road intersection.
Caernarvon Township	<ul style="list-style-type: none"> • Reconstruct Narvon Road (widen, repave, install new drainage). • Replace one-lane existing bridge on California Road. • Replace one-lane existing bridge on Shirktown Road south of New Holland Pike.
Earl Township	<ul style="list-style-type: none"> • Realign the intersection and install new traffic signal at US 322 and N Railroad Avenue. • Realign the intersection of PA 23, Peters Road and Voganville Road.
East Earl Township	<ul style="list-style-type: none"> • Improve, realign, add turn lanes, and/or stoplights at the following intersections: PA 897 with US 322; US 322 with PA 23 at Blue Ball Square; PA 23 with PA 897. • Improve connections and address traffic congestion by constructing a new road west of East Earl Road to connect Toddy Drive to Witmer Road south of US 322. • Connect PA 897 to Musser Road by building a new road between US 322 and PA 23.

Figure 7-4

Proposed Roadway Improvements



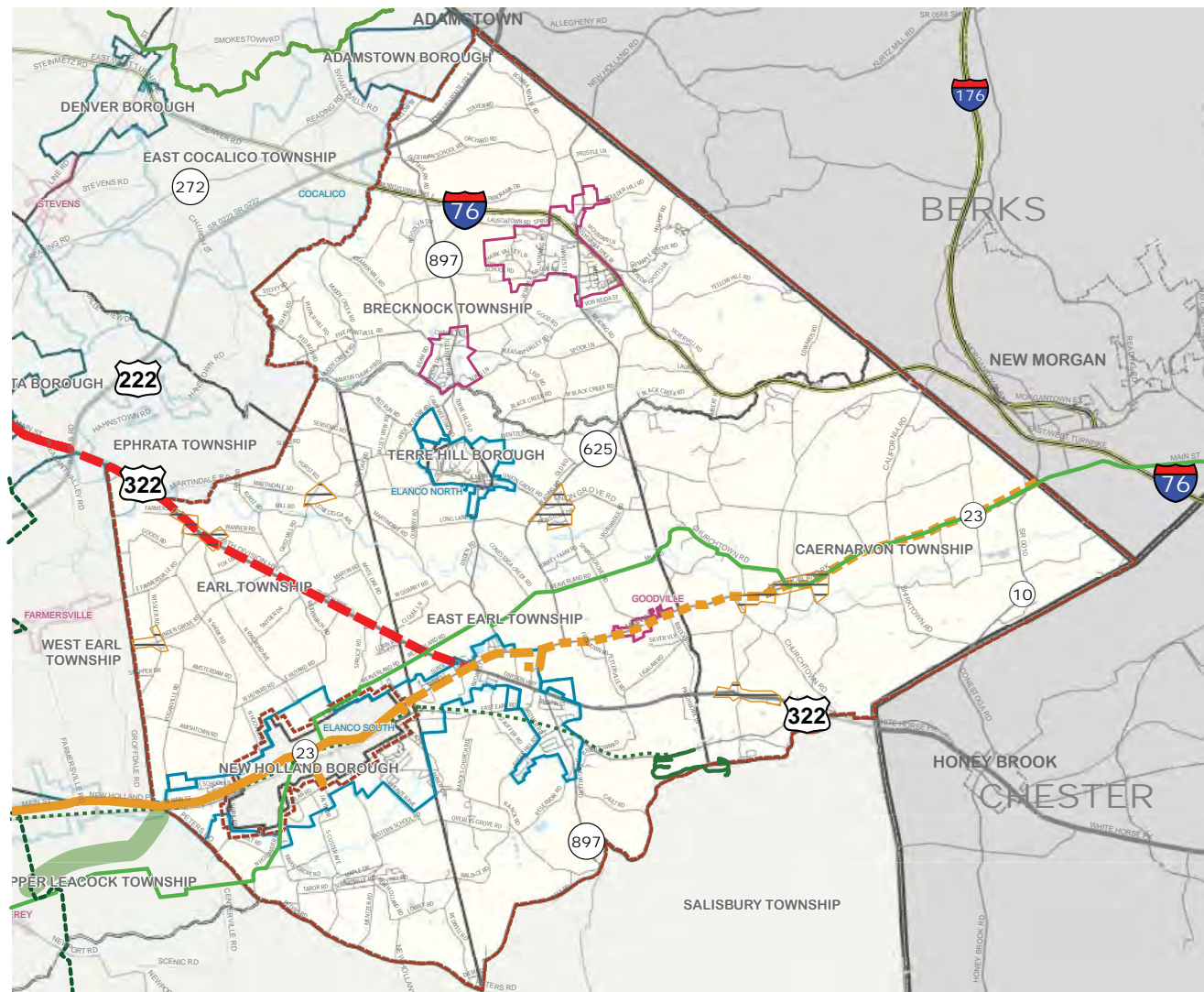


Figure 7-5

Bicycle / Pedestrian / Transit Facilities
and Recommended Improvements

- RTA Bus Routes
 - Route 11
 - Route 12
- Proposed RTA Bus Route Extensions
 - Route 11 Extension to New Holland
 - Route 12 Extension to Shady Maple/Morgantown
- Trails
 - Biking the Back Roads Route
 - PA State Bicycle Route S
 - Horseshoe Trail
 - Other Trails
- Proposed Bicycle/Pedestrian Facilities
 - New Holland - Lancaster City Multi-Use Path
 - Sidewalk Community
 - Proposed Greenway Trail
- ELANCO Region
- Designated Growth Areas
 - Urban Growth Area (existing)
 - Village Growth Area (existing and proposed)

Bicycle Strategies

- Incorporate bicycle facilities as standard features in all transportation improvement projects. For example, incorporate a New Holland to Lancaster City multi-use path into the “build” alternatives being considered in the PA Route 23 EIS.
- Widen and pave shoulders for use by non-motorized vehicles whenever possible.
- Maintain existing signed bicycle routes and post signs on additional routes.
- Reconstruct/re-orient drainage grates and other hazards to bicycles such as rough shoulders and road surfaces that are prone to puddles.
- Sweep shoulders on designated bike routes frequently to remove debris that can cause damage to bicycle tires.
- Take advantage of State Bicycle Route S to develop bicycle-based tourism in the ELANCO region.
- Investigate the creation of an off-road bicycle path network.

Pedestrian Strategies

- Incorporate pedestrian facilities as standard features in all transportation improvement projects. For example, incorporate a New Holland to Lancaster City multi-use path into the “build” alternatives being considered in the PA Route 23 EIS.
- Encourage sidewalks in the region’s Designated Growth Areas and Crossroads Communities and make connections more visible to existing sidewalk networks.
- Install new crosswalks, median refuges, pedestrian signals, and yield-to-pedestrian bollards to improve safety.
- Fill in missing segments to ensure sidewalk continuity in walkable communities.
- Investigate the creation of an off-road pedestrian path network.

Transit Strategies

Work with Red Rose Transit to:

- Extend hours of service, especially on weekdays.
- Increase the frequency of transit service.
- Explore the feasibility of new bus routes to link the ELANCO region with nearby areas such as Ephrata and Morgantown. At a minimum, consider extending Route 12 service to Shady Maple.
- Use NextBus or other Automatic Vehicle Locator (AVL) technologies to provide commuters with up to the minute transit information at bus stops and on cell phones.
- Explore the use of transit buses as school buses and vice versa.

PA 23 EIS: Land Use-Transportation Coordination

Transportation improvements can significantly influence land use patterns by improving access to an area. As the major transportation improvement planned for the ELANCO region, the PA 23 Traffic Relief Project needs to be carefully considered for its effects on the land use goals and strategies of the ELANCO Regional Comprehensive Plan. The potential impacts of the Bareville Connector Alternative would be relatively limited in extent, including:

- Some farmland in Earl Township between Peters Road and the New Holland Borough would be directly impacted by roadway construction.
- The improved access provided by this alternative could generate development pressures on farmland in Earl Township in the area east of Peters Road, north of Mill Creek, west of N. Hollander Road, and south of New Holland Borough. This area is already surrounded by residential, commercial, and industrial development on three sides.

The potential impacts of the Southern Alternative are more extensive than the Bareville Connector Alternative, including:

- Farmland in both Earl and East Earl Township would be directly impacted by roadway construction.
- The improved access provided by this alternative could generate development pressures on farmland in the Mill Creek Valley between New Holland Borough and Welsh Mountain to the south. The most susceptible areas would likely be at the four proposed interchange locations and along the roadways served by these interchanges (N. Hollander Road, New Holland Road, Ranck Road, and Rancks Church Road). Factors that could contribute to development pressures include existing development and sewer service areas located outside of the ELANCO South UGA.

The Future Land Use Map (Figure 5-4) designates the above lands as agricultural. A coordinated strategy is needed by PennDOT, Lancaster County, and the effected municipalities to maintain the area in predominantly agricultural use if one of the build alternatives is implemented (particularly the Southern Alternative). Elements of this strategy should include:

- Maintaining or adopting effective agricultural zoning in the Mill Creek Valley (and also effective conservation zoning on Welsh Mountain).
- Establishing the area as a high priority for Purchase of Development Rights (PDR). This will require increasing the amount of farmland covered by Agricultural Security Areas. Interchange locations should be the highest priorities for preservation.
- Establishing a Transfer of Development Rights (TDR) program. Following the model used in Warwick Township, development rights could be transferred from farmland to industrial lands in the ELANCO South UGA. Interchange locations should be the highest priorities for preservation.
- Working with local farmers to reduce or mitigate the direct impacts of roadway construction on farms located along the route of either alternative.

8. Community Facilities

8.1 Overview

ELANCO's community facilities greatly impact the region's quality of life and safety of its citizens. These community facilities include: utilities, emergency services, schools, healthcare institutions and recreation services. This chapter analyzes the current status of these facilities and services and makes recommendations for providing them as effectively as possible.

The region is served well by many types of community facilities. Assessing their operations and planning for future needs as part of the ELANCO Regional Plan is appropriate because most of the providers currently serve more than one municipality in the region. This offers the opportunity for more regional cooperation and sharing of resources.

The region's growing and changing population will need expanded and new community facilities. Community facility needs driven by these changes will vary from new school buildings to educate the region's children to different healthcare and recreation options for the region's growing population of retirees. The location of these community facilities is also an important planning consideration. Their location significantly impacts their accessibility and can strongly influence growth patterns in the region.

8.2 Strengths and Issues

The ELANCO region's community facilities are diverse in their operations. Figures 8-1 and 8-2 show the locations of existing community utilities (public sewer and water and facilities, respectively). The region's projected growth will create new demands on these important facilities and services. Strengths and issues for the region, in relation to this growth, are identified below.

Strengths

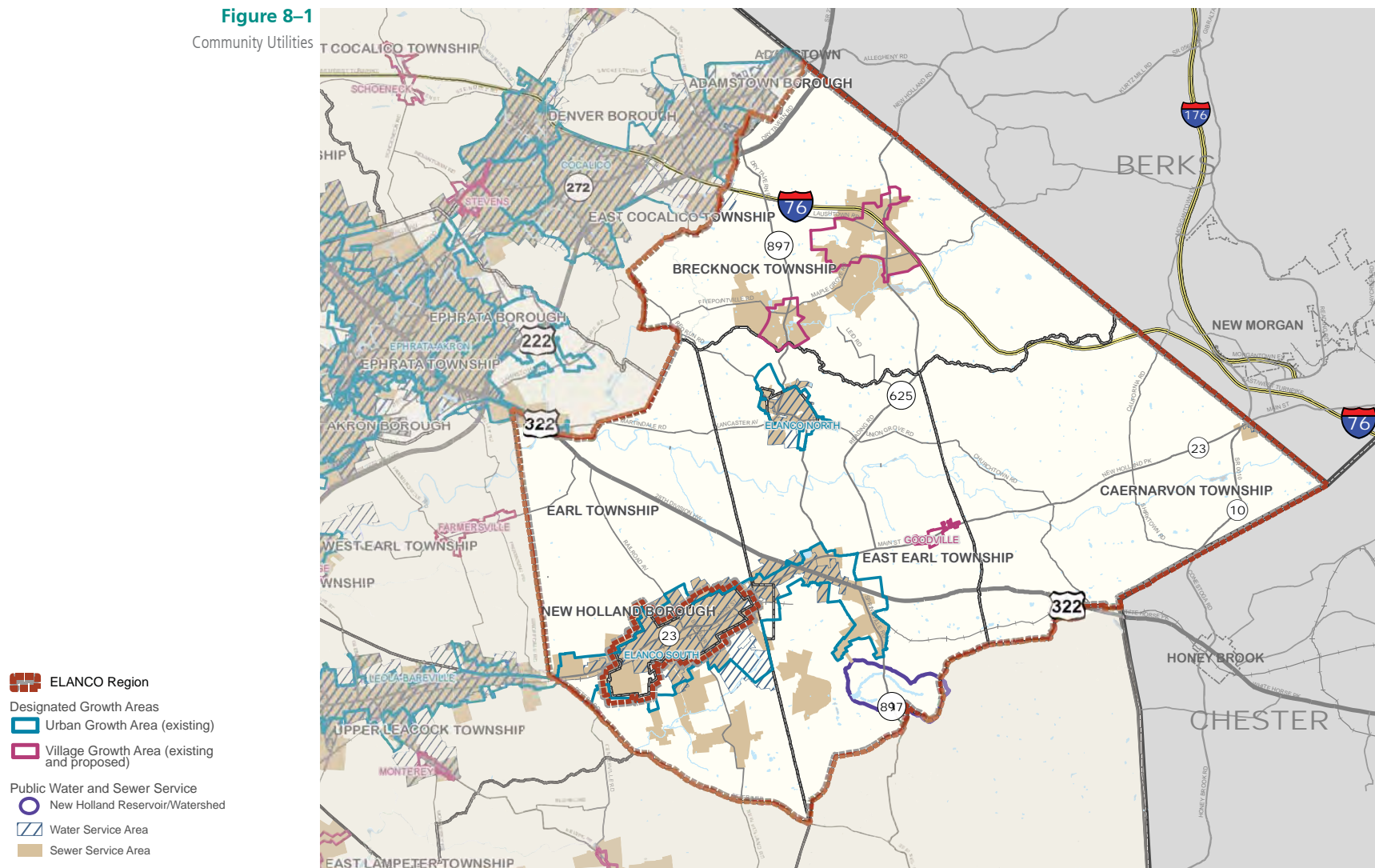
- The region's population provides strong support for community organizations. ELANCO has a strong spirit of volunteering.
- Police, fire and emergency services groups provide good coverage in the region.
- The ELANCO School District is highly regarded by local residents and businesses.
- Adequate water sources are available using ground and surface waters.
- The community is protecting its water supply through the Wellhead Protection Areas Management Program.
- Safe and reliable utilities are available in the region's growth areas.
- Several parks provide historic, natural, and open

space recreation, including Brubaker Park in Brecknock Township, Poole Forge in Caernarvon Township, Money Rocks County Park in Caernarvon and East Earl Townships, and the Community Park in Terre Hill Borough. New Holland Borough's Community Park and several athletic fields also serve the surrounding region.

- Lancaster County established a suggested standard for municipalities of 10 acres per 1,000 residents in the 1992 Regional Open Space Plan and has reaffirmed this standard in the current Green Infrastructure Plan process. In 2004, Caernarvon, Earl, and East Earl Townships and Terre Hill Borough prepared



Figure 8-1
Community Utilities



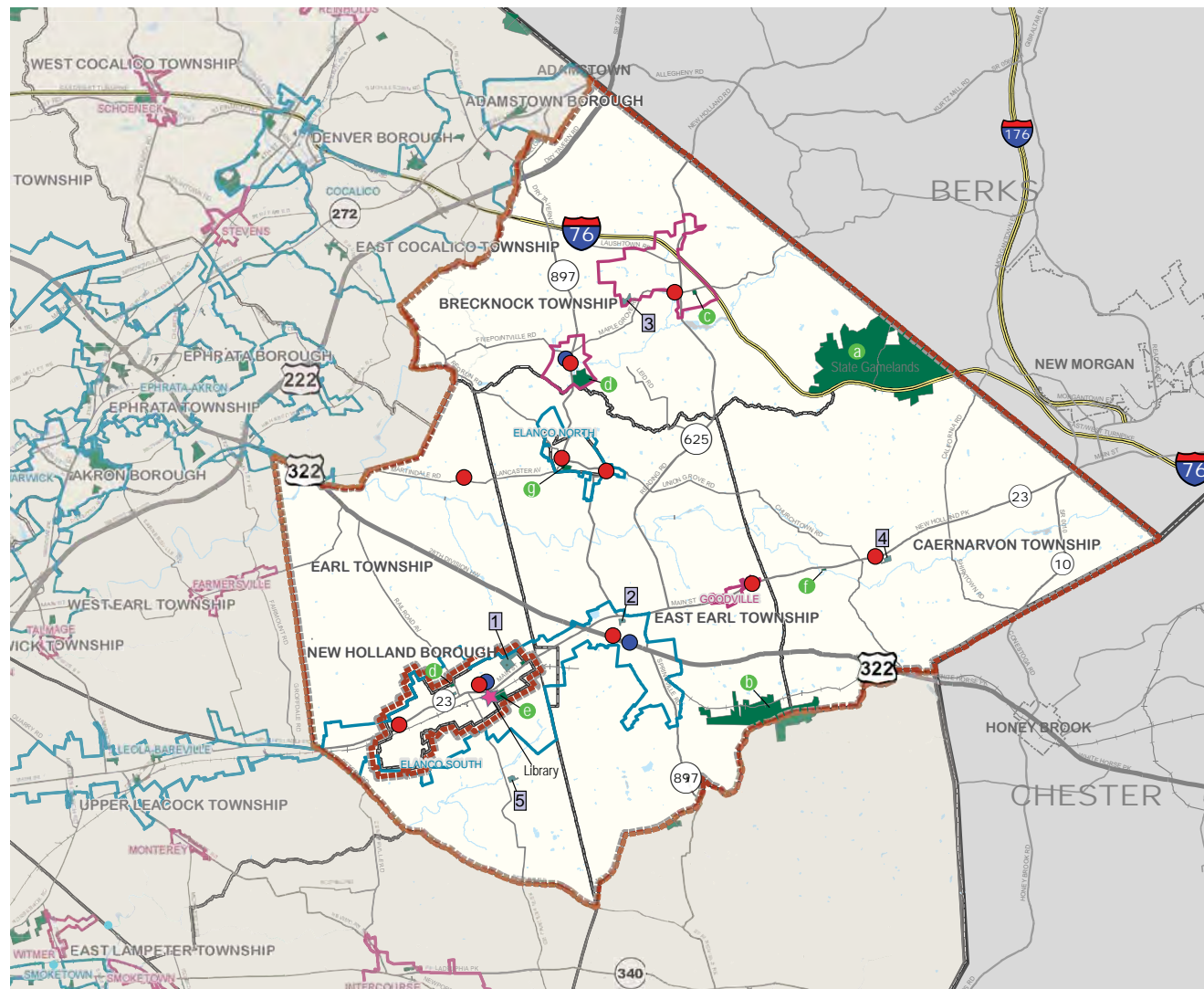
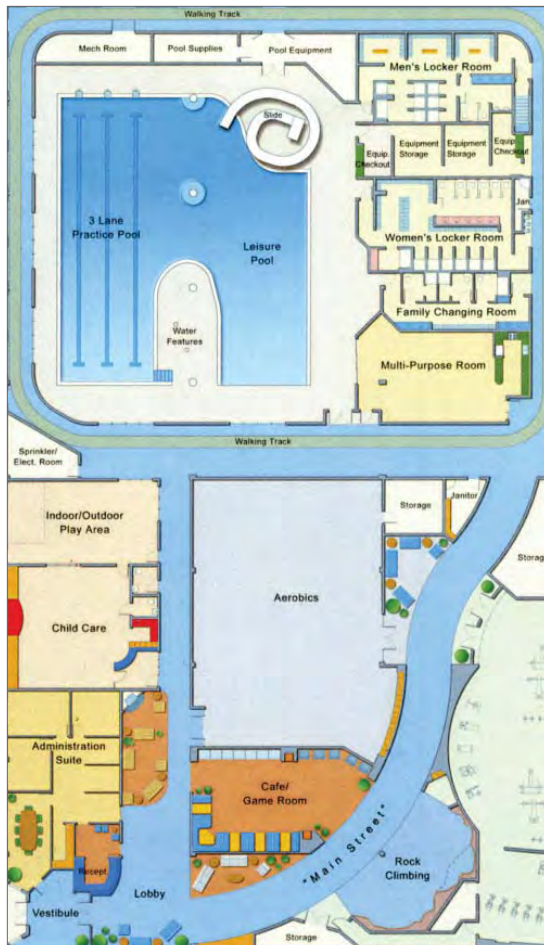


Figure 8-2

Parks and Community Facilities

- ELANCO Region
- Designated Growth Areas
 - Urban Growth Area (existing)
 - Village Growth Area (existing and proposed)
- Parks and Recreation**
 - Parks
 - a. State Gamelands #52
 - b. Money Rocks County Park
 - c. Bowmansville Memorial Field
 - d. Brubaker Park
 - e. Groff Memorial Park
 - f. New Holland Community Memorial Park
 - g. Poole Forge Park
 - h. Terre Hill Park and Community Center
- Public Schools**
 - Public Schools
 - 1. Garden Spot Middle School and High School
 - 2. Blue Ball Elementary School
 - 3. Brecknock Elementary School
 - 4. Caernarvon Elementary School (closed)
 - 5. New Holland Elementary School
- Eastern Lancaster Library
- Fire Districts
 - Bowmansville Fire Department
 - Blue Ball Fire Company
 - Caernarvon Township Fire Company
 - Fivepointville Fire Company
 - Goodville Fire Company
 - Liberty Fire Co New Holland Borough (2 Locations)
 - Martindale Fire Company
 - Terre Hill Fire Company
- Police and Municipal Buildings
 - Brecknock Township Municipal Buildings
 - East Earl Township Police Department
 - New Holland Borough Police Department



Proposed New Holland Recreation Center

the Recreation, Parks and Open Space Plan for the region. Recommendations include developing a mixed-use park in each of the three townships, investigating the possibility of a regional sports park, and undertaking a greenway feasibility study in the ELANCO region.

- The Eastern Lancaster County Library in New Holland Borough and the Adamstown Area Library in Adamstown serve the region.
- Clubs for regional sports and other recreational groups offer many options to meet people's interests.
- The New Holland Recreation Center is currently organized and fundraising to construct a new facility to serve the region. The new building will include a variety of recreation and community-oriented facilities.
- ELANCO's churches are very active in addressing many social and recreational needs. The region's Plain Sect population generally meets their needs through their religious community.

Issues

- Many opportunities exist for regional cooperation, but too many community efforts continue to be duplicated in individual municipalities.
- Equipment, training, and other operational costs for local police, fire, and emergency services are grow-

ing substantially and causing funding and staffing challenges. It is also becoming more difficult with people's busy schedules to recruit volunteers for local fire companies.

- Routes 23 and 322 are the only major east/west routes in the region and emergency response can be impacted when Route 23 in New Holland Borough is blocked.
- Several areas in the region have inconsistencies between Designated Growth Areas (DGAs) and their utility services areas (see Figure 8-1 for locations). These inconsistencies generally relate to the need to extend service outside of DGAs to serve preexisting development.
- Two new wells are needed in the region to supply additional water: one for the New Holland Water Authority to meet growing industrial usage in Earl and East Earl Townships within the next 25 years and the second to address greater water needs by the Blue Ball Water Authority.
- The Western Heights Water Authority in Earl Township needs to address high nitrate levels in an existing well.
- The Earl Township Sewer Authority is planning to expand the capacity of its plant to 998,000 gpd

by 2009 to meet treatment needs in the southern portion of the region.

- Connecting new developments to the infrastructure network of existing communities more cooperatively between municipalities. Interconnections between different utility authorities would help this situation.
- Portions of ELANCO are experiencing problems with on-lot sewage systems. This issue is a major challenge in Caernarvon Township. The Pennsylvania Department of Environmental Protection (DEP) has stated that on-lot management systems are not sufficient in several rural areas of the Township, but the Township does not support central sewage systems that could encourage growth in these locations. Other sewage management alternatives should be considered.
- On-site sewage disposal systems are also a problem in Goodville in East Earl Township. While there is an existing package treatment plant serving an industrial complex, it is not feasible to expand it to serve the entire village due to cost and environmental issues.
- No health facility, other than what is provided at Garden Spot Village, is available in the region, especially for emergency and trauma treatment.
- The ELANCO School District needs to expand at the Garden Spot High School, but adjacent land is not

affordable. Other recent school facilities have moved and/or been constructed outside of the region's towns and villages where they are only accessible in motorized vehicles. The school district recently closed the Caernarvon Elementary School in Churchtown.

- It is becoming very difficult for the ELANCO School District to accommodate the field needs for its own sports program and local youth athletic groups. Additional athletic fields are needed in the region.
- Trails and more non-sports activities for teens were identified in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan as top recreational priorities.
- The ELANCO School District reports that interest in cultural entertainment (e.g., the performing arts) is growing in the region.

8.3 Goals

ELANCO's goals for community facilities are presented below and provide general statements indicating the desired direction for the region over the next 25 years.

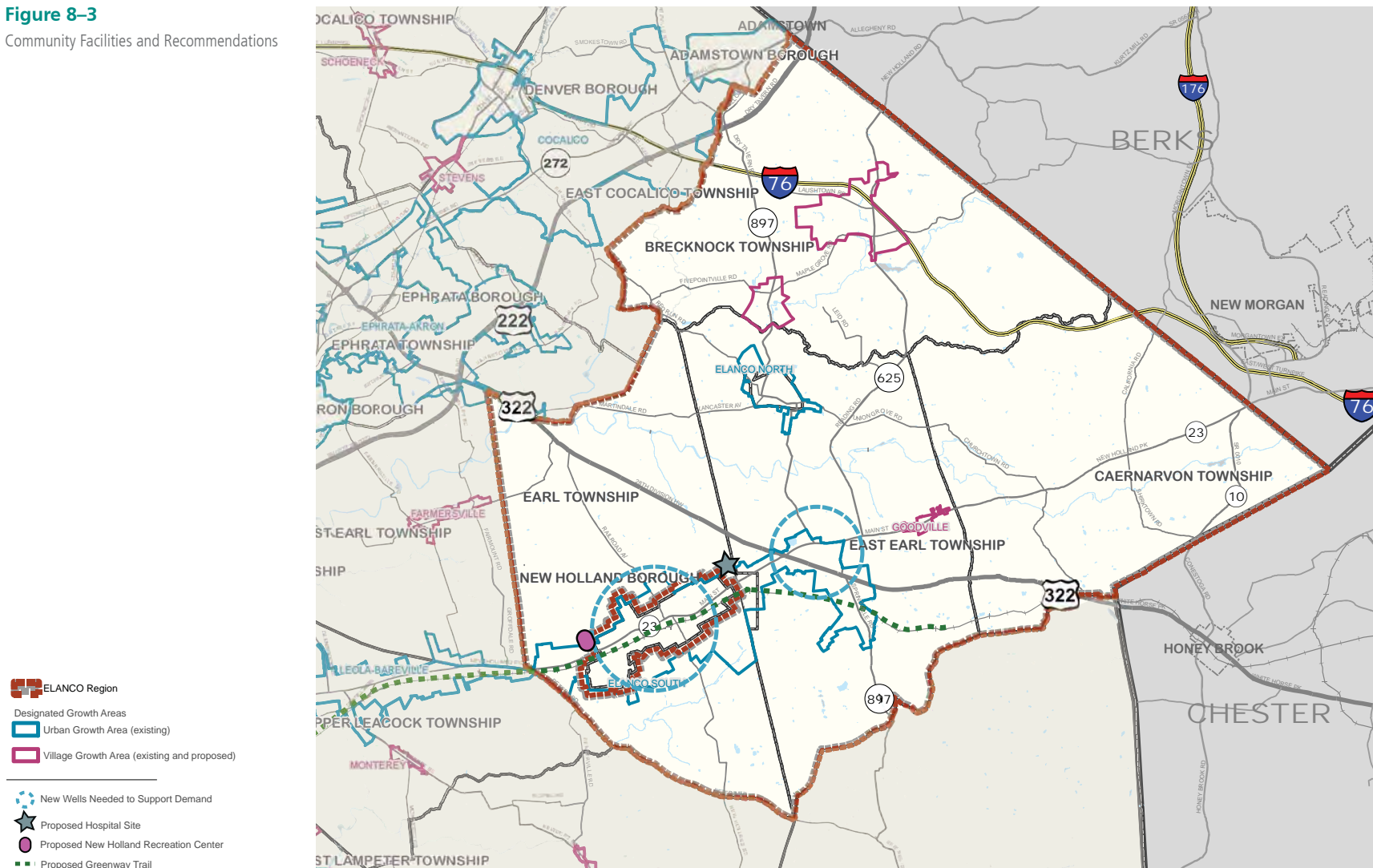
Community Facilities Goals

- Encourage the coordination of municipal services / facilities.
- Maintain and improve the region's water supply.

- Provide efficient, centralized sewer and water facilities within ELANCO's growth areas, and strongly restrict their use outside of designated growth areas.
- Identify methods to address wastewater treatment in areas not served by central facilities
- Identify methods to address wastewater treatment in areas not served by central facilities that are environmentally sensitive, cost effective, and do not promote undesired development.
- Seek a new healthcare facility offering fast care emergency and outpatient services to locate in the region.
- Support existing emergency services and improve their capacities to serve a growing population. Offer quality recreation options to meet the needs of the region's citizens.
- Provide a balance of convenient active and passive recreation sites, including a trail network, to serve local residents as outlined in the 2004 Eastern Lancaster County Recreation, Parks and Open Space Plan.
- Cooperate with the ELANCO School District and the region's other public institutions to enhance their facilities as important community focal points and promote pedestrian access in the region's existing communities.

Figure 8-3

Community Facilities and Recommendations



8.4 Strategies

The following strategies provide policy and regulatory direction for the municipalities in the region to pursue in order to implement the goals of the plan for community facilities.

- Pursue opportunities for joint training, equipment and other regional cooperation for ELANCO's police, fire and emergency services organizations. Evaluate the recommendations of the police study currently being completed for Caernarvon, Earl, East Earl, New Holland, and Terre Hill and the fire study being completed for the Blue Ball, Goodville, and Terre Hill Fire Companies.
- Expand municipal cooperation on road maintenance and identify additional services for joint municipal activities.
- Install two new wells to serve the growing needs of the ELANCO South Urban Growth Area. The New Holland Water Authority and the Blue Ball Water Authority should each provide a new well for their respective service areas as determined by future growth over the next 25 years. Siting of new wells should take into consideration the need to protect the water supply through the establishment of wellhead protection zones.
- Address high nitrate levels in an existing Western Heights Water Authority well through installation of a denitrification system.
- Continue implementation of the Wellhead Protection Areas Management Program prepared by Earl and East Earl Townships and New Holland and Terre Hill Boroughs. Consider expanding this program to address water supply issues in Brecknock and Caernarvon Townships.
- Promote development methods (e.g., conservation subdivisions, green roofs, and porous paving) to minimize impermeable surfaces and maximize groundwater recharge.
- Implement strategies such as natural resources protection ordinances to preserve the region's existing vegetation, especially on steep slope areas and in riparian corridors to protect water quality. (See Chapter 4, Agricultural, Natural and Historic Resources).
- Review municipal land development regulations and 537 plans for consistency with the land use and community facilities goals of this Plan, especially related to restricting centralized sewer and water facilities outside of the region's DGAs. Ensure that DGAs, zoning designations, and sewer and water service areas are as consistent as possible.
- Provide appropriate development densities within the region's DGAs to support central sewer and water utilities. The average residential density targets set by the Lancaster County Growth Management Element are 7.5 dwellings/net acre for Urban Growth Areas and 2.5 dwellings/net acre for Village Growth Areas.
- Promote sewage treatment systems that improve groundwater recharge, such as spray and drip irrigation systems. These systems should especially be encouraged in the region's designated rural areas.
- Continue to work with Lancaster General Hospital and/or Ephrata Community Hospital to locate a new facility providing fast care emergency and outpatient services in the ELANCO region. Local businesses and retirement centers have expressed interest in partnering in this effort.
- Explore the formation of a regional park board to better coordinate regional recreation needs and assess future regional park and trail facilities based on the recommendations of the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan. Develop open space and recreational policies and strategies for Brecknock Township, which was not included in the 2004 plan.
- Provide a community-level park in each of the region's municipalities to address the shortage of

athletic fields and offer other passive and active recreation activities.

- Require dedicated open space or cash-in-lieu of open space in new developments according to the standards of the Municipalities Planning Code. These open space requirements could provide the necessary resources for municipal community-level parks and/or offer important opportunities to create neighborhood-level parks in the region's growth areas. As an overall goal, strive to achieve the standard set by the Lancaster County Planning Commission of 10 acres of community and neighborhood parkland per 1,000 residents.
- Pursue the potential for a regional trail along a rail right-of-way that runs thru Money Rocks County Park and a possible Lancaster City to New Holland trail in conjunction with the proposed Route 23 improvements. Prepare a Community Pathways Plan to promote implementation of these trail initiatives and coordinate other local trail and bicycle/pedestrian connections.
- Support the proposed New Holland Recreation Center as a regional community resource.
- Work with the ELANCO School District to address space needs at the High School, and identify how their other facilities can reinforce the region's

neighborhoods and better serve as important community centers. Discuss the possibility of reinvesting in existing neighborhood and country schools and the co-location of school and other community facilities, such as recreation or cultural arts centers, in order to maximize the use and investment in these public buildings. Explore options for the future use of the Caernarvon Elementary School site that meet both School District and community needs.

9. Implementation

Plans are turned into reality by taking action. This chapter summarizes how the strategies recommended in Chapters 4 to 8 can be implemented by the individual municipalities in the ELANCO region. For each municipality, key issues for implementation are presented, followed by actions that can be taken to address the issues. The issues and actions are organized by Comprehensive Plan element.

The actions provided for each municipality are not intended as a prescriptive list, but rather as a guide to be used in defining priorities and work programs for moving forward with implementation in collaboration with the Lancaster County Planning Commission (LCPC). Implementation needs to move forward not only at the municipal level, but at the regional level as well. To accomplish this, the municipalities should enter into a **cooperative implementation agreement** pursuant to the provisions of Section 1104 of the Pennsylvania Municipalities Planning Code. A cooperative implementation agreement is a form of intergovernmental cooperative agreement that establishes the processes to be used and roles and responsibilities of the participating municipalities in implementing a multi-municipal (regional) plan. Implementation of the cooperative agreement makes the municipalities eligible for benefits such as priority consideration for state financial or technical assistance for projects consistent with the plan, a regional transfer of development rights (TDR) program, and a greater degree of protection from exclusionary zoning challenges by developers.

While the actions are listed individually by municipalities, a number of them involve cooperation at the regional level. This is particularly true of the community facility actions, which promote the concepts of regional collaboration and sharing of resources. Regional initiatives proposed by the plan include:

- **Regional TDR Program:** TDR is one of the key implementation tools recommended by the plan. The specific mechanisms whereby this tool is implemented in the ELANCO region will need to be developed by the municipalities working cooperatively with the LCPC. Although it is beyond the scope of the ELANCO Region Comprehensive Plan, the participating municipalities also recommend that the LCPC consider developing a countywide TDR program that would allow development rights to be transferred outside of the region to Lancaster City or other appropriate UGA.
- **Heritage Byways Program:** Several roadways, including PA 625, PA 897, PA 23, and US 322, are recommended for designation under the new Lancaster County Heritage Byways Program. These roadways traverse more than one municipality and designation would thus require joint action.
- **Other Transportation Initiatives:** The plan recommends municipal cooperation to implement recommendations of the Access Management Studies for Routes 23 and 322 that traverse Caernarvon, Earl,

and East Earl Townships. This plan also encourages adoption of aggressive land preservation and access management strategies at proposed access points if the PA 23 Southern Alternative or Bareville Alternative is implemented.

- **Watershed Management Plans:** The plan recommends that municipalities within the Conestoga and Mill Creek watersheds consider participating in regional watershed management plans.
- **Bike Routes:** The plan recommends consideration of a “Biking the Back Roads” route on roads with limited traffic and high scenic value. Such a route would likely traverse two or more municipalities and could be sponsored by Lancaster County as one of its designated bicycle tours. The plan also encourages PennDOT to improve PA State Bicycle Route S, which runs west-east through Earl, East Earl, and Caernarvon Townships, for bicyclists.
- **Housing:** Several regional housing initiatives are recommended, including beginning a discussion with the Plain Sect community regarding the housing needs of non-farming members of the community. Additionally the plan recommends municipalities adopt incentives for TND zoning standards in VGAs and incentives/benefits for local workforce housing.

- **Police, Fire, and Emergency Services:** The plan proposes regional cooperation and sharing of resources among the region's police, fire, and emergency services organizations.
- **Other Municipal Services:** The plan recommends municipal cooperation on road maintenance and identification of additional services for joint municipal activities (e.g., public water service).
- **Regional Park Board:** The plan proposes formation of an ELANCO Region Park Board to better coordinate and provide for regional recreation and open space needs based on the recommendations of the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan and the 2001 Brecknock Park and Open Space Plan. This board could also sponsor development of a regional green infrastructure plan in partnership with LCPC.
- **New Holland Recreation Center:** The plan recommends that the municipalities support development of the New Holland Recreation Center as a regional community resource.
- **ELANCO School District:** The plan recommends that the municipalities work with the ELANCO School District to determine how existing schools; planned closures schools, expansions of schools, or reinvestment in existing neighborhood or country schools; or new facilities can best complement and reinforce existing communities and neighborhoods.
- **Health Care:** The plan recommends that the communities continue to work with Lancaster General and/or Ephrata Community Hospital to locate a new facility providing fast care emergency and outpatient services in the ELANCO region. Locations currently under consideration are in the vicinity of the Earl/East Earl Township boundary.
- **Water Supply:** The plan supports continued implementation of the Wellhead Protection Areas Management Program prepared by Earl and East Earl Townships and New Holland and Terre Hill Boroughs.
- **Other Community Facilities:** Also recommended is the review of municipal land development regulations and 537 planning for consistency with the land use and community facilities goals of this plan, especially related to restricting centralized public sewer facilities outside of DGAs. To improve groundwater recharge, this plan recommends sewage treatment systems such as spray and drip irrigation systems, especially in Designated Rural Areas.

9.1 Brecknock Township

Agricultural, Natural and Historic Resources

Issues for Implementation:

- Some residential and commercial development has occurred in the AG and AG-2 Agricultural zoned areas.
- FP Floodplain district regulations only address the impacts of flooding on properties rather than the impacts of development on stream corridors.
- The slope regulations are limited in scope and have not effectively curtailed past development in steep slope areas of the Township.
- The FR Forest Recreational district permits limited residential development with a minimum lot size of 3 acres, which has the potential to produce sprawl development.
- Lack of historic resource protection may impact the character of historic towns and villages.

Actions:

- Adopt a regional transfer of development rights (TDR) program, which would establish Village Growth Areas (VGAs) as receiving areas.
- Enact a conservation development ordinance as an alternative to conventional subdivisions to allow development on smaller lots while maintaining large tracts

of open space, thereby protecting sensitive natural resources and potentially allowing farming operations to continue.

- Rather than limit resource protection to floodplains and steep slopes, adopt a comprehensive Natural Resource Protection Ordinance as a township-wide overlay district to protect multiple natural resources. The overlay could include the following elements:
 - » **Agricultural soils:** restrict non-agricultural development on prime agricultural soils.
 - » **Designated floodplain areas:** as with the current ordinance, protect development from flooding by limiting encroachment in designated floodplains and floodways.
 - » **Riparian (river and stream) corridors:** protect river and stream corridors by limiting development, including impervious surfaces, within a specified distance of riparian corridors.
 - » **Steep slopes:** improve current slope regulations by limiting development on slopes of at least 15%. Development pressure in these areas may be reduced with a regional TDR ordinance in place.
 - » **Wetlands:** restrict development in wetlands.
 - » **Woodlands:** enact regulations to limit removal of trees above a specified size and caliper, including

requirements to mitigate unavoidable issues.

- Adopt effective conservation zoning provisions in the FR Forest Recreational District to limit fragmentation of forest resources.
- Protect the rural landscapes and historic character of the Township, and celebrate its heritage through the following:
 - » Conduct a historic resource inventory.
 - » Adopt local preservation regulations through a zoning overlay using the Municipalities Planning Code, or create a historic district through the Pennsylvania Historic District Act. In either, regulations may be as lenient or as stringent as desired by the municipality. At a minimum, design guidelines and a demolition review process should be established.
 - » Consider determining if Bowmansville and Five-pointville are eligible for nomination to the National Register of Historic Places, and, if eligible, pursue the nomination process. There are no regulations associated with the National Register; it is a prestigious designation that can provide tax advantages for owners as well as the opportunity to celebrate Brecknock Township's heritage.

- Nominate PA 625 and PA 897 for the Lancaster County Heritage Byways Program to protect scenic landscapes in the region and County.
- Explore establishment of a greenway along Muddy Creek through land acquisition and easements as recommended in the 2001 Brecknock Township Park and Recreation Plan.

Land Use

Issues for Implementation:

- Significant amounts of land inside the proposed Bowmansville and Fivepointville Village Growth Areas (VGAs) are zoned Low Density Residential.
- The FR Forest Recreational district permits limited subdivision rights and a minimum lot size of 3 acres.

Actions:

- Adopt VGAs in Bowmansville and Fivepointville, and coordinate land use policy, zoning, and the provision of central utilities to limit sprawl outside of the VGAs. Allow for higher densities throughout the VGAs, or permit conservation development.
- Adopt effective conservation zoning provisions in the FR Forest Recreational district.

Transportation

Issues for Implementation:

- Two Corridors of Concern – PA 897 and PA 625 – traverse the township.
- Sidewalks are lacking in Bowmansville and Fivepointville.

Actions:

- Improve the PA 625 and Maple Grove Road intersection.
- Work with East Earl Township and Terre Hill Borough to develop and implement Access Management Plans for PA 625 and PA 897.
- Develop an official map to define transportation infrastructure in VGAs.
- Work towards establishing sidewalk continuity in Bowmansville and Fivepointville.
- Construct traffic-calming gateways at village entrances.
- Undertake projects – such as ensuring shoulders are a minimum of six to eight feet wide – to safely accommodate non-motorized vehicles along PA 625, PA 897, and Maple Grove Road (as necessary).
- Consider participating in a “Biking the Back Roads” route on roads with limited traffic and high scenic value in the ELANCO region.
- Implement countywide recommended cross sections for roads based on context-sensitive roadway design principles.

Housing

Issues for Implementation:

- Residential development has consumed substantial amounts of agricultural and natural resource lands in the Township, which negatively impacts these resources.
- Significant amounts of land inside Brecknock Township's proposed VGAs are zoned Low Density Residential.
- Baby Boomers will be downsizing, and their children will be seeking starter homes, which will increase demand in the region for single-family attached and multi-family housing styles to match their incomes and lifestyles.

Actions:

- Participate in a regional TDR program.
- Adopt VGAs in Bowmansville and Fivepointville.
- Consider permitting conservation development at the edges of the adopted VGAs.
- Allow for higher residential densities in the VGAs to accommodate future growth.
- Consider using Traditional Neighborhood Development (TND) zoning standards and incentives in the VGAs to promote a mix of housing types that are compatible with the existing character

of Bowmansville and Fivepointville.

Community Facilities

Issues for Implementation:

- Many opportunities exist for regional cooperation, but too many community efforts continue to be duplicated in individual municipalities.
- The Township has inconsistencies between its Village Growth Areas (VGAs) and its utility services areas.

Actions:

- Pursue opportunities for joint training, equipment, and other regional cooperation for ELANCO's police, fire, and emergency services organizations. Review the recommendations of the police study currently being completed for Caernarvon, Earl, and East Earl Townships and New Holland and Terre Hill Boroughs and the fire study being completed for the Blue Ball, Goodville, and Terre Hill Fire Companies.
- Expand municipal cooperation on road maintenance, and identify additional services for joint municipal activities.
- Consider expanding the Wellhead Protection Areas Management Program prepared by Earl and East Earl Townships and New Holland and Terre Hill Boroughs to address water supply issues in Brecknock Township.

- Promote development methods (e.g., conservation subdivisions, green roofs, and porous paving) to minimize impermeable surfaces and maximize groundwater recharge.
- Implement strategies such as natural resources protection ordinances to preserve existing vegetation, especially on steep slope areas and in riparian corridors to protect water quality.
- Review the Township's land development regulations and 537 planning for consistency with the land use and community facilities goals of this Plan, especially related to restricting centralized public sewer facilities outside of Brecknock Township's proposed VGAs. Ensure that VGAs, zoning designations, and utility service areas are as consistent as possible.
- Consider future provision of public water service to Brecknock Township's VGAs.
- Provide appropriate development densities within the Township's VGAs to support central sewer and water utilities. The average residential density target set by the Lancaster County Growth Management Element is 2.5 dwellings/net acre for Village Growth Areas.
- Promote sewage treatment systems that improve groundwater recharge, such as spray and drip irrigation systems. These systems should especially be encouraged in designated rural areas.

- Explore the formation of a regional park board to better coordinate regional recreation needs and assess future regional park and trail facilities based on the recommendations of the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan and Brecknock Township's 2001 Park and Recreation Plan.
- Require dedicated open space or cash-in-lieu of open space in new developments according to the standards of the Municipalities Planning Code. These open space requirements could provide the necessary resources for municipal community-level parks and/or offer important opportunities to create neighborhood-level parks in the Township's VGAs. As an overall goal, strive to achieve the standard set by the Lancaster County Planning Commission of 10 acres of community and neighborhood parkland per 1,000 residents.
- Support the proposed New Holland Recreation Center as a regional community resource.
- Work with the ELANCO School District to address how the Brecknock Elementary School (located at the edge of the Bowmansville VGA) and any other school facilities proposed in the future can reinforce the Township's neighborhoods and better serve as important community centers. Discuss the possibility of co-location of school and other community facilities, such as recreation or cultural arts centers, in order to maximize the use and investment in these public buildings.

9.2 Caernarvon Township

Agricultural, Natural and Historic Resources

Issues for Implementation:

- Some residential and commercial development has occurred in the AG Agricultural and OS/C Open Space/Conservation zoned areas.
- FP Floodplain district regulations only address the impacts of flooding on properties rather than the impacts of development on stream corridors.
- The slope requirements do not prohibit development on slopes of 15% or greater. Development is permitted as long as the minimum lot size is five acres.
- Preservation of existing woodlands regulations only apply to the AG Agricultural and OS/C Open Space/Conservation zoning districts.
- The Churchtown Village district has minimal design standards to protect community character. The zoning language requires only that the “architectural appearance of any proposed structure is compatible with the architectural character within the CV Churchtown Village District.”

Actions:

- Adopt a regional TDR program, to reduce development potential in requests in AG Agriculture and OS/C Open Space/Conservation districts.
- Enact a conservation development ordinance as an alternative to conventional subdivisions to allow development on smaller lots while maintaining large tracts of open space, thereby protecting sensitive natural resources and potentially allowing farming operations to continue.
- Rather than limit resource protection to floodplains, steep slopes and woodlands in select districts, adopt a comprehensive Natural Resource Protection Ordinance as a township-wide overlay district to protect multiple natural resources. The overlay could include the following elements:
 - » **Agricultural soils:** restrict non-agricultural development on prime agricultural soils.
 - » **Designated floodplain areas:** as with the current ordinance, protect development from flooding by limiting encroachment in designated floodplains and floodways.
 - » **Riparian (river and stream) corridors:** protect river and stream corridors by limiting development, including impervious surfaces,

within a specified distance of riparian corridors.

- » **Steep slopes:** improve current slope regulations by being more restrictive with development on steep slopes of 15% or greater. Development pressure in these areas may be reduced with a regional TDR ordinance in place.
- » **Wetlands:** restrict development in wetlands.
- » **Woodlands:** enact regulations to limit removal of trees above a specified size and caliper, including requirements to mitigate unavoidable issues.
- Consider participating in a regional Conestoga River watershed management plan.
- Protect the rural landscapes and historic character of the Township, and celebrate its heritage through the following:
 - » Conduct a historic resource inventory.
 - » Adopt local preservation regulations through a zoning overlay using the Municipalities Planning Code, or create a historic district through the Pennsylvania Historic District Act. In either, regulations may be as lenient or as stringent as desired by the municipality.
 - » At a minimum, design guidelines and a demolition review process should be established.

- » Churchtown has been determined eligible for the National Register of Historic Places. Consideration should be given to completion of the nomination process to get the village listed on the National Register. There are no regulations associated with the National Register; it is a prestigious designation that can provide tax advantages for owners as well as the opportunity to celebrate Caernarvon's heritage.
- » The Conestoga Rural Historic District has been determined to be eligible for the National Register of Historic Places. Support and encourage the nomination phase to list the district on the National Register.
- Adopt a village overlay district with design guidelines adjacent to Morgantown where Route 23 enters the Township.
- Nominate PA 23 and US 322 for the Lancaster County Heritage Byways Program to protect scenic landscapes in the region and County.

Land Use

Issues for Implementation:

- Several areas within the Conservation area on the Future Land Use Map are zoned for Low Density Residential development.
- Some residential and commercial development has occurred in agricultural and conservation areas.
- The CV Churchtown Village district has minimal design standards for protecting community character. The zoning language requires only that the "architectural appearance of any proposed structure is compatible with the architectural character within the CV Churchtown Village District."

Actions:

- Adopt a zoning district in the area adjacent to the Berks County line south of PA 23, which is currently zoned for commercial and higher density residential development. (See Figure 5-3 for examples the types of development that could be encouraged in this district).
- Update the CV Churchtown Village district with design guidelines similar to the proposed Village/Mixed-Use district, but which are more appropriate for Churchtown's character.

Transportation

Issues for Implementation:

- Two High Priority Corridors of Concern, PA 23 and US 322, traverse Caernarvon Township.
- Pennsylvania State Bicycle Route S bisects the Township, primarily along Churchtown Road and PA 23.
- RRTA Route 12 transit service currently terminates in New Holland Borough, to the west of Caernarvon Township.

Actions:

- Implement the recommendations of the PA 23 Access Management and Traffic Calming study, including gateway entrances to Churchtown that are sensitive to the local context.
- Reconstruct Narvon Road (widen, repave, install new drainage).
- Replace the one-lane existing bridge on California Road.
- Replace the one-lane existing bridge on Shirktown Road south of New Holland Pike.
- Work with RRTA and BARTA to study the extension of RRTA Route 12 transit service through Caernarvon Township to Morgantown in Berks County.

- Develop an official map to define transportation infrastructure in Churchtown.
- Ensure sidewalk continuity in Churchtown, including the connection to Pool Forge Park.
- Encourage PennDOT to undertake projects – such as ensuring shoulders are a minimum of six to eight feet wide – to safely accommodate non-motorized vehicles along PA 23 and US 322 (as necessary), in a manner that is sensitive to the local context.
- Encourage PennDOT to create a safe environment for cyclists along Pennsylvania State Bicycle Route S by widening shoulders and adding “Share the Road” signs and markings where possible.
- Consider participating in a “Biking the Back Roads” route on roads with limited traffic and high scenic value in the ELANCO region.
- Implement county-wide recommended cross sections for roads based on context-sensitive roadway design principles.

Housing

Issues for Implementation:

- Several areas within the Conservation area on the Future Land Use Map are zoned for Low Density Residential development.
- Caernarvon Township lacks a Designated Growth Area (DGA).
- Baby Boomers will be downsizing, and their children will be seeking starter homes, which will increase demand in the region for single-family attached and multi-family housing styles to match their incomes and lifestyles.
- There is need for conveniently located housing for the Plain Sect population that is not involved in farming.

Actions:

- Participate in a regional TDR program to allow proposed development to be transferred to DGAs outside of the township.
- Consider using Traditional Neighborhood Development incentives and design requirements in the Township’s crossroads communities to promote a mix of housing types that are compatible with each community’s character.

- Adopt a village overlay zoning district in the area adjacent to the Berks County line and Morgantown just south of PA 23, which is currently zoned for commercial and higher density residential development. (See Figure 5-3 for examples of the type of development that could be encouraged in this district).
- Initiate discussion with the Plain Sect community regarding the possibility of a program and/or district to meet the housing needs of non-farming members.

Community Facilities

Issues for Implementation:

- Many opportunities exist for regional cooperation, but too many community efforts continue to be duplicated in individual municipalities.
- Portions of Caernarvon Township are experiencing problems with on-lot sewage systems. This issue is a major challenge for the Township. The Pennsylvania Department of Environmental Protection (DEP) has stated that on-lot management systems are not sufficient in several rural areas of the Township, but the Township does not support central sewage systems that could encourage growth in these locations.
- The ELANCO School District recently closed the Caernarvon Elementary School in Churchtown. Other recent school facilities in the region have been

relocated and/or constructed outside of towns and villages where they are only accessible in motorized vehicles.

- It is becoming very difficult for the ELANCO School District to accommodate the field needs for its own sports program and local youth athletic groups. Additional athletic fields are needed.
- Trails and more non-sports activities for teens were identified in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan as top recreational priorities.
- The ELANCO School District reports that interest in cultural entertainment (e.g., the performing arts) is growing in the region.

Actions:

- Pursue opportunities for joint training, equipment and other regional cooperation for ELANCO's police, fire, and emergency services organizations. Evaluate the recommendations of the police study currently being completed for Caernarvon, Earl, and East Earl Townships and New Holland and Terre Hill Boroughs and the fire study being completed for the Blue Ball, Goodville, and Terre Hill Fire Companies.
- Expand municipal cooperation on road maintenance and identify additional services for joint municipal

activities.

- Consider expanding the Wellhead Protection Areas Management Program prepared by Earl and East Earl Townships and New Holland and Terre Hill Boroughs to address water supply issues in Caernarvon Township.
- Promote development methods (e.g., conservation subdivisions, green roofs, and porous paving) to minimize impermeable surfaces and maximize groundwater recharge.
- Implement strategies such as natural resources protection ordinances to preserve existing vegetation, especially on steep slope areas and in riparian corridors to protect water quality.
- Review the Township's land development regulations and 537 planning for consistency with the land use and community facilities goals of this Plan, especially related to restricting centralized sewer and water facilities outside of the region's DGAs.
- Promote sewage treatment systems that improve groundwater recharge, such as spray and drip irrigation systems. These systems should especially be encouraged in designated rural areas.
- Explore the formation of a regional park board to better coordinate regional recreation needs and as-

sess future regional park and trail facilities based on the recommendations of the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan and Brecknock Townships's 2001 Park and Recreation Plan.

- As proposed in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan, provide a community-level park in Caernarvon Township to address the shortage of athletic fields and offer other passive and active recreation activities.
- Require dedicated open space or cash-in-lieu of open space in new developments according to the standards of the Municipalities Planning Code. These open space requirements could provide the necessary resources for municipal community-level parks and/or offer important opportunities to create neighborhood-level parks. As an overall goal, strive to achieve the standard set by the Lancaster County Planning Commission of 10 acres of community and neighborhood parkland per 1,000 residents.
- Support the proposed New Holland Recreation Center as a regional community resource.
- Explore options for the future use of the Caernarvon Elementary School site that meet both School District and community needs.

9.3 Earl Township

Agricultural, Natural and Historic Resources

Issues for Implementation:

- Some residential and commercial development has occurred in the AG Agricultural zoned areas.
- A small portion of Welsh Mountain is located in Earl Township. This area is currently zoned RR Rural Residential, which permits residential development at a minimum lot size of one acre. Additionally, there are no steep slope provisions in the ordinance to limit development on this sensitive resource.
- The Cluster Development provisions apply only to the R Residential District, which is located inside the UGA. Some areas adjacent to but outside the UGA are zoned RR Rural Residential or AG Agriculture and are not eligible for the cluster option and have public sewer service.
- Lack of historic resource protection may impact the character of historic towns and villages.

Actions:

- Adopt a regional TDR program, which would establish the UGA as a receiving area. This program could provide incentives for developers to direct growth into growth areas and reduce development in the AG

district.

- Apply the Cluster Development option to the RR district where served by public sewer. Also consider applying the option to AG zoned areas that are adjacent to the UGA and served by public sewer.
- Adopt a comprehensive Natural Resource Protection Ordinance as a township-wide overlay district to protect multiple natural resources. The overlay could include the following elements:
 - » **Agricultural soils:** restrict non-agricultural development on prime agricultural soils.
 - » **Designated floodplain areas:** as with the current ordinance, restrict development in flood hazard zones.
 - » **Riparian (river and stream) corridors:** protect river and stream corridors by limiting development, including impervious surfaces, within a specified distance of riparian corridors.
 - » **Steep slopes:** Restrict development on steep slopes of 15% or greater. Development pressure in these areas may be reduced with a regional TDR ordinance in place.
 - » **Wetlands:** restrict development in wetlands.
 - » **Woodlands:** enact current regulations to limit

removal of trees above a specified size and caliper throughout the Township, including requirements to mitigate unavoidable issues.

- Consider participating in regional Conestoga River and Mill Creek watershed management plans.
- Protect the rural landscapes and historic character of the Township and celebrate its heritage through the following:
 - » Conduct a historic resource inventory.
 - » Adopt local preservation regulations through a zoning overlay using the Municipalities Planning Code or create a historic district through the Pennsylvania Historic District Act. In either, regulations may be as lenient or as stringent as desired by the municipality. At a minimum, design guidelines and a demolition review process should be established.
 - » Support and encourage the nomination phase of the Conestoga Rural Historic District and the Mill Creek Rural Historic District to the National Register of Historic Places. Both of these districts were determined to be eligible previously. There are no regulations associated with the National Register; it is a prestigious designation that can provide tax advantages for owners as well as the opportunity to celebrate Earl's heritage.

- Nominate PA 23 and US 322 for the Lancaster County Heritage Byways Program to protect scenic landscapes in the region and County.

Land Use

Issues for Implementation:

- Several access points are proposed along the UGA border for the PA 23 southern alternative. If implemented, this alternative will have significant land use implications for the Township.

Actions:

- Adopt aggressive land preservation and access management strategies at proposed access points if the PA 23 Southern Alternative or Bareville Alternative is implemented. Strategies may include TDR, conservation easements, official map, land acquisition, and conservation development.

Transportation

Issues for Implementation:

- Two High Priority Corridors of Concern, PA 23 and US 322, traverse Earl Township.
- North Railroad Avenue and New Holland Road form another Corridor of Concern.
- The PA Route 23 EIS is examining several alignments through Earl Township. If the Southern Alternative or

the Bareville Alternative is chosen, either route would add a through roadway south of PA Route 23.

- Pennsylvania State Bicycle Route S bisects the township primarily along Hollander and Weaverland Roads.
- RRTA Route 12 transit service currently terminates in New Holland Borough.
- Earl Township is located between New Holland Borough and Ephrata Borough. These two boroughs are significant employment and population centers, yet there is no public transportation connection between the two.
- Two functionally obsolete bridges are located along South Custer Avenue.
- Shirk and Hollander Roads experience heavy north and southbound traffic; however neither road has a shoulder.
- Sidewalks are sporadic within the ELANCO South UGA and the Crossroad Communities and may be in poor condition.

Actions:

- Realign the intersection of US 322 and N. Railroad Avenue, and install a new traffic signal.
- Realign the intersection of PA 23, Peters Road, and Voganville Road.

- Implement recommendations from the US 322 Access Management Plan.
- Work with New Holland Borough to develop an Access Management Plan for PA 23 west of Blue Ball.
- Work with RRTA to study the extension of RRTA Route 11 transit service from Ephrata Township to New Holland Borough or a point on the PA Route 23 Corridor.
- Study and implement an alignment for the proposed New Holland/Lancaster City multi-use connector path.
- Develop an official map to define transportation infrastructure in the ELANCO South UGA and the Township's Crossroad Communities.
- Work towards establishing sidewalk continuity in the ELANCO South UGA and the Crossroad Communities.
- Undertake projects – such as ensuring shoulders are a minimum of six to eight feet wide – to safely accommodate non-motorized vehicles along the Township's major roads (as necessary).
- Encourage PENNDOT to ensure a safe environment for cyclists along Pennsylvania State Bicycle Route S by widening shoulders adding "Share the Road" signs and markings where possible.
- Consider participating in a "Biking the Back Roads"

route on roads with little traffic and high scenic value in the ELANCO region.

- Construct traffic-calming gateways at community entrances.
- Implement county-wide recommended cross sections for roads based on context-sensitive roadway design principles.
- Consider replacing obsolete bridges located at South Custer Avenue to conform to the existing roadway.
- Add a paving shoulder and white edge line to delineate the cartway on Shirk Road and Holland Road.
- Review the need to replace and/or extend sidewalks within the ELANCO South UGA and Crossroad Communities in the future.

Housing

Issues for Implementation:

- Some residential development has occurred in the Township's rural areas.
- Baby Boomers will be downsizing, and their children will be seeking starter homes, which will increase demand in the region for single-family attached and multi-family housing styles to match their incomes and lifestyles.
- There is a need for conveniently located housing for the

Plain Sect population not involved in farming.

Actions:

- Participate in a regional TDR program, which would establish the ELANCO South UGA as a receiving area.
- Apply the Cluster Development option to the RR Rural Residential district where served by public sewer. Also consider applying the option to AG Agricultural zoned areas that are adjacent to the UGA and served by public sewer.
- Use TND incentives and design requirements in the Township's UGA to promote a mix of housing types that are compatible with the existing character of the community.
- Encourage the region's industries to create local workforce housing benefits and incentives.
- Seek improved local housing opportunities for workers in the region's industries.
- Initiate discussion with the Plain Sect community regarding the possibility of a program and/or district to meet the housing needs of non-farming members of the Plain Sect community.

Community Facilities

Issues for Implementation:

- Many opportunities exist for regional cooperation, but too many community efforts continue to be duplicated in individual municipalities.
- Several areas in the Township have inconsistencies between the ELANCO South Urban Growth Area (UGA) and utility service areas. These inconsistencies generally relate to the need to extend service outside of the UGA to serve preexisting development.
- A new well is needed for the New Holland Water Authority to meet growing industrial usage in both Earl and East Earl Townships within the next 25 years.
- An existing Western Heights Water Authority well has high nitrate levels.
- The Earl Township Sewer Authority is planning to expand the capacity of its plant to 998,000 gpd by 2009 to meet treatment needs in the southern portion of the region.
- Connecting new developments to the infrastructure network of existing communities should be done more cooperatively between municipalities.
- No health facility, other than what is provided at Garden Spot Village, is available in the region, especially for emergency and trauma treatment.

- The ELANCO School District needs to expand at the Garden Spot High School, but adjacent land is not affordable. Other recent school facilities have moved and/or been constructed outside of the region's towns and villages where they are only accessible in motorized vehicles.
- It is becoming very difficult for the ELANCO School District to accommodate the field needs for its own sports program and local youth athletic groups. Additional athletic fields are needed.
- Trails and more non-sports activities for teens were identified in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan as top recreational priorities.
- The ELANCO School District reports that interest in cultural entertainment (e.g., the performing arts) is growing in the region.

Actions:

- Pursue opportunities for joint training, equipment, and other regional cooperation for ELANCO's police, fire, and emergency services organizations. Evaluate the recommendations of the police study currently being completed for Caernarvon, Earl, and East Earl Townships and New Holland and Terre Hill Boroughs and the fire study being completed for the Blue Ball, Goodville, and Terre Hill Fire Companies.
- Expand municipal cooperation on road maintenance and identify additional services for joint municipal activities.
- In cooperation with the New Holland Water Authority, install an additional well as growth dictates in the ELANCO South Urban Growth Area over the next 25 years.
- Address high nitrate levels in an existing Western Heights Water Authority well through installation of a denitrification system.
- Continue implementation of the Wellhead Protection Areas Management Program prepared by Earl and East Earl Townships and New Holland and Terre Hill Boroughs.
- Promote development methods (e.g., conservation subdivisions, green roofs, and porous paving) to minimize impermeable surfaces and maximize groundwater recharge.
- Implement strategies such as natural resources protection ordinances to preserve existing vegetation, especially on steep slope areas and in riparian corridors to protect water quality.
- Review the Township's land development regulations and 537 planning for consistency with the land use and community facilities goals of this Plan, especially related to restricting centralized sewer and water facilities outside of the ELANCO South UGA. Ensure that the UGA, zoning designations, and sewer and water service areas are as consistent as possible.
- Provide appropriate development densities within the Township's UGA to support central sewer and water utilities. The average residential density target set by the Lancaster County Growth Management Element is 7.5 dwellings/net acre for Urban Growth Areas.
- Promote sewage treatment systems that improve groundwater recharge, such as spray and drip irrigation systems. These systems should especially be encouraged in designated rural areas.
- Continue to work with Lancaster General Hospital and/or Ephrata Community Hospital to locate a new facility providing fast care emergency and outpatient

services in the ELANCO region. Local businesses and retirement centers have expressed interest in partnering in this effort.

- Explore the formation of a regional park board to better coordinate regional recreation needs and assess future regional park and trail facilities based on the recommendations of the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan and Brecknock's 2001 Park and Recreation Plan.
- As proposed in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan, create a community-level park in Earl Township to address the shortage of athletic fields and offer other passive and active recreation activities.
- Require dedicated open space or cash-in-lieu of open space in new developments according to the standards of the Municipalities Planning Code. These open space requirements could provide the necessary resources for municipal community-level parks and/or offer important opportunities to create neighborhood-level parks in the Township's growth areas. As an overall goal, strive to achieve the standard set by the Lancaster County Planning Commission of 10 acres of community and neighborhood parkland per 1,000 residents.
- Pursue the potential for a regional trail along a rail right-of-way that runs thru Money Rocks County Park and a possible Lancaster City to New Holland trail in conjunction with the proposed Route 23 improvements. Prepare a Community Pathways Plan to promote implementation of these trail initiatives and coordinate other local trail and bicycle/pedestrian connections.
- Support the proposed New Holland Recreation Center as a regional community resource.
- Work with the ELANCO School District to address space needs at the High School, and identify how existing facilities and proposed facility expansions can reinforce the region's neighborhoods and better serve as important community centers. Discuss the possibility of co-location of school and other community facilities, such as recreation or cultural arts centers, in order to maximize the use and investment in these public buildings.

9.4 East Earl Township

Agricultural, Natural and Historic Resources

Issues for Implementation:

- Some residential and commercial development has occurred in the AG Agricultural and CO Conservation/Open Space zoned areas.
- Unlike the AG Agriculture district, the CO Conservation/ Open district does not include sliding scale density requirements to limit residential development. The minimum lot size of 3 acres could lead to sprawl development in the sensitive Welsh Mountain Region.
- The Open Space Neighborhood Option applies only to the RM Residential Medium zoning district.
- The steep slope requirements do not prohibit development on lots with an average slope of 15% or greater. Development is permitted on a percentage basis – no more than 30% of a tract of land with an average slope of 15 – 25% can be developed and no more than 15% of a tract of land with an average slope over 25% can be developed.
- Lack of historic resource protection may impact the character of historic villages.

Actions:

- Adopt a regional TDR program, which would establish UGAs and VGAs as receiving areas. This program could provide incentives for developers to direct growth into Designated Growth Areas and reduce development potential in AG and CO districts.
- Apply the Open Space Neighborhood Option to the RL district, at least in RL zoned areas that are adjacent to UGAs and VGAs and are served by public sewer.
- Rather than provide separate resource protection regulations to floodplains, steep slopes and woodlands, adopt a comprehensive Natural Resource Protection Ordinance as a township-wide overlay district to protect multiple natural resources. The overlay could include the following elements:
 - » **Agricultural soils:** restrict non-agricultural development on prime agricultural soils.
 - » **Designated floodplain areas:** as with the current ordinance, restrict development in flood hazard zones.
 - » **Riparian (river and stream) corridors:** protect river and stream corridors by limiting development, including impervious surfaces, within a specified distance of riparian corridors.
 - » **Steep slopes:** improve current slope regulations

by being more restrictive with development on steep slopes of 15% or greater. Development pressure in these areas may be reduced with a regional TDR ordinance in place.

- » **Wetlands:** restrict development in wetlands.
- » **Woodlands:** include current regulations to prohibit removal of trees of a specified size and caliper throughout the Township.
- Consider participating in regional Conestoga River and Mill Creek watershed management plans.
- Consider Goodville for historic district designation and develop specific historic district design standards to ensure preservation of historic character. Another option is to adopt a Neighborhood Conservation District, which would provide greater range and flexibility in preservation than what is typically afforded by locally designated historic districts. At a minimum, develop more specific design guidelines to more effectively protect the existing historic character of Goodville, as well as Union Grove and Blue Ball.
- Protect the rural landscapes and historic character of the Township, and celebrate its heritage through the following:
 - » Conduct a historic resource inventory.
 - » Adopt local preservation regulations through a

zoning overlay using the Municipalities Planning Code or create a historic district through the Pennsylvania Historic District Act. In either, regulations may be as lenient or as stringent as desired by the municipality. At a minimum, design guidelines and a demolition review process should be established.

- » Support and encourage the nomination phase of the Conestoga Rural Historic District, the Goodville Area Historic District and the Mill Creek Rural Historic District to the National Register of Historic Places. All of these districts were determined to be eligible previously. There are no regulations associated with the National Register; it is a prestigious designation that can provide tax advantages for owners as well as the opportunity to celebrate East Earl's heritage.
- » (Note: The Goodville Area Historic District has already been determined to be eligible for the National Register. As it is completely inside the proposed Conestoga Rural Historic District it would be necessary to consult with PHMC, the state bureau for historic preservation, to determine if they should be nominated separately or nominated as a whole.)
- Nominate PA 23, PA 625, PA 897, and US 322 for the Lancaster County Heritage Byways Program to

protect scenic landscapes in the region and County.

Land Use

Issues for implementation:

- Several areas inside the UGA are zoned Low Density Residential and Agriculture, which is inconsistent with the Future Land Use Map.
- Several access points are proposed along the UGA border for the PA 23 Southern Alternative. If implemented, this will have significant land use implications for the Township.

Actions:

- Rezone areas within the UGA to be consistent with the Future Land Use Map.
- Adopt aggressive land preservation and access management strategies at proposed access points if the PA Southern Alternative is implemented. Strategies may include TDR, conservation easements, adoption of an official map, land acquisition, and conservation development.

Transportation

Issues for Implementation:

- Two High Priority Corridors of Concern, PA 23 and US 322, traverse East Earl Township.
- PA 897 and 625 form other Corridors of Concern in the Township.
- Several busy intersections in East Earl Township are misaligned or lack turn lanes and stoplights.
- The PA Route 23 EIS is examining several alignments including the Southern Alternative, which would run through East Earl Township. If the Southern Alternative is chosen, the route would add a high capacity road corridor to a portion of the Township.
- Pennsylvania State Bicycle Route S bisects the township along Weaverland Road.
- RRTA Route 12 transit service currently terminates just before East Earl Township in New Holland Borough.
- East Earl Township straddles the area between New Holland Borough and Ephrata Borough. These two boroughs are significant employment and population centers, yet there is no public transportation connection between the two.

Actions:

- Improve, realign, add turn lanes, and/or add stop-lights while maintaining adequate shoulders at the following intersections to reduce turning movements and improve traffic flow:
 - » PA 897 with US 322
 - » US 322 with PA 23 at Blue Ball Square
 - » PA 23 with PA 897
- Construct new roads to connect other busy roads in East Earl Township:
 - » Create a new road west of East Earl Road to bypass the residential section of East Earl Road by connecting Toddy Drive to Witmer Road south of US 322.
 - » Connect PA 897 to Musser Road by building a new road between US 322 and PA 23.
- Develop Access Management Plans for the Township's Corridors of Concern in conjunction with Earl Township, New Holland Borough, and Terre Hill Borough.
- Work with RRTA to study the extension of Route 12 transit service from New Holland Borough to at least Shady Maple and perhaps beyond to Goodville or Morgantown.
- Work with RRTA to study the extension of Route 11 transit service from Ephrata to New Holland Borough or a point on the PA Route 23 Corridor such as Shady Maple.
- Develop an official map to define transportation infrastructure in Designated Growth Areas and Crossroad Communities.
- Ensure sidewalk continuity in the ELANCO South and ELANCO North Urban Growth Areas, Goodville, and Union Grove.
- Undertake projects – such as ensuring shoulders are a minimum of six to eight feet wide – to safely accommodate non-motorized vehicles along the Township's major roads (as necessary).
- Construct traffic-calming gateways at community entrances.
- Ensure a safe environment for cyclists along Pennsylvania State Bicycle Route S by widening shoulders, adding "Share the Road" signs and markings where possible.
- Consider participating in a "Biking the Back Roads" route on roads with limited traffic and high scenic value in the ELANCO region.
- Implement countywide recommended cross sections for roads based on context-sensitive roadway design principles.

Housing**Issues for Implementation:**

- Some residential development has occurred in the Township's rural areas.
- Baby Boomers will be downsizing, and their children will be seeking starter homes, which will increase demand in the region for single-family attached and multi-family housing styles to match their incomes and lifestyles.
- There is a need for conveniently located housing for the Plain Sect population not involved in farming.

Actions:

- Participate in a regional TDR program, which would establish UGAs and VGAs as receiving areas.
- Apply the Open Space Neighborhood Option to the RL district, at least in RL zoned areas that are adjacent to UGAs and VGAs and are served by public sewer.
- Use Traditional Neighborhood Development incentives and design requirements in the Township's Designated Growth Areas to promote a mix of housing types that are compatible with the existing character of the community.
- Encourage the region's industries to create local workforce housing benefits and incentives.

- Seek improved local housing opportunities for workers in the region's industries.
- Initiate discussion with the Plain Sect community regarding the possibility of a program and/or district to meet the housing needs of non-farming members of the Plain Sect community.

Community Facilities

Issues for Implementation:

- Many opportunities exist for regional cooperation, but too many community efforts continue to be duplicated in individual municipalities.
- Several areas in the Township have inconsistencies between Designated Growth Areas (DGAs) and their utility services areas. These inconsistencies generally relate to the need to extend service outside of DGAs to serve preexisting development.
- An additional well is needed to address greater water needs by the Blue Ball Water Authority.
- Connecting new developments to the infrastructure network should be done more cooperatively between municipalities.
- On-site sewage disposal systems are a problem in Goodville. While there is an existing package treatment plant serving an industrial complex, it is not feasible to expand it to serve the entire village due to cost and environmental issues.
- No health facility, other than what is provided at Garden Spot Village, is available in the region, especially for emergency and trauma treatment.
- Recent school facilities have moved and/or been constructed outside of the region's towns and villages, where they are only accessible in motorized vehicles.
- It is becoming very difficult for the ELANCO School District to accommodate the field needs for its own sports program and local youth athletic groups. Additional athletic fields are needed.
- Trails and more non-sports activities for teens were identified in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan as top recreational priorities.
- The ELANCO School District reports that interest in cultural entertainment (e.g., the performing arts) is growing.

Actions:

- Pursue opportunities for joint training, equipment, and other regional cooperation for ELANCO's police, fire, and emergency services organizations. Evaluate the recommendations of the police study currently being completed for Caernarvon, Earl, and East Earl Townships and New Holland and Terre Hill Borough and the fire study being completed for the Blue Ball, Goodville, and Terre Hill Fire Companies.
- Expand municipal cooperation on road maintenance and identify additional services for joint municipal activities.
- Work with the Blue Ball Water Authority to install an additional well for the growing needs of the ELANCO South Urban Growth Area.
- Continue implementation of the Wellhead Protection Areas Management Program prepared by Earl and East Earl Townships and New Holland and Terre Hill Boroughs.
- Promote development methods (e.g., conservation subdivisions, green roofs, and porous paving) to minimize impermeable surfaces and maximize groundwater recharge.

- Implement strategies such as natural resources protection ordinances to preserve existing vegetation, especially on steep slope areas and in riparian corridors to protect water quality.
- Review the Township's land development regulations and 537 planning for consistency with the land use and community facilities goals of this Plan, especially related to restricting centralized sewer and water facilities outside of the region's DGAs. Ensure that DGAs, zoning designations, and sewer and water service areas are as consistent as possible.
- Provide appropriate development densities within the Township's DGAs to support central sewer and water utilities. The average residential density targets set by the Lancaster County Growth Management Element are 7.5 dwellings/net acre for Urban Growth Areas and 2.5 dwellings/net acre for Village Growth Areas.
- Promote sewage treatment systems that improve groundwater recharge, such as spray and drip irrigation systems. These systems should especially be encouraged in designated rural areas.
- Continue to work with Lancaster General Hospital and/or Ephrata Community Hospital to locate a new facility providing fast care emergency and outpatient services in the ELANCO region. Local businesses and retirement centers have expressed interest in partnering in this effort.
- Explore the formation of a regional park board to better coordinate regional recreation needs and assess future regional park and trail facilities based on the recommendations of the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan and Brecknock Township's 2001 Park and Recreation Plan.
- As proposed in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan, create a community-level park in East Earl Township to address the shortage of athletic fields and offer other passive and active recreation activities.
- Require dedicated open space or cash-in-lieu of open space in new developments according to the standards of the Municipalities Planning Code. These open space requirements could provide the necessary resources for municipal community-level parks and/or offer important opportunities to create neighborhood-level parks in the Township's growth areas. As an overall goal, strive to achieve the standard set by the Lancaster County Planning Commission of 10 acres of community and neighborhood parkland per 1,000 residents.
- Pursue the potential for a regional trail along a rail right-of-way that runs thru Money Rocks County Park. Prepare a Community Pathways Plan to promote implementation of these trail initiatives and coordinate other local trail and bicycle/pedestrian connections.
- Support the proposed New Holland Recreation Center as a regional community resource.
- Work with the ELANCO School District to address how their facilities can reinforce the Township's neighborhoods and better serve as important community centers. Discuss the possibility of co-location of school and other community facilities, such as recreation or cultural arts centers, in order to maximize the use and investment in these public buildings.

9.5 Terre Hill Borough

Agricultural, Natural and Historic Resources

Issues for Implementation:

- Lack of historic resource protection may impact the historic character of the Borough.

Actions:

- Adopt a regional TDR program, which would establish the Borough as a receiving area. This program could provide incentives for developers to direct growth into the Borough and reduce requests for re-zonings in agricultural areas in the surrounding areas.
- Protect the rural landscapes and historic character of the Borough and celebrate its heritage through the following:
 - » Conduct a historic resource inventory.
 - » Adopt local preservation regulations through a zoning overlay using the Municipalities Planning Code, or create a historic district through the Pennsylvania Historic District Act. In either, regulations may be as lenient or as stringent as desired by the municipality. At a minimum, design guidelines and a demolition review process should be established.
 - » Consider determining if portions of Terre Hill Borough are eligible for nomination to the National

Register of Historic Places, and, if eligible, pursue the nomination process. There are no regulations associated with the National Register; it is a prestigious designation that can provide tax advantages for property owners as well as the opportunity to celebrate Terre Hill's heritage.

- » Support and encourage the nomination phase of the Conestoga Rural Historic District to the National Register of Historic Places.

- Nominate PA 897 for the Lancaster County Heritage Byways Program to protect scenic landscapes in the region and County.

Land Use

Issues for Implementation:

- Residential zoning in the Borough is inconsistent with adjacent East Earl Township zoning within the UGA.

Actions:

- Work with East Earl Township to develop consistent density requirements for adjacent development.

Transportation

Issues for Implementation:

- Road connections within the Borough and to the adjacent Township areas within the UGA do not facilitate efficient traffic and pedestrian movement.
- One Corridor of Concern – PA 897 – runs through Terre Hill Borough.
- Terre Hill Borough has no transit service.

Actions:

- Work with East Earl Township to create an Access Management Plan for PA 897.
- Ensure a safe environment for cyclists through the Borough.
- Work with East Earl Township to develop an official map to define transportation infrastructure in the ELANCO North Urban Growth Area.
- Ensure sidewalk continuity within the Borough and the ELANCO North Urban Growth Area.
- Implement gateways at entrances to Terre Hill Borough.
- Implement countywide recommended cross sections for roads based on context-sensitive roadway design principles.

Housing

Issues for Implementation:

- Maintain the small town character of the Borough's residential areas.
- Residential zoning in the Borough is inconsistent with adjacent East Earl Township zoning within the UGA.
- Baby Boomers will be downsizing, and their children will be seeking starter homes, which will increase demand in the region for single-family attached and multi-family housing styles to match their incomes and lifestyles.

Actions:

- Participate in a TDR program that would establish the ELANCO North UGA as a receiving area.
- Work with East Earl Township to establish consistent density requirements for adjacent development.
- Use Traditional Neighborhood Development incentives and design requirements to promote a mix of housing types – including smaller single-family houses – compatible with the Borough's existing character.

Community Facilities

Issues for Implementation:

- Many opportunities exist for regional cooperation, but too many community efforts continue to be duplicated in individual municipalities.
- Several areas surrounding the ELANCO North Urban Growth Area (UGA) have inconsistencies between the UGA and utility service areas.
- Trails and more non-sports activities for teens were identified in the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan as top recreational priorities.

Actions:

- Pursue opportunities for joint training, equipment, and other regional cooperation for ELANCO's police, fire, and emergency services organizations. Evaluate the recommendations of the police study currently being completed for Caernarvon, Earl, and East Earl Townships and New Holland and Terre Hill Boroughs and the fire study being completed for the Blue Ball, Goodville, and Terre Hill Fire Companies.
- Expand municipal cooperation on road maintenance and identify additional services for joint municipal activities.

- Continue implementation of the Wellhead Protection Areas Management Program prepared by Earl and East Earl Townships and New Holland and Terre Hill Boroughs.
- Promote development methods (e.g., conservation subdivisions, green roofs, and porous paving) to minimize impermeable surfaces and maximize groundwater recharge.
- Implement strategies such as natural resources protection ordinances to preserve existing vegetation, especially on steep slope areas and in riparian corridors to protect water quality.
- Review the Borough's land development regulations and 537 planning for consistency with the land use and community facilities goals of this Plan, especially related to restricting centralized sewer and water facilities outside of the ELANCO North UGA. Ensure that the UGA, zoning designations, and sewer and water service areas are as consistent as possible.
- Provide appropriate development densities within the ELANCO North UGA to support central sewer and water utilities. The average residential density target set by the Lancaster County Growth Management Element is 7.5 dwellings/net acre for Urban Growth Areas.

- Explore the formation of a regional park board to better coordinate regional recreation needs and assess future regional park and trail facilities based on the recommendations of the 2004 Eastern Lancaster County Region Recreation, Park and Open Space Plan and Brecknock's 2001 Park and Recreation Plan.
- Require dedicated open space or cash-in-lieu of open space in new developments according to the standards of the Municipalities Planning Code. These open space requirements could provide the necessary resources for municipal community-level parks and/or offer important opportunities for other open space projects in the Borough. As an overall goal, strive to achieve the standard set by the Lancaster County Planning Commission of 10 acres of community and neighborhood parkland per 1,000 residents.
- Support the proposed New Holland Recreation Center as a regional community resource.