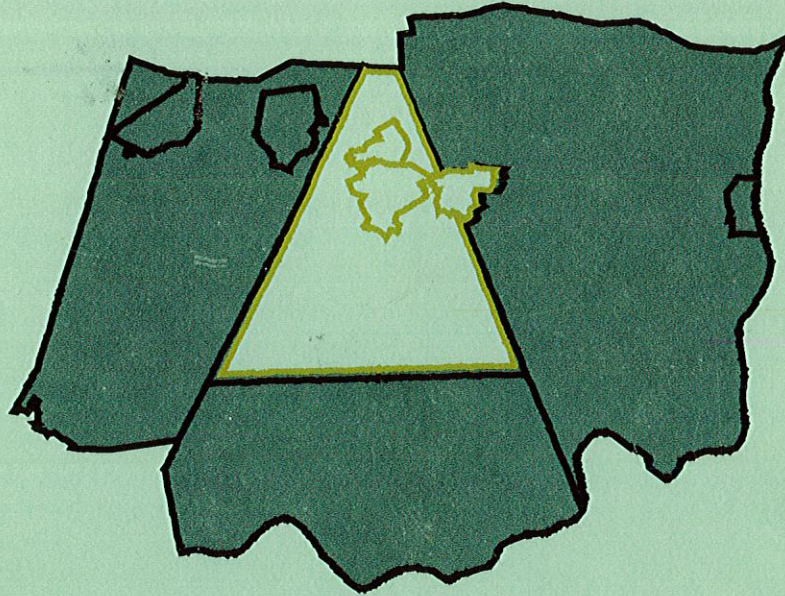


Regional Comprehensive Plan

Central Slate Belt Region

JUN 23 2005



COMPREHENSIVE PLAN 2005 - 2030 BOROUGH OF EAST BANGOR PENNSYLVANIA

**Boroughs of Bangor, Roseto,
East Bangor, Township of Washington
in County of Northampton, Pennsylvania**

Preliminary Draft Report Sections prepared in 2004 & 2005.

This report was financed, in part, by a grant from the Pennsylvania Department of Community and Economic Development under the Land Use Technical Assistance Planning Program. This program is part of a Multi-municipal Planning Program including the Boroughs of Bangor, East Bangor, Roseto and the Township of Washington.

**BOROUGH OF EAST BANGOR PLANNING COMMISSION
Central Slate Belt Regional Plan Steering Committee
Rodite & Pandl, LLC, Community Planners**

The Boroughs of Bangor, Roseto, East Bangor and the Township of Washington make up the Central Slate Belt Region. The municipal governing bodies of this region agreed to create a long range comprehensive plan as part of an inter-governmental cooperation agreement. For convenience in this report the four municipalities are referred to as the BREW municipalities or communities.

Why plan together? There are several reasons for multi-municipal planning. For the BREW municipalities, economics is one of the prime reasons. The Northern tier of Northampton County has long been refer-red to as the Slate Belt Area. Five slate quarries opened between 1863 and 1870 in the Bangor Area. Slate mining and related industries were very important to the local economy until 1920s when the slate industry went into deep decline. More recently, agriculture, apparel manufacturing, retail trade, and service industries, particularly tax processing and computer related businesses provide most of the local job opportunities. However many local people commute long distances to work. The rural portions of the BREW planning area include productive agricultural soils and farming continues to be viable in the southern portion of the planning area. Regional planning will help the BREW municipalities to improve the Central Slate Belt Regional economy through a coordinated strategy to create local job opportunities. Secondly, this regional plan provides a better opportunity to preserve BREW environmental assets, farmland, and open space resources of this region.

There are also fiscal and legal advantages for this multi-municipal plan. There are cost savings in the planning stage and potential savings on shared services in the future. From the legal standpoint, the Pennsylvania Municipalities Planning Code enables a group of cooperating municipalities to provide for all required land uses over a larger geographic area for

a more rational distribution of land uses.

SELECTED CHARACTERISTICS

Bangor, Roseto, East Bangor and Washington Township are located in a low shale plateau with undulating hills located on the southerly side of the Blue Mountain. Martins Creek and several other streams have their head waters in this region. The BREW region generally has a scenic rural setting. The three historic boroughs and Township villages are semi-rural, central places, within the region. They also have local historic and architectural charm.

Beautiful Landscape – The beauty of this landscape is evident from the hills, valleys, streams, forests, farms, and village scale of the BREW communities. Special views of this landscape are enhanced from the higher land elevations. Land elevations above sea level reach their highest (1,600 feet on the Blue Mountain) and lowest points (340 feet along the Martins Creek) in Washington Township. Following are some other elevations:

Bangor – 760 feet at Bangor Memorial Park, 800 feet near 13th Street, 720 feet along Ridge Road, 520 feet at Broadway and Main Streets, 480 feet on Martins Creek near Pennico Park west of South Main Street.

Roseto – 840 feet along Kennedy Drive, 800 feet along Garibaldi Avenue and Eisenhower Boulevard, 760 feet at the Borough Park, 740 feet at the Municipal Building, 670 feet along Roseto Avenue, and 630 feet along Columbus Street as it exits the Borough to the east.

East Bangor – 800 feet along Maple Street near South Broad Street, 780 feet near North Broad, 700 feet at the Borough Park as well as at the intersection of Broad and Central Avenue, 620 feet at Capitol Auto Parts, and 580 feet along SR 512 at the western entrance of the Borough.

Washington Township Villages - 580 to 480 feet in Ackermanville, 440 to 400 feet in Factoryville, 480 to 420 feet in Flicksville, 700 to 660 feet in Jacktown, 800 to 680 feet in Locke Heights, 680 to 480 feet in Richmond, 940 to 840 feet in West Bangor.

HERITAGE

Indians were the earliest residents of this region. They were joined by European settlers in the early 18th century. In the 1730s, Scotch-Irish farmers came to this area. As more settlers arrived, mostly from Germany, village development took place primarily at the confluence of Martins Creek and Brushy Creek. When slate mining began in the mid to late 1860s, Welsh, English, German, Irish, Italian and others came to work in the mines and area businesses. The Slate Belt Heritage Center museum on North First Street in Bangor provides an opportunity to learn more about the history and economy of this Area.

Although this is a regional plan, the plan seeks to respect and preserve each community's identity as part of the planning process.

PURPOSE OF THIS PLAN

The primary purpose of this plan is to recommend a set of coordinated policies to guide future growth, renewal of built-up areas and preservation of community – environmental assets in the four BREW municipalities. This plan also seeks to be consistent with the twelve purposes of a multi-municipal plan as defined in Section 1101 of the Pennsylvania Municipalities Planning Code.

SCOPE OF THIS PLANNING PROGRAM

This multi-municipal planning program includes three major tasks described below in the order of their accomplishment.

Investigation of Background Information- Information including surveys, U.S. Census data, prior published reports and interviews form the basis for this plan. Some of that background information is summarized in Chapter Three of this report. Other data is in electronic files and preliminary draft report sections that were presented to the BREW municipal planning commissions as part of the multi-municipal planning program.

Preparation of Comprehensive Plan – The three major comprehensive plan elements are land use, transportation, and community facilities. The planning process involved preparing a Central Slate Belt Regional land use Plan, taking that plan to each individual community for their general agreement, having a Central Slate Belt Regional planning steering committee accept the plan and then detailing the transportation and community facilities elements.

Development of Plan Implementation Recommendations – This planning process included the preparation of a recommended zoning ordinance for three of the four municipalities and a recommended zoning map for the fourth BREW community. This planning process also included a recommendation for the amendment of the multi-municipal intergovernmental agreement to include a process for the implementation of plan recommendations that are appropriate to carry out jointly by two or more of the BREW municipalities.

ORGANIZATION OF THIS REPORT

This report is organized in such a manner that it emphasizes the plan goals, policies, and implementation recommendations rather than the background information. The first chapter is the Regional Plan. This is followed by a local plan for each community. The background sections are in Chapter Three. This plan is consistent with the scope of the planning program established at the outset of this program to

meet the requirements of the PA Municipalities Planning Code and the PA Department of Community and Economic Development that administers the partial grant for this program.

ASSUMPTIONS

This Comprehensive Plan is based on the following general assumptions:

- It is important to consider human activities and the physical environment of the region as interacting. Balance is important.
- It is important to respect the existing human development in the Central Slate Belt Boroughs and Villages. These developments can be cultivated as decent, safe, and interesting central places for people to live, worship, recreate, work, and in which to conduct business.
- It is important to understand and respect the natural context and resources that link the communities, including the Blue Mountain watershed area, the three north-south trending creeks and their tributaries, the upland woodlands and the productive agricultural soils.
- It is important to understand that economic opportunities are extremely important to many residents of the BREW area particularly borough residents. Good economic opportunities provide local work and increased self respect. Improved economics for the family provides resources for living as well as home improvement, neighborhood stabilization, community enrichment and regional stability.

This Central Slate Belt Regional planning program is intended to be people oriented. The economy, land use, transportation, and community facility elements of the plan are inter-related to best serve the people of this region. Balance is

important. The old slate mining operations of the past were out of balance with nature leaving difficult reclamation issues for decades after the close of those mines. There was too much taking from nature and not enough care, respect and giving back. The landscape around the old mines tells the story. It is assumed that future policies of this Central Slate Belt Region should be more respectful of the land as a place for people to coexist with nature.

Population Trend Impact on Assumptions -

The number of people in the BREW area grew as a function of the prosperous mining and agricultural economies. By 1880, there were 1,328 people living in the village that became Bangor. Bangor's population grew up to the year 1950 when it peaked at 6,050 persons as the textile and apparel industries provided a new prosperous economic base to replace slate and limited agricultural growth. The number of people settling in the Boroughs of Roseto, East Bangor, and the villages in Washington Township also increased during this period, but they never grew to the size of Bangor. Bangor became the central place for many activities such as shopping, social activities, church and services. However, from 1950 to 1980 Bangor Borough's population declined to 5,006 as the textile and apparel industries began to move south and out of this country to lower labor costs and other lower costs.

Bangor's population increased slightly in the 1980's (+377), but declined by 64 in the 1990's. The number of people living in Washington Township increased by 554 in the 1980's and continued to increase in the 1990's by 393.

According to Lehigh Valley population forecasts, at some year between 2010 and 2020, the number of people living in Washington Township will exceed the number living in Bangor. Part of the reason for this change is that Bangor no longer provides major employment opportunities since textile manufacturing

is gone and apparel industries are a mere shadow of their employment importance within the Borough. Just south of the Borough, the largest regional apparel manufacturer is located in Washington Township. Another factor in Bangor's population decline is the aging population. As children graduated from school, they moved elsewhere to find work leaving only one or two parents in the large Bangor homestead. The number of persons per household in Bangor has been declining and is projected to continue to decline slightly for many more years. The number of buildable lots in Bangor is very limited. Conversely, Washington Township has almost all of the land for building homes in the BREW region. Washington Township also has a picturesque living environment. Some of the people moving into the Township are attracted to the Township for its environment and for its lower cost of land. Clearly from the local planning questionnaire results, many New Jersey and New York families are moving into Washington Township for the more affordable cost of living, picturesque living environment and its safety. Many of the job holders in these new Township households either commute back to their former home areas or are commuting to the Lehigh Valley employment center. Some of the new residents appear to be working at home. This Central Slate Belt Regional Plan assumes that these trends will continue and intensify during the planning period to 2030.

Slate Belt and Central Slate Belt Population Growth Assumption – This Central Slate Belt Regional (BREW) Comprehensive Plan will utilize the population forecasted to the year 2030 by the Lehigh Valley Planning Commission (LVPC) as follows:

Slate Belt Area	2000	2030	Change
Central Slate Belt (BREW) Region			
Bangor B.	5,319	5,508	4%
Roseto B.	1,653	1,653	0%
East Bangor B.	979	1,103	13%
Washington T.	4,152	6,855	65%
BREW Region	12,103	15,120	25%

(Population Table Continued)			
Slate Belt Area	2000	2030	Change
Remainder of Slate Belt (non-BREW) Region			
<i>Lower Mount Bethel T.</i>	3,228	3,669	14%
<i>Upper Mount Bethel T.</i>	6,063	9,115	50%
<i>Plainfield T.</i>	5,668	9,002	59%
<i>Pen Argyl B.</i>	3,615	3,729	3%
<i>Portland B.</i>	579	747	29%
<i>Wind Gap B.</i>	2,812	2,812	0%
Non BREW	21,965	29,074	32%
Slate Belt Total	34,068	44,194	30%

Table Data Source: Lehigh Valley Planning Commission, Comprehensive Plan – Lehigh and Northampton Counties, PA. The Lehigh Valley...2030

Population Characteristics Assumptions – The resident population of the Central Slate Belt Region is becoming ethnically diverse. Population within the Boroughs still has strong influences from the immigration of Welsh, German, Italian, English and Dutch people. Washington Township's older population contains the same ethnic roots. While the influx of new families is reducing the strength of immigrant numbers, the pride and spirit of the region's cultural heritage remains vibrant. The success of the Slate Belt Heritage Center located in Bangor and the many regional celebrations and events (such as "Roseto's Big Time" and the "Slate Belt Heritage Festival") are evidence of a continuing interest in heritage. This Regional Plan assumes such interest will continue and grow.

Other major population characteristics will have an impact upon this Region. The post World War II "baby boom" population

group born between 1946 and 1964 will increasingly retire from the work force during the next 25 years. The generations of younger people born after 1964 appear to have different values from the older pre

1946 and baby boom generations. The younger generations (Generation "X" born 1965-77 and the Millennial" born 1977-2000+) are very busy people with both mother and father working. Many of these people came of age when national institutions, big businesses, and famous people came under question for their actions. Layoffs, downsizing of companies, and out-sourcing of work to other countries is becoming a way of life that requires constant improvement of job and communication skills in order to retain family supporting jobs. With the high divorce rate, the post baby boom population has become more self reliant. Although they are individualistic, there is somewhat of a trend to be group-oriented. Frequently, their group is related to work, areas of social interest, or based on Internet communications and their group is not as much based on neighborhood and

community contacts.

Local interest of many younger families is perked by threats to their children's safety, education needs, and in some cases environmental and property value degradations. This plan assumes that the above trends will continue during the next 20 plus years. This plan also assumes that as a result of these trends there will be many opportunities for this region. Some of those opportunities that are considered in this plan are a need for better local education opportunities including vocational retraining, physical rehabilitation and exercise for the aging population. There may also be an opportunity to establish an environmental quality committee and neighborhood watch groups affiliated with the local governments or affiliated with a council of local government bodies such as the Slate Belt Council of Governments.



Central Slate Belt Region Comprehensive Plan Steering Committee, during a planning meeting

PUBLIC INPUT FOR CENTRAL SLATE BELT REGIONAL COMPREHENSIVE PLAN

Each of the four Central Slate Belt Regional municipalities conducted a survey of all residents as a way to obtain useful information regarding community attitudes on comprehensive planning related issues. The results of their public participation process and surveys are summarized in the back of this plan report with the special plan recommendations for each community. Following are results from a survey of the Central Slate Belt Steering Committee that was appointed by governing bodies of the four BREW municipalities.

1. How would you describe the mission of our Multi-municipal Plan?

Central Slate Belt Regional Plan Steering Committee Answer: *To provide an Inter-municipal Cooperative Planning Approach that coordinates future land uses, preserves the natural and the residential environments, accommodates new job development and tax ratables, encourages inter-municipal cooperation and service sharing, and facilitates the public interest in preserving the health, safety, general welfare, economy, and Central Slate Belt beauty of the region.*

2. How would you describe the vision of our Multi-municipal plan?

Central Slate Belt Regional Plan Steering Committee Answer:

Vision statements	% agree	% disagree
a. A Central-slate belt area as a residential bedroom community with income tax to fund local and school service.	12.5%	87.5%
b. A Central-slate area with local job opportunities for at least half of the work force and with tax and service sharing.	100%	0%

c. A Central-slate belt area with strong local identity, featuring tourism linkages to both greater LV and Pocono regions.	100%	0%
Vision statements	% agree	% disagree
d. A Central-slate belt area free from all slate mine holes and slate refuse piles with either garbage or fly ash to fill the holes and generate a major revenue source for local services.	0%	100%
e. A Central-slate belt area with some or all of the slate mine remnants preserved and inter-connected walking and bicycling trails throughout the area.	100%	0%
f. A Central-slate belt area that strongly supports local education of children and adults and enhances broadband and the best internet access as an asset for home and business	90%	10%

3. What Values and/or Images come to your mind to describe the Unique Identity of Each or Our Communities?

Bangor – A struggling, quaint, close-knit, small town – working together to make changes to preserve its heritage.

East Bangor – “Mayberry, USA” - A small, old fashion, tight-knit, residential community.

Roseto – A quaint, rural small town with a strong Italian heritage.

Washington Township – A rural, agricultural area, with housing developments, open fields, commercial plazas and small village centers.

4. Public Input Also Derived By: Key Person Interviews, Public Workshops & Hearings.

CENTRAL SLATE BELT REGIONAL COMPREHENSIVE PLAN CONCEPTS

The major ideas of this Central Slate Belt Regional Comprehensive Plan are introduced in this chapter of the plan report as overarching goal statements. Each of the subsequent sections of this chapter builds upon these goals by recommending policies and implementation actions. The major plan concepts seek to accomplish the following:

1. Concentrate future Regional land development within the Boroughs of Bangor, Roseto, East Bangor, and in Washington Township near these Boroughs as well as within Township Villages. Discourage sprawl development and loss of farmland in Washington Township.
2. Encourage economic development in clusters along the existing railroad, along State Route (SR) 512, and in places that already have business development such as Downtown Bangor and Majestic in Washington Township and in areas that have traditionally been employment locations, such as the slate quarries and mill sites.
3. As part of an economic development and community building strategy, attract educational institutions to locate preferably in the Borough of Bangor and/or elsewhere within this Planning Region.
4. Enhance the Central Slate Belt Regional electronic communication linkages between educational institutions, businesses, home based businesses and the electronic world.
5. Preserve stream, wetlands, and important natural areas with a 50 to 100 foot set back for development, and where possible, use these open space preserve corridors as greenway connections for walkways and bikeways.
6. Retain the rural character of most of Washington Township by preserving open space and preserving meaningful open space within all future developments of any type.
7. Promote tourism as a form of low impact economic development by keeping the scale of tourism development in balance with the natural and human environment.
8. Nurture agriculture as a business activity, protector of open space, and as a way of life. Enhance the development potential of agricultural related businesses in this region.
9. Enhance systems for the movement of people and goods. Include streets, buses, parking, park and ride facilities, and heliports as well as safe and attractive pedestrian corridors.
10. Evolve the community facility and utility systems to change with the times and to be complementary with the intent and purposes of the land use plan and proposed Central Slate Belt regionalization.

Other concepts of this plan relate to the fact that the Central Slate Belt Region is part of many other geographic, economic and social worlds. Openness and cooperation should be pursued. As an example, the BREW municipalities are also part of the Slate Belt Area of northern Northampton County. This Central Slate Belt Regional Comprehensive Plan recommends that each of the BREW municipalities join the Slate Belt Council of Governments (COG).

Elaborating on goal statement #3 & 4 from above, this plan recommends linkages with vocational schools, colleges, and other institutions of higher learning. Even if these facilities are not located within the BREW communities, linkages should be pursued. Special opportunities can emerge from such relationships that combine the talent of educators along with the enthusiasm and energy of students. The contact can be enlightening for the students & beneficial for the local businesses, government & residents.

PRESERVATION OF NATURAL , HISTORIC, AND FARMLAND RESOURCES PLAN

PRESERVATION PLANS

Major natural resources for preservation were identified in a Central Slate Belt Planning Region Natural Features Inventory report (NFI) prepared by Rodite & Pandl, LLC Community Planners in September of 2003. The original NFI Study focused on Washington Township, but it has regional significance as summarized below:

- **Agriculturally Productive Soils** are mapped in the NFI report. Highly productive and moderately productive soils are highlighted. Unfortunately, most of the highly productive agricultural soils are located in the western part of Washington Township along the highly accessible SR 191 highway corridor and in locations that have already experienced subdivision activity. Significant land development has already occurred on many farms in this area.
- **Farms under the two PA farmland preservation acts' protection** are mapped in the NFI. The mapped area includes both the Central Slate Belt Area and a strip of land along the Washington Township Boundaries that extend into the adjacent three townships. The map portrays very extensive farmland act participation, particularly in the southern part of Washington Township and along the eastern and southwestern Township boundaries.
- **Major natural areas of statewide significance** are identified in the Central Slate Belt Region as unique and important for the protection of biological diversity. Each one of the following areas is identified on a map in the NFI report.

- Blue Mountain
- Roseto Pond
- Angle Swamp

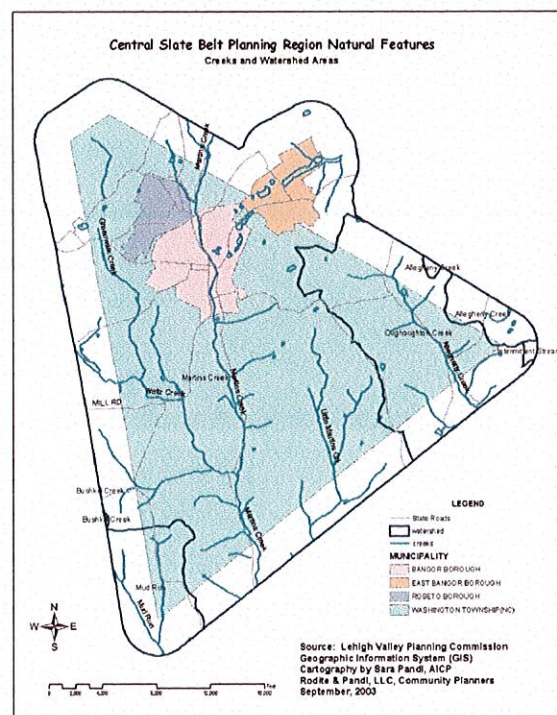
- East Bangor Swamp Complex
- Wooded Areas

● **Major woodlands, watersheds and creeks** are identified in the NFI. Combining the NFI report and the LVPC Lehigh Valley 2003 Comprehensive Plan regarding stream quality reveals the following:

- **Martins/Jacoby Creek** including its tributaries (Greenwalk and Waltz Creeks) is a Trout Stocking (TSF) Stream.
- **Little Martins Creek, Allegheny Creek, Oughoughton Creek, and Mud Run** are all Cold Water Fishes (CWF) Streams

Natural Features Map: CREEKS & WATERSHEDS

(See chapter 3 for full size version of this map. This map and other maps in this section are "thumbnail" miniature copies. They are presented here for general reference only. On this map, watersheds are named and the watershed boundaries are outlined with a black line; streams are also named.)



RIPARIAN (STREAMSIDE) BUFFERS PLAN

The above streams are quality streams. They are major assets to the Central Slate Belt Region. These streams connect each community with the others. Stream based connectivity and interrelationship combines the natural and human environment into one major watershed neighborhood. This Central Slate Belt Regional Plan recommends the creation, development and continual respect of riparian buffers along every stream and minor tributary in this region.

Riparian buffers are one way of respectfully dealing with storm water runoff. This plan recommends storm water control approaches such as minimizing impermeable land coverage on each parcel of land, developing and maintaining effective ground water retention, detention and aquifer recharge systems in every development.

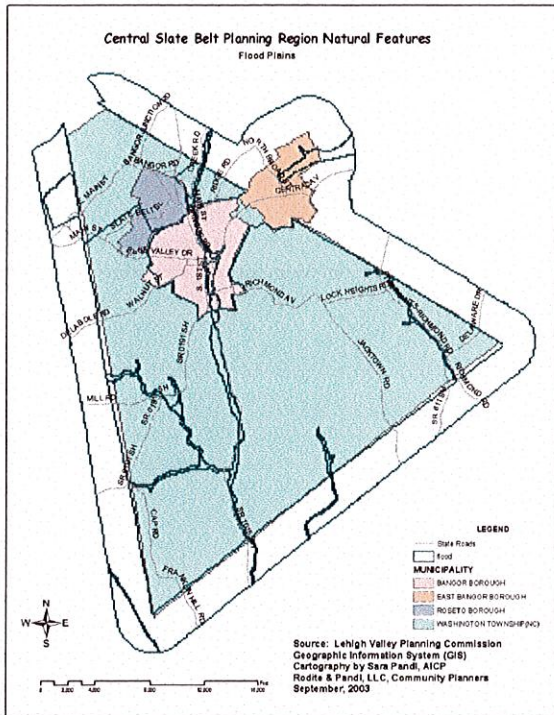
Wetland (including swamps-bogs etc) should also be protected by riparian buffering. Wetland areas frequently act as ground water recharge areas.

GOAL

To protect streams and wetlands so they can provide numerous recreational and environmental benefits to Central Slate Belt Region residents.

POLICIES

- ◆ Encourage creation of quality streamside buffers on lands that border streams.
- ◆ Require riparian buffers of 100 feet along Martins Creek and buffers of at least 50 feet along all other streams.
- ◆ Inform Developers about quality riparian buffers that contain a variety of native trees and plants. Discourage the development of riparian buffers with monocultures of exotic vegetation.
- ◆ Educate officials and landowners as to why it is important to protect rivers and streams.
- ◆ Encourage stream conservation plans.
- ◆ Encourage landowners with streams on their property to have conservation plans prepared that include best management practices for riparian buffers.
- ◆ Encourage landowners to put conservation easements on the parts of their property that include riparian buffers.
- ◆ Promote the use of existing voluntary best management practices in the management of forestry activities in and along streamside buffer areas.
- ◆ Include provisions for the preservation and restoration of riparian buffers in the Borough and Township zoning ordinances, & subdivision and land development ordinances.
- ◆ Give high priority should be given to recreation, greenway and open space projects that involve streams.
- ◆ Offer opportunities for colleges and universities to study streams and to adopt stream segments to develop riparian buffers.
- ◆ Encourage public and private local school teachers to monitor stream and riparian buffer quality and to work with students from colleges and universities who adopt a local stream and buffers.
- ◆ Facilitate the collaboration between young and senior citizen residents to adopt stream segments and their riparian buffers to monitor their quality and do streamside clean up when necessary. Boy scouts, girl scouts and senior citizens through a community center facility could be the groups to initiate this policy.



*The above thumbnail (miniature) map is entitled **Natural Features Map: FLOOD PLAINS** (This map generally identifies where flood plains exist. Much more detailed maps are required to specifically locate the flood plain for a property or group of properties. The Geographic Information System (GIS) prepared by the Lehigh Valley Planning Commission provides more detailed information on the location and extent of flood plains. That information may be viewed together with other data layers such as property lines and streets to more specifically ascertain the impact of flood plains. The full size version of this FLOOD PLAIN map is located in Chapter 3 of this Comprehensive Plan report.)*

FLOODPLAINS

Several of the villages in Washington Township (i.e. Ackermansville, Factoryville, and Richwood) and the Borough of Bangor have major floodplain areas. In some cases, development has already encroached on these flood plain areas. Fortunately, it has been almost two decades since major flooding has been a region-wide event. Major flooding is a game of chance. A major flood event is likely to occur and it is most prudent to manage land use so as to reduce the damage to individual properties in the Central Slate Belt Region. This Regional

Comprehensive Plan recommends a region-wide approach to this issue with the following goal and policies:

GOAL

To minimize flood damage and protect floodplains.

POLICIES

- Prohibit new buildings, structures and fill in the 100-year floodplain except for highways and certain other structures owned or maintained by the Commonwealth of Pennsylvania, municipalities or public utilities as defined and regulated in Chapter 106 Floodplain Management of Title 25 Environmental Protection, Pennsylvania Code.
- Redevelopment of vacant, formerly developed land is not recommended within the floodway. Outside the floodway, but within the flood plain fringe, adequate flood proofing measures must be taken for the reuse or substantial improvement of existing buildings or the redevelopment of vacant but formerly developed land.
- Floodways and in some cases parts of the 100 year flood plain land areas should be purchased by a public body if these areas have potential for linear park and/or riparian buffer use. Otherwise, zoning regulations should prevent development of these flood impacted areas. As part of that acquisition (in fee simple or development rights purchase), these areas should be included in riparian buffers and where possible developed as linear parks.

WETLANDS PRESERVATION PLAN

GOAL

To protect the remaining wetlands in the Central Slate Belt Region.

POLICIES

- * Preserve 100% permanent open space in all wetlands. All wetlands are protected and regulated by State and Federal regulations. A wetland delineation should be obtained from the appropriate public agency.
- * Require a 50 foot riparian type buffer around all wetlands and a 100 foot buffer around all wetlands that are in critical aquifer recharge areas particularly in the foot hills of the Blue Mountain and the Greenwalk Creek watershed. Both of these areas provide water sources for human consumption. Offer opportunities for colleges and universities to study streams and to adopt stream segments to develop riparian buffers.
- * Encourage public and private local school teachers to adopt certain wetlands that exist in key stream watersheds. Facilitate the collaboration between young and senior residents to monitor the quality of their adopted stream and do wetland buffer clean up when necessary. Boy scouts, girl scouts and a senior center facility group could be the groups to initiate this policy.

The above map is entitled - Natural Features Map: ELEVATION CONTOURS (This map identifies lines of equal land elevation above sea level at 20' intervals. Very steep slopes are evident on this map where the brown contour lines are clustered together appearing as brown bands.)

STEEP SLOPES PLAN

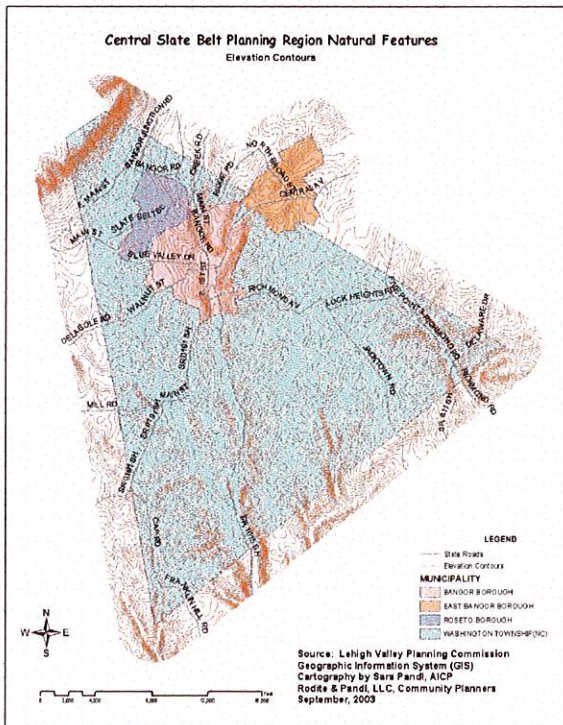
The Blue Mountain ridge and roadways such as SR 191 that descend from that ridge provide beautiful views of the Central Slate Belt Region and beyond. There are other promontory views along SR 191 throughout its corridor in this Planning Area. Many of the views are of a picturesque quilt like pattern of farms, steams, and housing. It is very tempting for people to want to capture that type of view by building their home on a slope that provides such a vista. However, like the old parenting term, "look but don't touch" there are hazards for development of steep slope areas. For this reason the Central Slate Belt Regional Comprehensive Plan adopts a similar set of goals and policies as proposed in the Lehigh Valley Comprehensive Plan as follows:

GOAL

To minimize the adverse environmental impacts of steep slope development.

POLICIES

- ✗ Future development is not recommended on slopes greater than 25%.
- ✗ On slopes of 15% to 25%, large lots with low site coverage standards should be maintained and special erosion and storm drainage controls enforced. This Plan recommends a maximum of one dwelling unit per acre if public water and sewers are available. A minimum lot size of three acres is recommended if an on-lot water supply or sewer system is used. In boroughs and other urban areas, infill development on steep slopes should be allowed in accord with the zoning ordinance if site



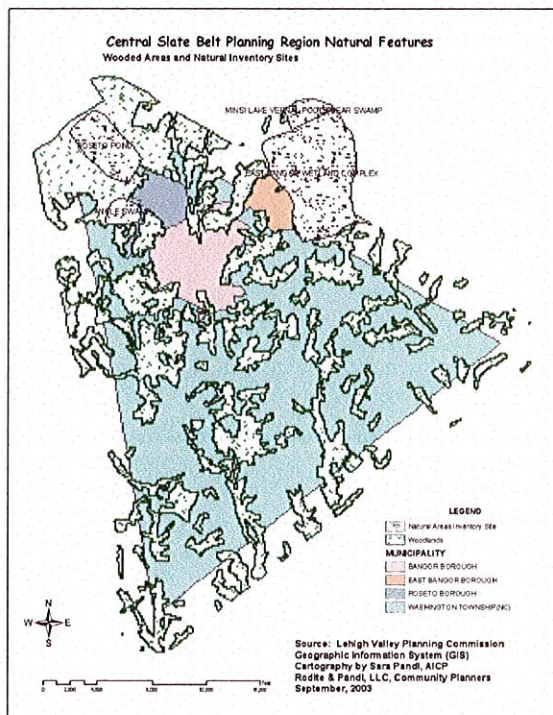
design can eliminate or greatly reduce the negative environmental impacts of the project.

- ✘ Encourage the treatment of steep slopes as areas where plantings and ground cover should be planted and preserved in a manner similar to the stream side and wetland buffers.

CARBONATE GEOLOGY

The geology of Washington Township does not include areas underlain by carbonate rock. (MOST OF THE AREA IS UNDERLAIN BY: (omb) BUSHKILL MEMBER, (omp) PEN ARGYL MEMBER, AND (omr) RAMSEYBURG MEMBER.

The following map is entitled Natural Features Map: WOODLANDS & NATURAL INVENTORY SITES (Wooded areas are outlined in green; natural areas of recognized environmental value, "natural inventory sites," are outlined in grey and are named.)



WOODLAND & NATURE INVENTORY PLAN

The Central Slate Belt Planning Region contains nearly 30,000 acres of woodlands. Significant wooded areas are located in the northern quarter of the planning region and

they extend into the Boroughs of Bangor, Roseto and East Bangor. Together with the creeks, the associated woodland provides important wildlife corridors that serve as habitat and migration paths throughout the planning region.

The woodland areas in Washington Township are predominantly mixed oak forests generally located along stream corridors and steep slopes. There are isolated hemlock forest associations along the north facing slopes of Martins Creek. Although the forest is fragmented due to development, significant forested areas occur on the Blue Mountain slopes and Nagy Hill, as well as within the riparian corridors that bisect the township in a general north south direction.

GOAL

To preserve the natural woodlands along steep slopes and watercourses in order to maintain their functions in erosion control, slope stabilization and as important wildlife corridors.

POLICIES

- To preserve Nature Preserve Areas identified on the Natural Inventory.
- To protect established woodland areas, especially within areas identified as containing important natural features.
- To provide property owners with education and incentives to protect woodlands on private property.
- To encourage site development with sensitivity to preserving trees and uninterrupted woodland areas.

IMPLEMENTATION

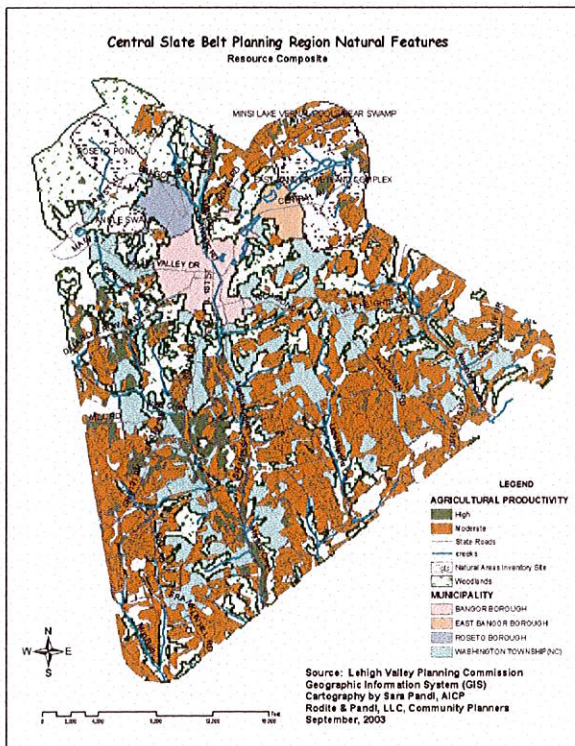
Prior to development, wooded areas and significant mature trees should be located on the development plan and development designed to preserve existing woodlands.

During construction, trees and woodland areas that are to be preserved should be clearly delineated to protect them from clearing, grading, construction traffic and storage.

The BREW Township and Boroughs should reserve the right to require an arborist as a consultant on important wooded tracts of land.

The BREW Township and Boroughs should require a tree replacement plan when mature trees are removed during development or are removed as part of wood harvesting. (Require planting of trees for any new development)

The following map is entitled Natural Features Map: RESOURCE COMPOSITE (This map presents the location of high quality agricultural soils in green and moderate quality agricultural soils in light brown along with other natural inventory features.)



NATURAL FEATURES PLAN

The Central Slate Belt Region includes four natural features identified by the State to be of regional significance. Blue Mountain, extending along the northwestern most corner of the planning area, is identified as an area of exceptional significance, because

of its natural diversity, relatively uninterrupted expanse and importance in the major east coast raptor migration flyways.

Within Washington Township, Roseto Pond and Angle Swamp have been identified as significant because of their population of Pennsylvania rare and endangered plant species. Additionally, a portion of the East Bangor Swamp Area of Upper Mount Bethel Township extends into the eastern portion of Roseto Borough and a small part of Washington Township. It is listed as a high priority site for preservation, since it represents the largest contiguous wetland complex in Northampton County.

GOAL

To protect significant natural features from disruption and development.

POLICIES

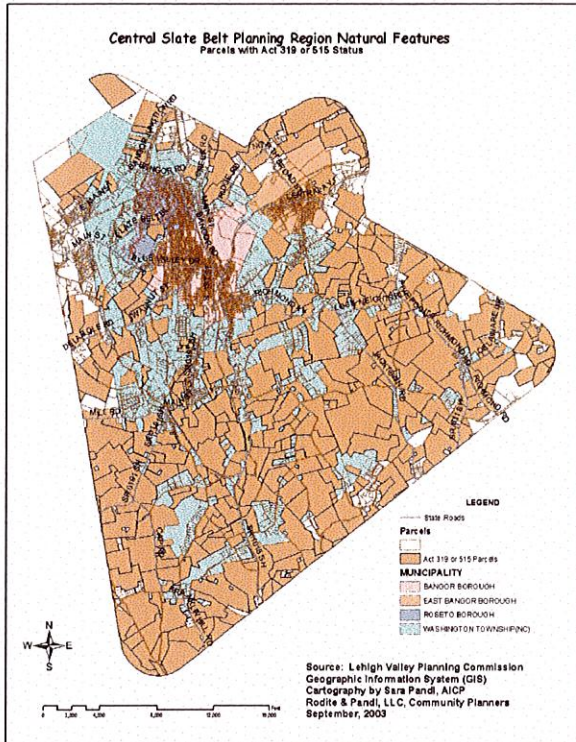
- Acquire conservation easements to significant parts of the Blue Mountain and East Bangor Swamp as the highest regional conservation priority.
- Work with property owners on Angle Swamp and Roseto Pond to prevent further degradation.
- Work with municipalities abutting areas of natural significance to ensure a comprehensive and coordinated approach to their preservation.

IMPLEMENTATION

Pursue grants and assistance from regional land conservancies to preserve areas identified as high priority natural features.

Develop best management practices for roads adjacent to natural areas, including non destructive weed abatement and pest management. Use conservation development practices to ensure that the most sensitive portions of a site are protected from disturbance.

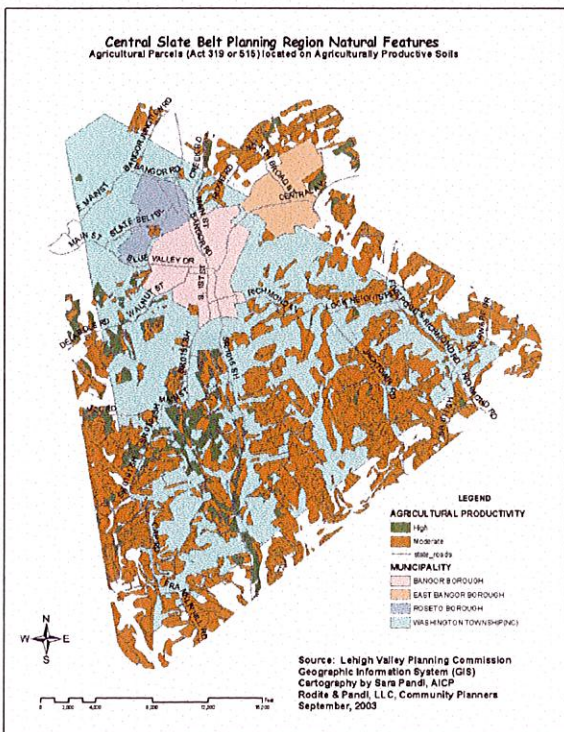
The following map is entitled Natural Features Map: PARCELS WITH ACT 319 OR 515 STATUS (This map presents –in light gold color - the location of parcels in Washington Township that are included in either the Act 319 or 515 agricultural land preservation programs)



The forgoing map is entitled Natural Features Map: AGRICULTURAL PARCELS (ACT 319 & 515) LOCATED ON AGRICULTURALLY PRODUCTIVE SOILS (This map presents the location of Act 319 & 515 farms on high quality soils – in green – and the location of Act 319 & 515 farms on moderate quality agricultural soils in gold-brown color.)

FARMLAND PRESERVATION PLAN

The Central Slate Belt Area (in Washington Township) has some of the best farmland soil in Pennsylvania. Unfortunately, most of this good soil area is in the western part of Washington Township where it is more easily accessible to SR 191. This relatively good accessibility contributes to the attractiveness of developing farms in this area as residential subdivisions. The attractiveness relates to the relatively easy commute on SR191 to employment opportunities either in the Lehigh Valley or north to the Poconos or to the New Jersey-New York metropolitan area. In fact, looking at a parcel map and land use map, it is evident that there are many lots and new homes in this good agricultural soil area of Washington Township.



The positive side of the agricultural soil situation relates to soils that are classified as moderately productive agricultural soils. Washington Township lands with moderately productive agricultural soils are in the southern and southeastern parts of the Township. These sections of the Township are not as accessible except for the far eastern part of the Township via US 611 that provides access. For limited accessibility and other reasons, there seems to be slightly less subdivision activity in the southern and southeastern parts of the Township. This provides a window of opportunity for more effective farmland preservation policies to be implemented.

In June of 2004, Washington Township with the assistance of Rodite & Pandl, LLC Community Planners, conducted a survey of farmland owners. The response rate was 39% of the 165 farm

land owners surveyed. A summary of responses follows:

- 81% were from smaller farms in the 10 to 75 acre size
- 65% of the farmland parcels were still being farmed.
- Types of farming from most to least- field crop, equestrian, live-stock, other (tree, hay, fish), orchards, and dairy.
- Current plans: 54% wish to remain in agriculture, 3% wish to sell, 11% wish to retain development rights, 32% were unsure of what to do.
- 71% agreed that Washington Township should establish an Agricultural Protection Zone. (29% did not agree)
- 56% favor a zoning approach that would preserve farmland by restricting development in areas zoned for agriculture. (13% do not favor this approach and 31% are not sure)
- Methods to preserve farmland received the following support:
 - 48% agree with a restriction to develop only 10% of farmland.
 - 19% agree with a restriction to develop only 20% of farmland.
 - 10% agree with a restriction to develop only 30% of farmland.
 - 23% agree with a restriction to develop only 50% of farmland.

GOAL

To preserve approximately 70% of farmland in Washington Township for agriculture.

POLICIES

- Create effective agricultural zoning.
- Support agricultural security areas, and purchase of agricultural easements in recommended farmland preservation areas.
- Preserve large contiguous clusters of farmland in areas that have not been substantially urbanized.
- Discourage extension of central water and sewer services and new roads into areas where farming is the recommended use.
- Encourage farm-related business in areas where farming is recommended.
- Protect recommended farmland preservation areas from residential development and non-farm activities that interfere with normal farming practices.
- Target strategic areas for preservation such as prime farmland and areas where clusters of like-minded farmers own land that they wish to preserve in farmland.

LAND USE AND HOUSING PLAN

GROWTH TRENDS AND FORECASTS

The population, household, and land development forecasts for the BREW Regional Municipalities are presented in the following tables:

Central Slate Belt Region – Population Forecast LVPC			
	2000	2030	Change
Bangor	5,319	5,508	189
Roseto	1,653	1,653	0
East Bangor	979	1,103	124
Washington	4,152	6,855	2,703
Total	12,103	15,119	3,016

Central Slate Belt Region – Household Forecast			
	2000	2030	Change
Bangor	2,105	2,285	180
Roseto	640	671	31
East Bangor	387	457	70
Washington	1,601	2,673	1,072
Total	4,733	6,086	1,353

Central Slate Belt Region – Land Use Forecast of Developed Acres			
	2001	2030	Change
Bangor	815	855	40
Roseto	283	290	7
East Bangor	298	323	25
Washington	3,452	4,702	1,250
Total	4,848	6,170	1,322

Source: LVPC, Rodite & Pandl, LLC

GENERAL GROWTH GOALS

This Central Slate Belt Regional Plan envisions an inter-municipal cooperative approach to guiding land development in the Central Slate Belt Region toward the following over-arching goals:

- ◆ *To seek preservation of open space and farmland in Washington Township where rural and open space are recommended by this plan.*

- ◆ *To encourage new in-fill housing and economic development in the Boroughs.*
- ◆ *To attract suburban and cluster housing development in Washington Township in designated Villages and in the areas adjacent to the Boroughs.*

If this Central Slate Belt Regional Plan is effective in reaching its goals, then some of the LVPC projected land development and population growth may be shifted from Washington Township into the three Boroughs.

GENERAL GROWTH POLICIES

- P Encourage cluster housing development as part of Conservation Planning in every part of Washington Township.
- P Consider a zoning ordinance provision that would provide for the transfer of development rights from properties in rural and agricultural zoning districts into Residential and Village Zoning Districts. Include a bonus of increased density for such developments if centralized sewer and water services are provided and three percent of the development is affordable owner-occupied housing.

EMPLOYMENT GROWTH ESTIMATES

When the Boroughs, villages and Township of this Central Slate Belt were first created and developed, industry and business were an integral

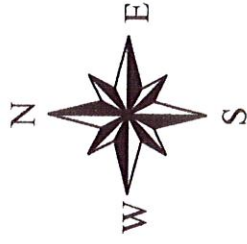
REGIONAL LAND USE PLAN

Central Slate Belt Region



- Village Center - Locke Heights
- Village Center - West Bangor
- Residential, Urban - Low Density
- Residential, Urban - Low Density
- Residential, Urban - Low Density
- Residential, Urban - Medium Density
- Residential, Urban - High Density
- Residential, Suburban - High Density
- Residential, Suburban - Low Density
- Residential, Suburban - Medium Density
- Residential, Suburban Growth Area
- Residential, Rural (slight overlap won't merge)
- Residential, Rural earlier version
- Business - Central Business Districts
- Business - Neighborhood and Highway
- Business - General & Mining
- Business Parks and Industry
- EXISTING LAND USE ADJACENT TO REGION
- Agricultural & Vacant
- Offices
- Parks & Other Outdoor Recreation
- Public & Quasi Public
- Residential
- Retail/Commercial
- Transportation, Communications & Utilities
- Warehousing/Distribution

This map was financed [in part] by a grant from the Commonwealth of Pennsylvania Department of Community and Economic Development.



Rodite & Pandl, LLC,
Community Planners &
Landscape Architects
Map Date March 2005

Central Slate Belt Region - Boroughs of Bangor, Roseto, East Bangor, and Township of Washington

part of the local community. During the last half century, the trend has been to concentrate industry and major business in regional locations, along major thoroughfares, centralized for a larger market area. More recent trends include work at home and even primary businesses operating out of the home. A recent Pennsylvania Municipalities Planning Code (MPC) amendment acknowledges these trends. The MPC requires that every community permits, as a matter of right, "Home Based Businesses" within the limits of State and local law.

In this context, the following policies are proposed by this Plan:

- ◆ To be a welcoming community to the "Technology Population"

including the home based knowledge workers.

- ◆ To encourage connections among home based business people and other businesses within the Central Slate Belt Region.
- ◆ To facilitate a networking between schools of higher learning and all businesses including home based businesses in this Central Slate Belt Region.
- ◆ To encourage research to identify opportunities for recycling-based economic development and reclaiming of lands covered with remnants of slate mining.

LAND USE AND HOUSING PLAN FOR THE CENTRAL SLATE BELT REGION MULTI-MUNICIPAL PLAN

The major land use plan and housing plan goals are related to the overarching goal statements agreed upon by the regional Central Slate Belt Regional Steering Committee. Those goals were introduced in the third section of this Chapter and are presented with related policy statements in this section.

LAND USE GOALS & POLICIES

First. To concentrate future Regional urban and suburban type land development within the Boroughs of Bangor, Roseto, East Bangor, and in Washington Township near these Boroughs, where development may be easily served by existing sanitary sewage

systems. Further growth should be encouraged within Township Villages. Discourage sprawl development and loss of farmland in Washington Township and retain rural Township environment.

- a. The primary regional land use policy for the First Goal will be to create coordinated zoning that will concentrate urban development in the Boroughs, in the Villages of Washington Township and in the sections of Washington Township shown on the accompanying regional land use plan map proposed for urban land use. These areas are to be designated as **GROWTH AREAS** (consistent with MPC term within multi municipal plan) where orderly and efficient development should take place. The growth areas are intended to

accommodate the projected growth within the planning area for the next 20 years. Commercial and industrial and institutional uses and services to these uses should fall within this area.

b. Secondly, the Township village areas outside the initial growth area are designated as **POTENTIAL FUTURE GROWTH AREAS**, where orderly extension of services and additional development may occur within the next thirty years.

c. The Rural and Agricultural Areas should be designated as **RURAL RESERVE**, including the Blue Mountain Conservation area, watershed protection areas and the agricultural preservation areas. No infrastructure improvements will be extended here and rural resources and supporting land uses are accommodated. Residential densities are compatible with continual agricultural use of the land, including consideration of effective agricultural zoning as has been used in Lehigh County.

d. An important implementation measure will be to update the Act 537 Sewerage Facilities Plans for all Central Slate Belt Regional Municipalities to provide for sewer service extensions consistent with the regional land use plan and identified areas for growth and preservation in this plan.

Second. To encourage economic development in clusters along the existing railroad, along SR 512, and in places that already have business development such as Downtown Bangor and Majestic in Washington Township.

a. The Borough of Bangor should continue in its efforts to revitalize its downtown with Pennsylvania Main Street and similar programs.

b. Existing business areas within Roseto, East Bangor, and Washington Township should be strengthened through Zoning and efforts to bolster existing businesses and attraction of new compatible businesses.

Third To encourage new development in areas that will be reclaimed from sites that have been previously mined or used for manufacturing. These sites have historically served as regional employment centers and should be re-used for new employment generating activities.

a. The primary regional land use policy for the Third Goal will be to secure plans and actual infrastructure improvements for “brownfields (old industrial sites) & greyfields (old mined sites)” so that these sites will have good access, feasible land development plans and marketing plans that are ready to implement.

b. The secondary regional land use policy for the Third Goal will be to provide a coordinated approach to directing prospective developers to the preferred economic development sites and away from the “greenfields (farmlands and open space lands).” These preferred economic development sites are located within the designated GROWTH AREA of the plan.

Fourth. To attract educational institutions to locate preferably in the Borough of Bangor and/or elsewhere within this Planning Region.

a. The primary regional land use policy for the Fourth Goal will be the belief that there is value for an educational institution to locate in the Central Slate Belt Region both for that institution as well for our region. A fact sheet should be prepared to list the advantages of this location to potential educational developers.

b. The secondary regional land use policy for the Fourth Goal will be outreach and marketing directly to nearby educational institutions such as Northampton Community College, Lafayette College,

East Stroudsburg University, Lehigh University and others for expansion of their facilities with a Slate Belt branch.

Fifth. To enhance the Central Slate Belt Regional electronic communication linkages between educational institutions, businesses, home based businesses and the electronic world.

a. The primary regional land use policy for the Fifth Goal will be to authorize the Slate Belt Council of Governments and the Slate Belt Chamber of Commerce to establish an agreement with one or more communication companies to provide state-of-the-art communications for the Central Slate Belt Region and the entire Slate Belt Area. This could be organized in conjunction with the Bangor Area School District and its access to high speed internet communication services.

b. The secondary regional land use policy for the Fifth Goal will be to facilitate home based businesses in this region to have access to the above proposed state-of-the-art broadband and other communication systems. The Slate Belt Chamber of Commerce and Slate Belt COG should also provide educational opportunities regarding the use of these systems and the opportunity to market local products nationally and internationally through the internet.

Sixth. To preserve natural features and agricultural areas.

a. The primary regional land use policy for the Sixth Goal will be to revise the local zoning ordinances and the local subdivision and land development ordinances to require preservation and protection of natural areas.

b. The secondary regional land use policy for the Sixth Goal will be to preserve stream, wetlands, and important natural

areas with a 50 to 100 foot set back for development. Where possible use these open space preserve corridors as greenway connections for walkways and bikeways.

Seventh. To retain the rural character of most of Washington Township by preserving open space and preserving meaningful open space within all future developments of any type.

a. The primary regional land use policy for the Seventh Goal will be to create and adopt a practical zoning ordinance to preserve meaningful open space in Washington Township.

b. The secondary regional land use policy for the Seventh Goal will be to pursue the purchase of farmland easements using State, County and Local sources of funding.

c. The tertiary regional land use policy for the Seventh Goal will be to encourage the use of farmland preservation and open space preservation through conservation easements and open space acquisitions that could provide greenway connections.

Eighth. To promote tourism as a form of low impact economic development by keeping the scale of tourism development in balance with the natural and human environment.

a. The primary regional land use policy for the Eighth Goal is to support the efforts of the Slate Belt Heritage Center and others in their efforts to create a recreation of a slate mine and related craft village in the Slate Belt Area.

b. The secondary regional land use policy for the Eighth Goal is to continue the local community celebrations and other culturally unique events and to attract more visitors to enjoy these events.

Ninth. To nurture agriculture as a business activity, protector of open space, and as a way of life. Enhance the development potential of agricultural related businesses in this region.

a. The primary regional land use policy for the Ninth Goal will be to minimize real estate tax costs and municipal regulations so that agriculture as a business can be prosperous.

b. The secondary regional land use policy for the Ninth Goal will be to seek incentives and innovative ideas for agriculture in much the same way that the Chamber of Commerce and regional economic development organizations nurture other economic development. Agriculture is more than a business; Agriculture generally preserves open space, provides a bucolic landscape, and a rural, rustic, pastoral environment that adds to the regional quality of life.

Tenth. To enhance systems for the movement of people and goods. Including streets, buses, parking facilities, park and ride facilities, and heliports as well as safe and attractive pedestrian corridors.

a. The primary regional land use policy for the Tenth Goal will be to establish a regional transportation improvement advocacy group. There have been proposed improvements on the State Plan that were put off and some dropped because of a lack of continuous local support. The Slate Belt Council of Governments should take the lead in creating this transportation advocacy group.

b. The secondary regional land use policy for the Tenth Goal will be to create an access management plan, official map, and other approaches to assure that new development takes place in a manner that is consistent with the regional plan and/or a way that is respectful of the concepts of the plan. In addition, off-site transportation improvements should be paid for at least in part by the proposed developments.

Eleventh. To expand and improve the community facility and utility systems to

change with the times and to be complementary with the intent and purposes of the land use plan and proposed Central Slate Belt regionalization.

a. The primary regional land use policy for the Eleventh Goal will be to update all of the Central Slate Belt Regional municipal Act 237 Sewerage Facilities Plans at or nearly at the same time so that they are coordinated with one another. Those plans ought to consider the new Central Slate Belt Region Comprehensive Plan.

b. The secondary regional land use policy for the Eleventh Goal will be to coordinate and consolidate, where appropriate, municipal services. This could include police and public works services. The Slate Belt Council of Governments is providing an opportunity to explore such options on a mix and match basis with municipalities being able to opt-in or opt-out of each service as they choose.

Twelfth - To establish a standard for residential land use density that is consistent within the region as follows:

- a. **Low Density Areas** – This includes lots that have square foot area of 10,000 or more for each single family detached unit and 8,000 square foot of land area or more for single family attached or duplex units if they are permitted in a Low Density Area.
- b. **Medium Density Areas** – This includes lots that have square foot area of 7,500 or more per single family housing unit.
- c. **High Density Areas** – This includes lots that have square foot area of 5,000 or more square feet per single family single family , two family, or town house units, and 2,500 or more square feet of land area per garden or low rise multiple family housing unit.

HOUSING

Providing adequate housing within a high quality living environment are important

concerns for the Central Slate Belt Region. This plan report section incorporates the Lehigh Valley Planning Commission Comprehensive Plan...2030 as a basis for this housing plan section. This plan focuses on the general public interest issues of quantity and quality of housing.

This plan is also based on a projected population range of between 6,170 to 7,198 persons living in Washington Township by the year 2030 and a modest amount of growth within the Boroughs (approximately 312 persons). The Lehigh Valley Planning Commission projected population for Washington Township is 6,855 and 15,119 for the entire Central Slate Belt Region. For housing needs, this plan section will seek to accommodate an additional 2,703 persons in the Township and 3,016 in the Central Slate Belt Region.

In the three Boroughs, the average household size will continue to decline. Future housing needs in the three Boroughs should result in a need for small dwelling units for single and two person families both in the elderly and in the young singles and couples households.

The projected housing need for 2030 is 1,072 additional homes in Washington Township and 281 additional homes within the three Boroughs combined.

Central Slate Belt Regional housing goals, objectives and policies that relate to housing quality and quantity issues are presented below:

HOUSING QUANTITY & GENERAL GOALS

- *To provide for a supply of housing within the Central Slate Belt Region that as a whole will meet the projected population and household needs by the year 2030.*
- *To provide for housing choice with a variety in housing types*

including single-family detached homes, single family attached homes, residences in 2 to 4 unit structures, and residences in 5+ unit structures, as well as mobile homes.

- *To provide opportunities for home ownership of existing housing units. The housing stock within the Boroughs is generally affordable, but the percentage of homeownership has declined and there are a significant number of vacant units available. These homes represent an opportunity for market rate affordable homes. Promoting ownership in the older residential areas could increase the pride of ownership in these neighborhoods and provide for variety in available housing which could decrease development pressure in other parts of the plan area.*
- *To increase the percentage of home owner occupied housing units within the Boroughs of the Central Slate Belt Region.*
- *To preserve existing housing stock and increase its safety and quality through housing inspections, rehabilitation programs, and housing maintenance education.*
- *To provide housing opportunities for residents in different age groups, from young families to senior citizens.*

POLICIES RELATED TO HOUSING QUANTITY AND OTHER GOALS

Policies recommended in the Lehigh Valley ... 2030 Comprehensive Plan should be incorporated where appropriate as policies of this Central Slate Belt Regional Comprehensive Plan.

IMPLEMENTATION

The Central Slate Belt municipalities should adopt new zoning ordinances that will accommodate the above recommended housing plan supporting a variety of densities and promoting quality housing units. Within this recommendation there is room for local municipal choice. Each of the Central Slate Belt municipalities may adopt their own separate zoning ordinance or they may join with one or more neighboring municipalities to adopt a multi-municipal zoning ordinance that will separately and/or jointly seek to achieve the above Central Slate Belt Regional housing related goals.

HOUSING QUALITY GOALS

- *To adopt the required ordinance to locally administer the new Pennsylvania Uniform Construction Code (UCC).*
- *To have each of the Central Slate Belt municipal governments elect to administer part (appeals board) or all of the UCC through the regional Slate Belt Council of Government (COG).*
- *To consider adopting an ordinance that will require, all housing units when they are occupied initially and reoccupied in the future, to meet the minimum health and safety requirements established by the local governments. This would include multi-family and other rental units, single family units, and mobile home units.*
- *To pursue grants, loans and other housing assistance programs that would seek to improve the quality of housing relative to health and safety issues as well as to increase the percent of local affordable home-owner occupancy primarily in the three boroughs in the Central Slate Belt Region.*

POLICIES RELATED TO HOUSING QUALITY GOALS

Wherever possible, the Central Slate Belt municipalities should work together to establish regulations and to implement these regulations jointly. This cooperative approach should extend to the Slate Belt Council of Government for an even broader based (Slate Belt ten community Council of Governments) regional association of governments.

Background For Following Plan

Recommendations- During the Central Slate Belt Region housing and land use condition surveys conducted by the Planners during late 2003 and early 2004, between one (1) to two (2) percent of the buildings in the Boroughs have obvious exterior defects that could classify those buildings as substandard. Another 10 to 25% of the residential buildings in the Boroughs were in fair condition with a few deficiencies evident from the exterior. It is possible that additional deficiencies exist on the inside of these buildings. The condition of these homes was listed as fair requiring some repair, painting or physical improvements visible from the exterior. Only a handful of buildings including accessory buildings such as garages, barns and storage-shed structures were classified as poor or dilapidated condition requiring demolition or major rehabilitation.

OTHER HOUSING GOALS

- *To encourage a mix of housing and business retail and service land uses. This can best be achieved in the Central Slate Belt municipalities' central business districts, however, mixed use areas can also be recreated in the Township in new or redeveloped business districts.*
- *To pursue respectful preservation and restoration of buildings that are historic and/or have special architectural style and details.*

- *To encourage reversion of single family homes previously converted to apartments. These units represent additional units for family ownership and an opportunity to remove undersized units. Financial incentives and zoning enforcement could assist in re-conversion of these homes and making them available for home ownership. The reversion of these housing units to their original condition will assist in the stabilization of older, historic neighborhoods.*
- *To link mass transportation services with the higher density housing areas including any age, and particularly 55 and older housing developments.*
- *To pursue stabilization and enhancement of existing neighborhoods through programs such as the Elm Street Program, as is being pursued in Bangor. The program should be extended into neighboring municipalities that are contiguous.*
- *To encourage developers to create separate pedestrian walkways that can connect with regional greenways and/or provide local opportunities for residents to safely walk to recreation areas or just walk for exercise.*

sector and the private sector. Private sector partners can include banks, other financial institutions, builders, developers, church and other social improvement organizations.

Education should be incorporated in the process of housing preservation and enhancement. Information on special County extension courses could be included in the local municipal newsletters. These articles and classes could educate residents on needs for and available resources for the removal of health and safety hazards (such as asbestos, lead base paint, and radon gas) in the home and within on-lot sewage disposal systems. Any grant and loan programs available to assist home owners and/or tenants should also be published in the newsletter and in the media as well.

HOUSING POLICIES RELATED TO THE OTHER HOUSING GOALS

Most of the Central Slate Belt Region is composed of neighborhoods that cross over municipal lines. This Plan recommends a regional policy to systematically improve the housing on a multi-municipal basis. Priority should be given to the areas with the greatest need. However, any eligible homeowner occupant should also be eligible for health and safety improvement assistance for their home. The implementation of this policy should be established as a partnership between the public

REGIONAL TRANSPORTATION AND CIRCULATION PLAN

GENERAL

This Plan was prepared consistent with the Pennsylvania Municipalities Planning Code, Article III, Comprehensive Plan, section 301 (a) (3), September 2000.

The transportation element of a comprehensive plan should identify how efficiently the existing network performs, identify hazardous conditions and outline an action plan to address deficiencies. The focus of this work element is to:

1. Define the existing transportation network
2. Identify current deficiencies
3. Identify future congested areas
4. Recommend a strategy to address transportation needs consistent with the land use plan

Planning for the development and needed transportation go hand-in-hand because development generates traffic and transportation supports the community's vision. The location and character of transportation help determine the general direction of growth and are factors in the location of residential, commercial and industrial development, as well as community facilities. However, as the Central Slate Belt Region municipalities continue to grow, the role of the transportation system will change and the quality of transportation services will be challenged.

EXISTING NETWORK

Highway Functional Classification- Central Slate Belt Regional streets and roads are functionally classified on the accompanying table and they are further defined and discussed below:

1. Expressways provide connections between major cities and regions. Expressways are generally four-lane

limited access highways with posted speeds of 55 or 65 miles per hour.

Expressways in the four Central Slate Belt Municipalities: None

2. Arterials provide access between major parts of counties, cities, towns and other major activity centers. Major Arterials are generally four-lanes, with access points controlled by traffic signals. However, the Arterial roads in the Central Slate Belt Region are not designed or proposed to be four lane highways. They are designed as two lane roads. Posted speeds are generally 35-45 miles per hour, however, some sections may be posted at 55 miles per hour.

Arterials in four Central Slate Belt Municipalities include: Route 191, Route 512, and Route 611.

3. Collectors provide connections between local streets and arterial highways; they provide access for business areas. Collectors are two-lane roads with 35 miles per hour posted speeds. Because collectors often provide the "bridge" between commercial and residential developments, more access points are often found than for arterials but fewer than for Local Streets. Collectors with substantial residential access should be posted at 25 miles per hour. Maintaining safe driving speeds is critical for the safe movement of pedestrians and vehicles.

Collectors in the Central Slate Belt Municipalities include: Ackermanville Road, American Bangor Road, Bangor Junction Road, Broad Street, Broadway, Brodt Road, Bunny Trail, Cedar Road, Dante Street, Delabole Road, East Factoryville Road, Flicksville Road, Fox Gap Avenue, Franklin Hill Road,

Garabaldi Avenue, Heinsohn Hill Road, Hester Road, Jacktown Road, Johnson Road, Labar Road, Locke Heights Road, Lower South Main Street, Main Street, Messinger Street, Mill Road, Martins Creek Road, Molasses Road, Mt. Pleasant Road, Nagy's Hill Road, North Street, Oak Road, O.W. Road, Palmer Road, Rasely Hill Road, Richmond Belvidere Road, Ridge Road, Rutt Road, Shooktown Road, Slate Belt Boulevard, South Eighth Street, Springfield Drive, Sunset Drive, True Blue Road, Upper North Main Street, West Factoryville Road, West Bangor Road,

4. **Local Streets and Roads** provide direct access to abutting residential properties and channel traffic to other streets. Local roads are generally posted at 25 miles per hour. Maintaining safe driving speeds is critical for the safe movement of pedestrians and vehicles. Traffic calming is critical to protecting neighborhood children and activities.
 - **Local Roads in Central Slate Belt Regional Study Area:** All remaining streets not already classified as arterial or collector streets.

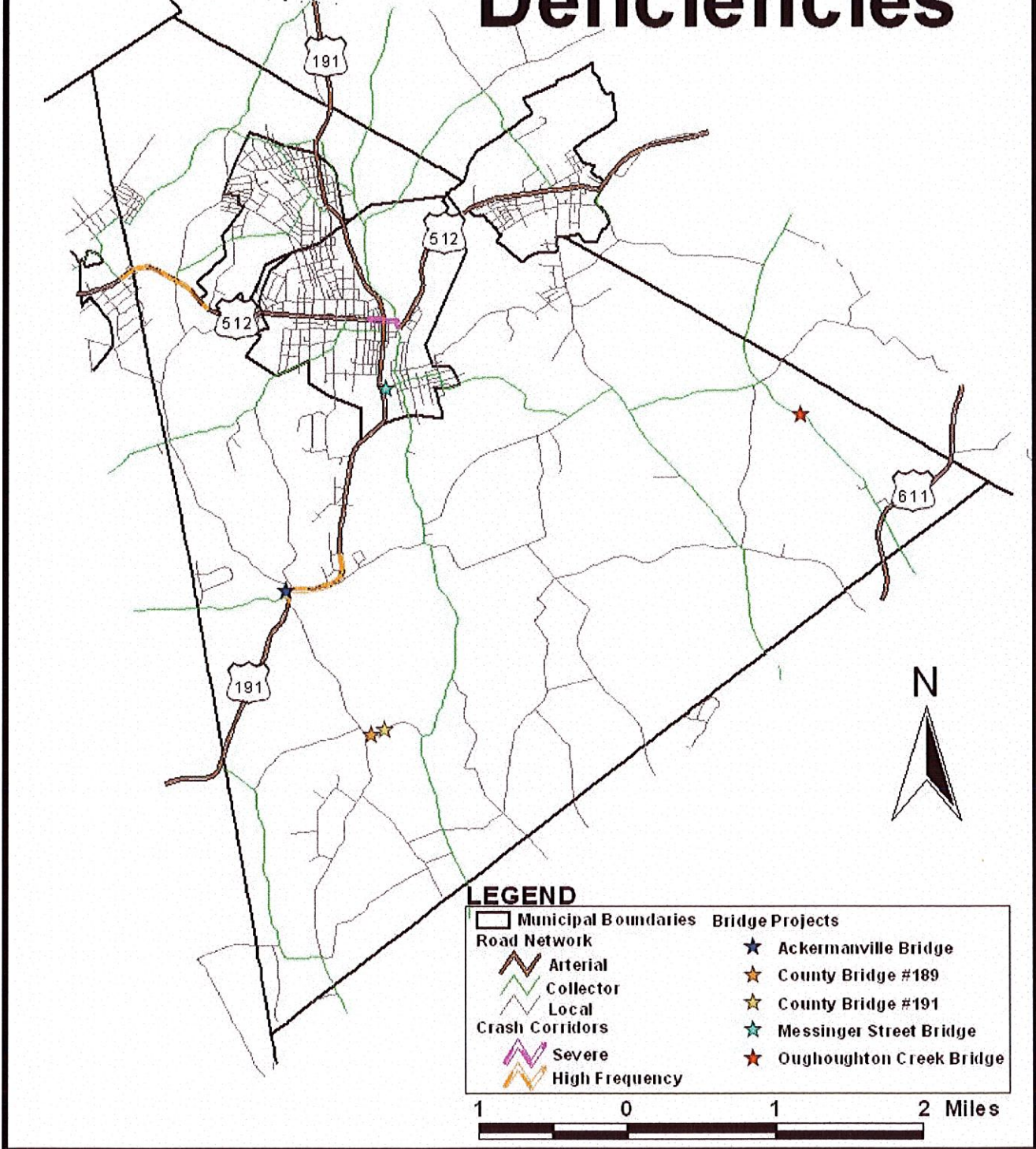
CURRENT DEFICIENCIES

See the table below and the accompanying map (on the following pages) that identify existing conditions and deficiencies from secondary data sources. Three Crash Corridors were identified in the Study Area. Two were high frequency crash corridors, where the number of reportable crashes is higher than the statewide average for similar roads throughout the state. There is also one severe crash corridor, which is a corridor that experiences more than (4) four serious crashes over a five-year period.

Five (5) bridge projects were identified in the Lehigh Valley Transportation Study's (LVTS) Long Range Transportation Plan (LRTP). The LRTP generally establishes the transportation priorities over a 20-year period. It is broken into short, medium and long time periods. The short period time frame is four (4) years and it is the equivalent to the Transportation Improvement Program (TIP). Any project that receives State or Federal funding must be on the TIP. Of the five (5) bridge projects, four (4) are programmed on the TIP. No other transportation projects in the Central Slate Belt municipal area are included in the TIP or the LRTP.

Transportation Table #1 Current Transportation Deficiencies Central Slate Belt Region					
No.	Municipality	Project	Project Type	TIP	LVL RTP
1.	Borough of Bangor	Messinger Street Bridge	Bridge Replacement	Yes	Yes
2.	Township of Washington	Ackermanville Bridge	Bridge Replacement	Yes	Yes
3.	Township of Washington	Oughoughton Creek Bridge	Bridge Replacement	Yes	Yes
4.	Township of Washington	County Bridge #189	Bridge Replacement	Yes	Yes
5.	Township of Washington	County Bridge #191	Bridge Replacement	Yes	Yes
6.	Township of Washington	Ackermanville Road to School Street	High Frequency Crash Corridor	No	No
7.	Township of Washington	Route 512 – Franklin Street to Kennedy Drive	High Frequency Crash Corridor	No	No
8.	Borough of Bangor	4 th Street to North Main Street	Severe Crash Corridor	No	No

Current Deficiencies



Note: This map was financed [in part] by a grant from the Commonwealth of Pennsylvania Department of Community and Economic Development. The map was prepared by Taggart Associates.

PUBLIC TRANSPORTATION

Lehigh and Northampton Transportation Authority (LANTA) provides fixed route bus service and passengers may be picked up anywhere along the route. The Valley Association for Specialized Transportation (VAST) provides door-to-door service to physically handicapped persons who are unable to use LANTA's fixed route service and other persons requiring special transportation assistance. The High Rise Elderly buildings and major industries also may need public transportation service in the future.

PEDESTRIAN AND BICYCLE FACILITIES

A municipality's pedestrian and bicycle paths should be designed to provide residents the opportunity to move safely about the area by non-motorized means. This valuable transportation resource enables children and adults alike to access education facilities, the community center(s) and neighborhood parks safely without the need for motorized vehicles. The path system should, where practical, be connected to adjacent municipalities. Where possible, the path system should be physically separated from the road system. When it is necessary for pedestrians, bicycles and vehicles to share cartways, extra attention to safety is necessary with cross walks, pedestrian activated signals and cautionary signage.

REGIONAL TRANSPORTATION AND CIRCULATION GOALS & POLICIES

- A. A transportation network that provides for safe and efficient circulation of people and goods within and through the Central Slate Belt Municipalities.**
- B. A roadway network that provides good access to business areas and to areas designated as urban,**

suburban, and village residential areas.

- C. A roadway network that seamlessly interconnects the four Central Slate Belt Regional municipalities as if they were all one community.**
- D. A way and means of achieving improvements to the Central Slate Belt Regional Arterial and Collector street systems in regard to improved safety, widenings, alignment improvements, and extensions. (Policy #1- Create an official map for the Central Slate Belt Regional and/or each community within the Region. Policy #2- Create a multi-municipal transportation improvement advocacy sub-committee.)**
- E. A roadway system that efficiently serves proposed business areas with a minimum of impact upon residential areas. (Policy #1- Require business development to help fund improvements to provide them with the shortest, safest connections to the arterial road and/or railroad systems. This could include Tax Increment Financing (TIF) of improvements. TIF financing will permit new businesses to extend their payment for such improvements over an extended time period and permit local governments to partner in that payment process by designating a part of the business property tax payment for the payment of such improvements. Policy #2- Pursue the shortest possible connections between business areas and the arterial system. Policy #3- Seek State and Federal assistance with improved access to business areas.)**
- F. A bikeway and pedestrian walkway system that connects neighborhoods to business areas and to parks and to other public areas of the community by using sidewalks and existing cartways where necessary and**

separate greenway trails where possible. (Policy- All new developments should provide for pedestrian and bike facilities as part of the municipal subdivision and land development requirements)

- G. An accessible transportation system consistent with the American Disabilities Act.
- H. A pedestrian/bikeway system that will provide an alternative to motorized vehicles transportation for short, local trips.
- I. Increased use of the LANTA and VAST, public transportation systems.

FUTURE CONDITIONS

This Central Slate Belt Regional Plan seeks progress toward the above goals and successful implementation of the recommended transportation policies as a means of helping this region to improve its transportation system, to manage growth, and to support development in the best-suited areas.

This Plan relies upon the LVPC's population and job forecasts as a basic assumption for basic parameters of development for this Central Slate Belt Regional plan.

Overall growth in this Region is expected to be relatively low; therefore major transportation related capacity problems are not anticipated assuming the existing issues identified are addressed.

GENERAL RECOMMENDATIONS

Maintaining the transportation system is an expensive task, LVPC estimates \$225,000 per mile, and building new infrastructure is even more expensive, \$2,500,000 per lane mile according to the LVPC. This Plan does not recommend pursuing major transportation improvement projects like a "Slate Belt Bypass". Large projects, like a bypass are extremely expensive; they negatively

impact the environment; and they take an extraordinary amount of time to move through PennDOT's Transportation Development Process. A "maintenance first" policy should always be the highest priority in transportation policies.

The availability of Transportation funds is extremely tight. The number of projects exceeds the funding to implement them. For example, the LVL RTP identifies 21 high priority crash corridors. A high priority crash corridor has both frequent and severe crashes. Over the 20-year life of the plan, LVPC estimates that there will be sufficient funding to study all 21 high priority crash corridors and implement safety improvements/ recommendations for about half of the corridors studied. The three (3) crash corridors identified in the study area are not considered high priority crash corridors and therefore they are not programmed to be studied or have improvements implemented during the life of this plan.

Fortunately, the BREW area has a distinct advantage over other municipalities if the area combines its resources and speaks with one voice. A Central Slate Belt Region or Slate Belt COG Transportation Subcommittee should be formed to advocate implementation of Regional transportation improvements. The Subcommittee should be comprised of equal representation from each municipality. Activities of the subcommittee should seek to:

- Strengthen relationship with PennDOT and local legislators.
- Monitor progress of TIP projects and other projects/studies of concern
- Establish priorities for transportation projects
- Coordinate the implementation of studies and projects
- Allocate revenues from impact fee's collected to priority projects and studies

The Slate Belt COG Transportation Subcommittee should develop a

recommendation regarding the designation of highways in the Central Slate Belt Region that should be considered for Billboard control through the PA By-Way Program.

PROJECTS AND STUDIES

1. Implement projects currently on the Lehigh Valley Transportation Study (LVTS) Transportation Improvement Program (TIP)- These include:

- a. Ackermanville Bridge Relocation
- b. County Bridge No. 189
- c. County Bridge No. 191
- d. Messinger Street Bridge
- e. Oughoughton Creek Bridge

There are five (5) bridge projects that are currently programmed on the current FFY 2003-2006 TIP and the Draft FFY 2005-2008 TIP. The Slate Belt Transportation Subcommittee (SB TC) should monitor the programmed projects on a regular basis. The SBTC should meet with their local legislators, Northampton County Officials, and PennDOT District 5-0 regarding the current status of the projects. For details regarding funding and locations of the projects please see Appendix A: FFY 2005-2008 LVTS Draft TIP. Of particular concern, is the progress of the Messinger Street Bridge. The bridge provides access to the Majestic factory, a major employer of the area.

The LVTS technical committee meets monthly. Each month, the Committee receives a status report on highways, bridge or transportation enhancement projects. These meetings are open to the public.

2. Perform necessary traffic studies to address identified crash corridors- Three crash corridors have been identified within the study area, two (2) High Frequency Crash Corridors and one (1) Severe Crash Corridor. For discussion purposes the Severe Crash

Corridor in this Central Slate Belt Region is the Downtown Bangor Crash Corridor. The two high frequency crash corridors in this Region are: the Ackermanville Crash Corridor and the Eastern Gateway Crash Corridor. The Downtown Bangor Crash Corridor should be the first studied by PennDOT due to the severity of accidents. The Slate Belt Transportation Subcommittee should prioritize study and seek improvements for the remaining crash corridors.

The primary focus of each traffic study should be addressing the associated crash corridor. However, it is important to take a comprehensive approach when examining the impacts of a traffic situation and possible alternatives. Unfortunately, there is no cure-all when dealing with these types of issues. Many times a series of trade-offs are required to find the proper balance.

3. Develop Access Management Policy/Plan - In the Commonwealth of Pennsylvania, local municipalities control land use decisions including local roadway design. Sound land-use decisions and good local road design should be looked at as one of the preventative maintenance options for enhancement of this Region's transportation system. The practice of preventative maintenance techniques on existing transportation infrastructure will increase the overall life expectancy of those facilities and decrease costs over the long hall. Preventative maintenance techniques, like Access Management, are extremely effective in improving safety and efficiency of existing infrastructure. An effective access management plan can actually add capacity to the transportation system while remaining relatively low in cost to implement. See Appendix documents for more information regarding access management and local roadway design tools.

An Overall Access Management Policy Plan should be developed for the entire multi-municipal area. The overall policy plan should outline design standards, Right-of-Way standards, best management practices for managing access onto the transportation system, and prioritize areas needing to retrofit access management. Access Management increases safety and decreases congestion. It is a relatively low-cost means of improving the transportation system. This Comprehensive Plan recommends that priority be given to implementation of the Access Management Plan beginning in the growth centers.

4. **Investigate Need For An Impact Fee Ordinance** - An Impact fee ordinance could be developed to offset the cost of impacts to the transportation system associated with new development. This study should address all requirements for establishing an Impact Fee Ordinance authorized by Act 209 of 1990. Please see Appendix B for more information.
5. **Create an Official Map** - While no major improvements are recommended at this time, eventually as traffic studies are completed and improvement plans are developed, an official map will be helpful in accomplishing the future improvements. The official map should also show Access Management improvements from the aforementioned study.

FUNDING

PennDOT's Project Development Process is long and cumbersome (See Appendix). However, if a municipality is willing to invest some money upfront this process can move faster. Working closely with PennDOT, the Slate Belt Transportation Subcommittee should take the lead on projects at least through the Preliminary Design Phase, which includes all of the feasibility studies. PennDOT is more likely

to fund a project if the municipality is willing to invest its own funds in the planning and design of the project.

TRANSPORTATION ACTION PLAN

- ◆ **Immediate Actions (Less than 1 year)**
 - Form Multi-municipal transportation subcommittee
 - Transportation subcommittee meet with State and County elected officials and PennDOT District 5-0 regarding status of TIP projects
 - Request bi-monthly or quarterly meeting with PennDOT District 5-0 for status report on TIP projects.
 - Prioritize recommended studies
- ◆ **Intermediate Action Items (1-5 Years)**
 - Perform Recommended Traffic Studies
 - Downtown Bangor Traffic Study
 - Eastern Gateway Traffic Study, Bangor
 - Ackermanville Traffic Study
 - Develop Traffic Impact Fee Ordinance
 - Prepare Overall Access Management Policy/Plan
 - Ackermanville Bridge
 - County Bridge No. 189
 - County Bridge No. 191
 - Messinger Street Bridge
- ◆ **Long Term (5 + Years)**
 - Implement findings for:
 - Downtown Bangor Traffic Study
 - Eastern Gateway Traffic Study, Bangor
 - Ackermanville Traffic Study
 - Access Management Study

Summary of Transportation Recommendations

1. Recommendations to improve access and interconnections to all parts of the Multi-municipal area proposed for future development. (This Regional Comprehensive Plan does not recommend any major improvements. The existing network is sufficient for future growth.)

2. Recommendations to improve the safety and operation of the street system including re-alignments, studies for traffic control etc.

- Two (2) high frequency crash corridors and one (1) severe crash corridor have been identified within the study area. A traffic study for each corridor should be performed to find solutions that address the safety issues.

3. Recommendations to deal with one-way streets and traffic calming.

- More analysis is needed to determine the need for one-way streets and traffic calming measures. The use of one-way streets and traffic calming measures should be examined as part of a Downtown Bangor Traffic Study.

4. Generalized recommendations for off-street parking concepts.

- The boroughs should consider acquiring properties as opportunities arise for conversion into off-street parking.

5. General recommendations for mass transit and walkway corridors.

- LANTA currently serves the area with two stops, one in Bangor and one in Roseto. This Plan recommends working with LANTA to add stops at the Majestic Facility and at the proposed Veterans Hospital.
- Walkway corridor recommendations will be addressed as part of the recreation plan.

6. List of highway improvement projects and procedure to fund them.

- This Plan recommends implementing the projects programmed in LVTS's TIP
 - Ackermanville Bridge
 - County Bridge No. 189
 - County Bridge No. 191
 - Messinger Street Bridge

7. Recommendations for speed limit studies and traffic impact fee studies, and any other follow-up studies.

- Downtown Bangor Traffic Study
- Western Gateway of Bangor Traffic study
- Ackermanville Traffic Study
- Traffic Impact Fee Study
- Access Management Policy Study

RECOMMENDATIONS FOR WASHINGTON TOWNSHIP CIRCULATION IN COORDINATION WITH LAND USE

The overall Central Slate Belt road system resembles a spoke and hub system. The major spokes are PA State Route (SR) 512 and SR 191. SR 712, South Main Street, is another spoke road. The hub is in downtown Bangor. It includes Broadway, Main, Market and First streets.

As the population of the Central Slate Belt Region increases and related business traffic increases, there is an increasing likelihood that downtown Bangor will become more congested with an increase of accidents and delays. This potential problem could be reduced somewhat if some of the through traffic on this radial-spoke system could safely move from one radial-spoke to another primarily in Washington Township. This would permit vehicular traffic to "connect" from one spoke road to another without having to travel all the way into Bangor or Roseto to make the desired connection.

Recommend Improvement to Existing Connector System of Collector Roads-

This Traffic Circulation Plan proposes that certain existing roads primarily located in Washington Township be improved so that they will be safer to use as they continue to be used by more vehicles as connector roads. The overall pattern of major State arterial roads is radial in design, if downtown Bangor is used as the center point of reference. Since there are no circumferential or loop roads that connect the radial roads, local people find it more convenient to use existing collector roads as connectors *(from one arterial such as SR*

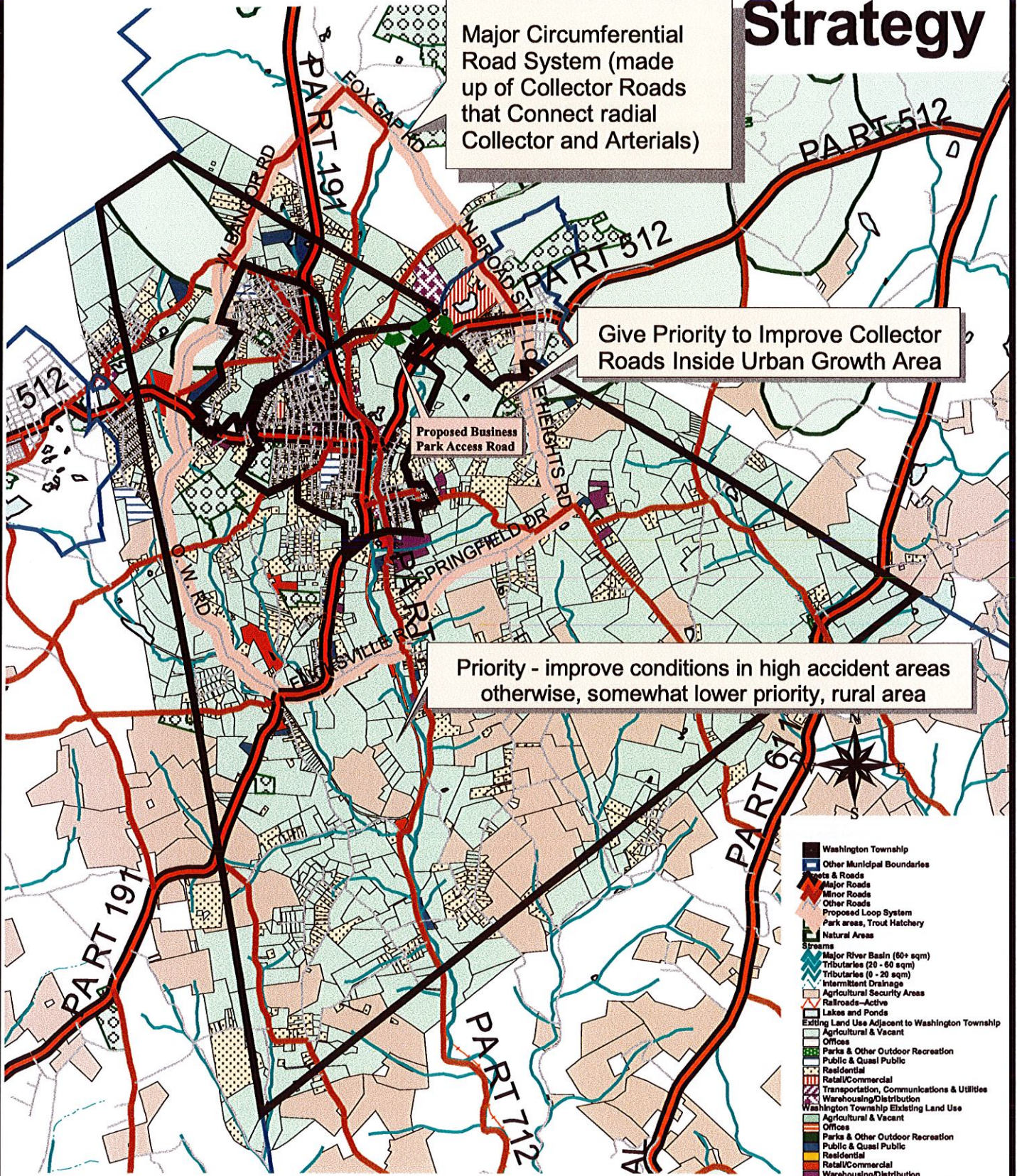
Vehicular Traffic Circulation Plan Strategy

Major Circumferential Road System (made up of Collector Roads that Connect radial Collector and Arterials)

Give Priority to Improve Collector Roads Inside Urban Growth Area

Proposed Business Park Access Road

Priority - improve conditions in high accident areas otherwise, somewhat lower priority, rural area



This map was financed [in part] by a grant from the Commonwealth of Pennsylvania Department of Community and Economic Development.

Rodite & Pandl, LLC, Community Planners and Landscape Architects June 2004

191 via N. Bangor Road to SR 512) to by-pass the major development of the Boroughs. This Central Slate Belt Regional Transportation Plan seeks to make these connector roads safer, but not to make them major thoroughfares by signing them as a part of a major loop road system. Therefore, the approach is low key and focuses on safety and access management rather than widening, and increasing the drivable speeds on these connector roads. In the future, the local municipalities may want to consider some traffic calming techniques to reduce the traffic speeds on these connector roads to further insure their safe use.

The Connector Roadway System is proposed to include the following roads & streets:

- **W. Bangor Road,**
- **O. W. Road,**
- **Flicksville Road,**
- **Springfield Road,**
- **Lock Heights Road,**
- **Broad Street, and**
- **Fox Gap Road.**

These Connector System Roads should be improved to the standards of a collector street (as per the Washington Township Subdivision and Land Development Ordinance) in terms of roadway width. The number of new access roads and driveways connecting to these roads should be minimized so that there are fewer potential accident points and less delay from traffic entering and leaving these roads. Any poor roadway geometry should be improved, such as poor intersection design (“+” intersections or 90 degree angle “T” intersections are best), optimum clear sight distances should be maintained at all intersections of these roadways, inter-secting streets should have the stop signs, steep grades and sharp curves should be reduced so that the grades and curves are less hazardous, but not so smooth that they will be attractive to become a major speedway.

Inside the connector system, the collector and local streets should be enhanced as part of a general grid system of streets. This system of roads and streets will enhance the residential and business environment within the connector system. It should complement the areas proposed for urban-suburban-village development.

Outside the connector road system, road improvements should be limited to improvements required for safety and reduction of high crash area problems.

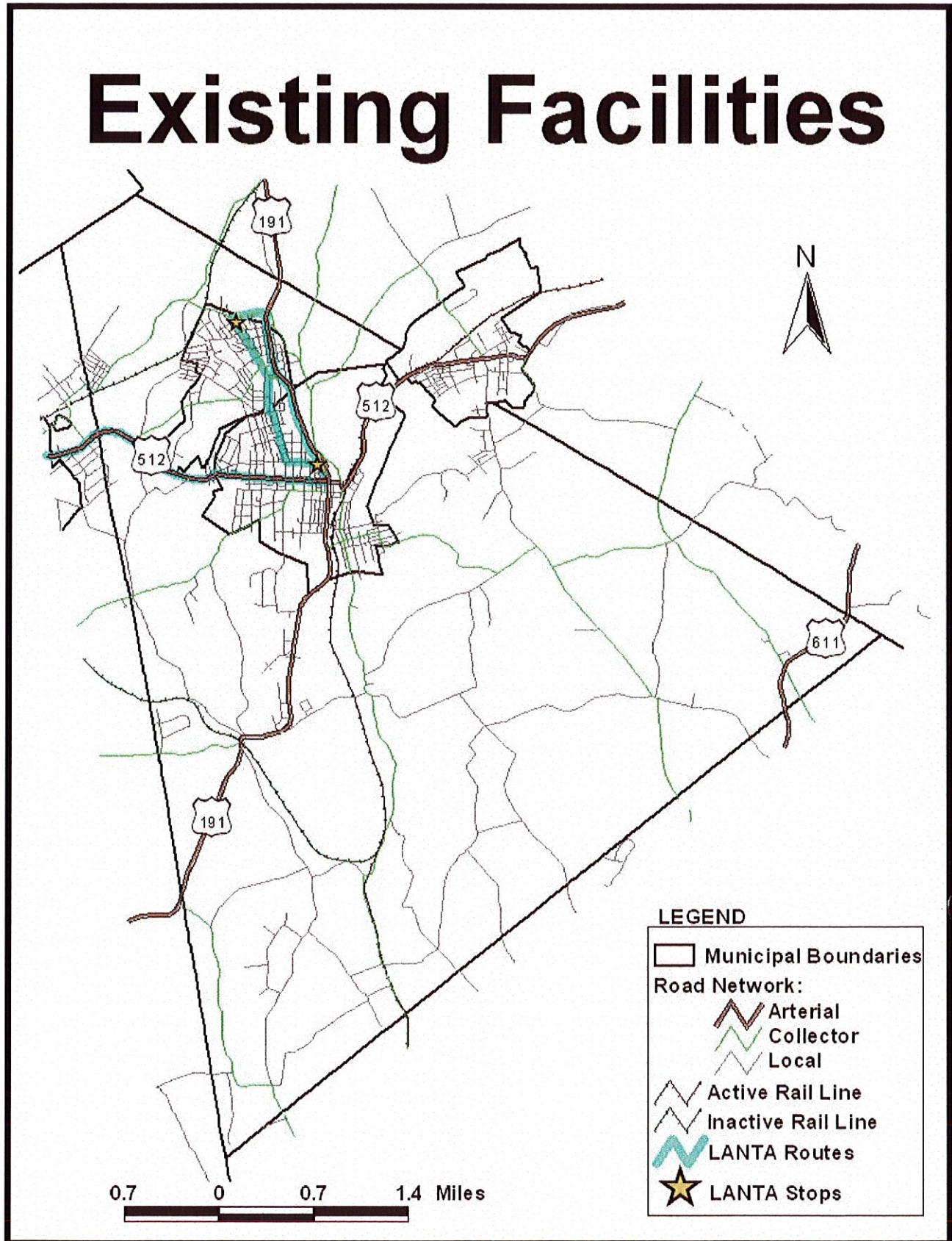
An exception to the above recommendation occurs at the western side of the connector system at the intersection of the Connector and Pennsylvania State Route 512. This area currently has a variety of businesses on the inside of the Connector system and on the outside toward Pen Argyl into Plainfield Township. This business area will very likely continue to attract most of the business potential for the Central Slate Belt Region. This corridor should be a top priority for the Transportation and Traffic Subcommittee to study and plan improvements. A “Specific Plan” should be created to not only make this corridor safer with minimal congestion, but streetscape beautification improvements should also be included as a priority for the Plan. Beautification including landscaping, signage and building appearance could be a point of pride for the Region at this important Western entranceway into the Central Slate Belt Area.

Signage and an information plaza should be developed in this entrance corridor to link this prosperous business district with the other business districts of this Central Slate Belt Region. The strength and heritage of each of the business districts could be presented at this gateway on one or more tastefully designed billboards and on a special sign and information plaza. If there is enough space and community support, a special parking area could be developed in the information plaza to permit bicyclist visitors to park their

vehicle and then begin a bicycle tour of the Central Slate Belt Region visiting each

of the business districts and other historic and scenic points of interest.

Existing Facilities



REGIONAL COMMUNITY FACILITIES AND UTILITIES PLAN

COMMUNITY UTILITIES SEWAGE DISPOSAL, WATER, STORMWATER

The availability of centralized water and sewerage utilities is important in this Central Slate Belt Regional Plan for the following reasons:

- The protection of human health.
- The preservation of environmental qualities.
- An incentive for economic development and creation of local jobs.
- An opportunity to influence the location and intensity of housing and other land use development.

Although the availability, capacity, and cost of public utilities are very powerful as a community building and preservation tool, our plan places this Public Utility Plan element last in the three major components of the Central Slate Belt Regional Plan after the Land Use Plan and the Transportation Plan elements. This regional plan first establishes a set of cultural, economic, and environmentally influenced land use goals and then seeks to have transportation and community utility policies organized to help carry out those goals.

This Central Slate Belt Regional Comprehensive Plan for 2005 to 2030 puts forth the following goals related to community utilities:

SANITARY SEWER PLAN GOAL

- ✘ To seek economical, efficient sewage collection and disposal for existing areas of urban development, areas nearby to existing service areas

that have failing on-lot sewerage systems even if they are low density, and finally areas designated for future urban development in this plan, but no sewerage service is proposed for areas designated for farmland preservation, open space protection, and environmental preservation areas.

POLICIES

- Urban development should locate in areas where the public sewer system can accept additional growth, either at present or through limited expansion and upgrading, consistent with the Comprehensive Plan recommendations for urban development. *(Note: Public sewerage service may include publicly owned collection of sewage, sewage treatment in innovative ways and spray irrigation of the clean effluent in field or forest areas)*
- Urban development should be discouraged in areas where it can only be served by on-site sewage disposal systems. This plan does not recommend the creation of new sewerage systems or the extension of existing sewerage systems into areas that are recommended for farmland preservation, watershed protection, or open space protection.

SANITARY SEWER PLAN GOAL

- ✘ To require environmentally sound sewage disposal for all persons, businesses, and other human activity within the Central Slate Belt Region.

POLICIES

- Tested primary and replacement absorption areas should be provided for

each lot proposed for on-site sewage disposal.

- Adequate up-to-date Municipal Official Sewage Plans should be created and be maintained consistent with Act 537 - the PA Sewage Facilities Act of 1966.
- Areas with malfunctioning on-lot sewage disposal systems or malfunctioning central systems should be provided with adequate sewage disposal. The most cost-effective solution to the problems should be implemented after an evaluation of appropriate alternatives.

WATER SUPPLY PLAN

The Central Slate Belt Planning Region includes two Community Water Systems:

- Public System owned and operated by the East Bangor Municipal Authority.
- Private System owned and operated by the Pennsylvania American Water Company.

In addition to the Community Water Systems, there are private on-lot water systems that serve properties primarily in Washington Township.

Direct local government control over the quality and quantity of potable (*suitable for drinking*) water is minimal. Local Central Slate Belt Regional municipalities should require that minimum health and safety standards for potable water be included in the initial development. However, the monitoring, supervision and enforcement of water quality standards after development takes place is the responsibility of higher authorities such as the PA Public Utilities Commission and the PA Department of Environmental Protection.

Since all of these water systems rely upon subsurface water, rainwater recharge of the subsurface aquifers, and surface water recharge of the subsurface aquifers, the municipalities do have an

indirect involvement in the protection of water quality and quantity available for public consumption. The municipal Land Use Plan element of the Regional/ local Comprehensive Plan and the Municipal Zoning Ordinance are municipal opportunities to help assure safe potable water supplies.

This Central Slate Belt Regional Plan seeks to assure that there is a safe, reliable water supply. Preservation of major community water system watershed areas in open space and forest use, as recommended in the Regional Comprehensive Plan, is an important part of this Regional Plan.

This Central Slate Belt Regional Plan is also concerned about the safety of water supply sources, water storage, and water conveyance systems. The level of concern was broadened starting from the terrorist attacks in New York City and Washington, D.C. on September 11, 2001. Therefore, this plan encourages the two Community Water System suppliers to create and implement emergency plans that would respond to natural and human adverse impacts upon these local water systems.

Since on-lot water supply is an important means of supplying potable water in the Township part of this region, the protection of well water quality is of great importance for this plan. As a result, this plan recommends that Washington Township continue to adopt the latest well head protection regulations as they become available from the Lehigh Valley Planning Commission and that those regulations be enforced.

WATER PLAN GOAL

GOAL

- ✘ To coordinate economical, efficient Community Water Systems, water services with existing land use and the Central Slate Belt Regional recommended future development.

POLICIES

- Urban development should locate where the existing community water system can accept additional growth, either at present or through limited expansion and upgrading, in areas where the Comprehensive Plan recommends urban development.
- Urban development should be discouraged in areas where it can only be served by on-site water systems or new central water facilities unless such areas are identified on the Central Slate Belt Regional Comprehensive Plan for future urban type development.
- Urban development in areas recommended for rural development in the Comprehensive Plan may be served by existing or expanded publicly-owned central water facilities under the following conditions:
 1. The area is clearly defined for urban development and water service in the municipal comprehensive plan and zoning ordinance;
 2. The defined urban area is a limited and contiguous expansion to the existing service area; and
 3. The municipal zoning ordinance is effective at steering urban land uses to the defined area and otherwise preserving agriculture or open space. LVPC standards and guidelines should be considered in any expansion of water services into areas beyond contiguous expansion of existing service areas.
- Where municipal water service is not available and the Township seeks to assure that on-lot water supplies are potable and safe to consume, the Township should require from the homeowner water quality and quantity test results for each on-lot system prior to the issuance of an occupancy permit.

STORMWATER MANAGEMENT PLAN

The Central Slate Belt Region is primarily located in the Martins Creek Watershed (about two thirds of area). About one fourth of the Planning Area is in the Oughoughton Creek Watershed and the remaining approximately 10 percent of the Planning Area is in the Mud Run Watershed. Since the Planning Area is in the foothills of the Blue Mountain, these watersheds are near their headwaters. The impact of heavy rainfall is much quicker (shorter warning time) in headwater streams and their valleys than downstream. There isn't as much time to react and prepare for a storm water runoff or a flood event in headwater stream areas as there is in the lower reaches of these watersheds. As a result, the hazards to property and life are somewhat different in that there is not as much time to prepare. The best preparation is in the planning of land development and the management of ground cover in open space areas and along stream corridors.

As recently as 2004, Hurricane Ivan brought a large amount of rainfall. It caused a very rapid build up of storm water runoff causing significant (*three feet*) flooding in the interior of a factory located in Bangor along Messinger Street. There are many instances of bridge and other storm water runoff problems in the Region.

STORMWATER MANAGEMENT GOALS

- ✘ To establish an intercommunity storm water cooperative approach to manage the rate, volume and quality of storm water runoff for protection of public safety and welfare, property and the environment.
- ✘ To study ways and means for the mitigation of existing storm water runoff problems in the Martins Creek Watershed in each of the Central Slate Belt Municipalities.

- ✘ To implement solutions for the existing storm water problems through intercommunity cooperation.

This Plan embraces the LVPC storm water management policies.

STORMWATER MANAGEMENT POLICIES

- Storm water problems should be identified in more detail on a watershed basis through inter-municipal cooperation in the planning and the plan implementation.
- This Plan also recommends that the Slate Belt COG seek a Growing Greener project to reduce the storm water runoff from Washington Township into Bangor Borough and the northern sections of Roseto Borough (*and related sections of Washington Township and Bangor Borough*) thereby mitigating future flood hazards.

SOLID WASTE

Solid waste management is becoming a very expensive service for the residents of the Central Slate Belt Planning Area. In the long range, research needs to be conducted into ways and means for reducing the amount and cost of waste disposal. In the meantime, the primary way to reduce costs is to increase the amount of solid waste that is recycled and reduce the stream of materials that is conveyed to the land fills.

Disposal of leaves, grass, tree, and yard waste is an area that the newly formed Slate Belt Region Council of Governments decided to study. Their plan is to identify ways and means by which these yard waste products could be recycled through composting via an inter-municipal program.

The Commonwealth of Pennsylvania provides incentive grants for recycling of waste materials. The larger grants go to those communities that achieve the highest rate of recycling. Therefore, there are financial incentives for recycling in addition to the obvious benefit of longer lasting land fills. The individual citizen's waste disposal bills could be less as a result of the reduction in waste taken to the curb for disposal.

SOLID WASTE GOALS

- ✘ To initiate a successful leaf, grass, and yard waste disposal program through the Slate Belt Council of Governments.
- ✘ To substantially increase (*50% increase*) the amount of solid waste that is recycled in the Central Slate Belt Region.

SOLID WASTE POLICIES

- The Slate Belt Area Council of Governments should formulate a program to increase recycling and to create a new leaf and yard waste recycling program.
- The waste disposal companies serving this area should provide the municipalities with the tonnage of waste recycled each quarter. This would serve as a basis for progress toward achievement of the recycling goal.

PARKS AND RECREATION PLAN

Each of the four Central Slate Belt Municipalities contains a community-wide park. The newest of these is in Washington Township. In-fact, Washington Township is currently in the process of developing a master community park plan for additional recreational facilities at their Township Park that is located to the rear of the Washington Township Municipal Building

located on S.R. 191 just south of the village of Ackermanville.

The Borough of Roseto has a centrally located park that contains a baseball field, basketball court, children's play apparatus area and a picnic pavilion. Roseto also has a mini-park along Columbus near Garabaldi Avenue. East Bangor has a similar set of facilities. East Bangor is currently in the process of upgrading the play equipment at the Reimer Memorial Community-wide Park. The Borough of Bangor has the largest, local municipal park. It includes a swimming pool and stadium in addition to a variety of play apparatus and other recreation facilities. Special features at the Bangor Memorial Park include a small train ride, a basketball court, a little league ball field, other fields and a group of volley ball courts, most of which are lighted for night use.

A spirit of inter-community cooperation exists and could be nurtured further in the area of recreation planning. (*i.e. Washington Township has contributed funds to Bangor so that Township residents may use the swimming pool at reduced rates.*)

RECREATION PLAN GOAL

Current municipal parks appear to meet the needs in each municipality. However, a more detailed study is recommended with emphasis on use trends of existing facilities, projection of needs based on anticipated regional population projections, and the potential of planning for special recreational needs on an inter-municipal basis. The major recreation goal therefore is as follows:

- To Prepare a Central Slate Belt Regional Park and Recreation Plan based on a detailed study of current and projected needs.
 - Policy #1 – Agree to pursue a grant to retain a recreation program

intern to coordinate inter-municipal recreation facility scheduling of fields and facilities and to establish a projected need for facilities.

- Policy #2 – Actively participate in the Lehigh Valley Planning Commission Greenway – Walkway study and plan. Seek to interconnect future Greenways and to include the Flory Dam Property between the Boroughs of Bangor and Roseto as a link in that system.
- Policy #3 – Pursue a grant to prepare a Regional Recreation Plan based on the results and outcomes from the above two policies. The Regional Plan ought to consider the need for a regional indoor recreational facility, regional playfields, and neighborhood – district facilities that serve districts that extend from one municipal neighborhood into the adjacent municipality.
- Policy #4 – Annually evaluate and upgrade the safety of all public recreation facilities. Correct identified problems immediately.
- Policy #5 – Seek public-private partnerships with regard to the creation, operation, and maintenance of recreation facilities.

OPEN SPACE AND SCENIC RESOURCES

State Route 191 is a scenic highway that is not officially designated in recognition of its scenic assets. S.R. 191 crosses the Appalachian Trail to the north of the Central Slate Belt Regional Planning Area. As it descends into the Planning Area from the crest of the Blue Mountain, the views from this roadway can be very inspiring. Then S.R. 191 passes through the Boroughs of Roseto, Bangor and the Township of Washington with many additional special views.

OPEN SPACE GOALS

- ✘ **To preserve open space and important natural areas** (*as identified earlier in the Preservation Plan section of this Chapter and as identified in Chapter Three in the National Inventory Site study.*)
- ✘ **To create an interconnected open space and green-way system that links all four Central Slate Belt Municipalities with walking and/or bicycling trails.**

CENTRAL SLATE BELT REGIONAL PUBLIC BUILDINGS, SERVICES, AND PUBLIC WORKS PLAN

Government Center Building Recommendations

The Borough of Bangor provides municipal services from the Bee Hive Community Center Building located on Pennsylvania Avenue and with frontage on North First Street (S. R. 191). The Borough Manager, Borough Secretary, Borough Code Enforcement Officer and office clerk are located in this municipal building. Borough Council meets (generally two times each month) in this building. This building has a small kitchen facility and its large “hall type” room and basement are actively used for indoor recreational activities. The Bangor Borough Police Department is located almost two blocks to the south in the “Old Town Hall” that is now known as the Slate Belt Heritage Center. It fronts on North First Street just north of Market Street. Neither of these buildings is well suited for its general government and police purposes. This Plan recommends that one new or better suited existing building should be provided for these functions during the Central Slate Belt Regional planning time period. (2005 to 2030). The size and location of the new facility should be based on a space use analysis and

projection of future local government service needs. Life cycle energy and maintenance costs should be an important factor in the selection of a new building. Ideally, a site near the downtown should be selected.

Bangor owns and operates several other buildings including three fire station houses, a public library and a street department garage. Both the Library and Public Works Building have structural and energy conservation problems. Both the public library and the street department garage functions should be carefully reevaluated in light of the Borough’s involvement with the regional Council of Governments. One or parts of both of these functions could be shared (*or more fully shared – in the case of the historic library facility*) by other Slate Belt Region Municipalities. Further study and analysis of the success of inter-community cooperation through the COG will need to take place before a final determination is made regarding the ultimate future need for these two government functions and the buildings that house them.

The Borough of Roseto owns and operates three public buildings. One is a multi-use Borough Hall and Fire Station that fronts on Garibaldi Avenue and Chestnut Street. This building is in sound condition, has good access, and serves the public well in terms of access via the relatively new elevator to the second floor, however, it may need to be further improved during the time-line of this Comprehensive Plan. It would be more convenient to have the existing restroom facilities on the top floor made handicapped accessible. It would also be more convenient to have more off-street parking with an appropriate number of handicapped parking spaces included. This municipal building has excellent kitchen facilities for in-house or catering food preparation. The second building is a police headquarter building at the corner of Roseto Avenue and North First Street (S.R. 191). This building is well located, but it is very small. It has no off-

street parking. It should continue in service until a change in local and/regional police service decisions are implemented. The third Roseto building is a Public Works Building located in Washington Township just north of the Borough relatively close to S. R. 191 and accessible from Shooktown Road. The main garage building is generally suitable for its intended use, however, the salt and cinder storage structure has been less than adequate.

Regionalization of some of the garage and equipment storage function should be evaluated in light of the potential for creation of one or more regional public works facilities within the greater Slate Belt COG region.

The Borough of East Bangor owns three municipal buildings. The East Bangor Volunteer Fire Company actually operates and maintains the old school house on Central Avenue where the Borough Council holds its meetings. Adjacent to the old school house the volunteers constructed a fire station to house their fire equipment. Both buildings are generally acceptable for continued service; However, repairs to the roof, heating, air conditioning, and kitchen facilities should be scheduled over the next 25 years (2005 to 2030) of this planning program. The Borough Police Station is located in a small building on Central Avenue to the west of the Fire Station House. The police station is small, but has a good location near the center of town and along the major thoroughfare, S.R. 512. The future of this station house will depend on the nature and extent of regionalization of police service in the future. The Slate Belt COG is currently pursuing a regional police service grant and study.

The Township of Washington owns and operates two building complexes. The first is the Township Municipal Complex located south of Ackermanville with frontage on S.R. 191. This is a new building that houses Township municipal offices, the Township Police offices, the meeting room for Township

Supervisors meetings, and it also accommodates other Township and regional meetings. It is well designed with adequate interior and exterior facilities such as parking which includes handicapped parking spaces. The second building complex is located north of Ackermanville with frontage on Flicksville Road a short distance from S.R. 191. It contains three buildings. The smallest is the old Township meeting and office building. The second building is a metal side and roof Road Department building. It is very well maintained as is the fine equipment stored therein. However, additional storage and repair space will be required as the Township population and development increase. The Third building in this complex is an old wooden barn structure. Some Road Department equipment is stored in this building.

This plan recommends that a special space needs and building site evaluation be conducted to determine whether this Washington Township existing public works complex will be able to serve the future needs. That study should also evaluate alternate locations for a new public works complex. This should include land on and adjacent to the new Washington Township Municipal Building and Park complex. It could also include shared public works facilities with the adjacent municipalities. Based on that study, a decision should be made as to which buildings should remain at this site and which should be raised. If the barn is slated for removal, the structural elements could be preserved and sold to someone who might rebuild it on another site. If the current public works complex is not suitable for use as a future public works complex, then its use for other public purposes should be evaluated. Central Slate Belt Municipal police headquarters could be one of the reuse alternatives considered.

The volunteer fire company owns and operates its own fire station located south of Ackermanville fronting on the west side of S. R. 191 just north of the new Municipal Complex.

Police Service Recommendations

Cooperate with the Slate Belt Regional Council of Governments to study and plan for regional police service for the Slate Belt Region. This study should lay out the options for regionalization that could include combining the existing police forces of Bangor, Roseto, East Bangor and Washington Township. If such an option is feasible, then this Regional Comprehensive Plan recommends that the recommendations be implemented. If some other form of cooperation is recommended or partial regionalization, this plan would support that option as well.

Fire Service Recommendations

Municipal fire service is provided by volunteer fire persons. It has been increasingly difficult to attract the number of volunteers that have sustained the local fire departments 10 or 20 years ago when the regional population was lower and the subdivisions in Washington Township were closer in to the Boroughs.

This Regional Comprehensive Plan recommends that all of the municipalities within this region locally (or regionally) administer the Uniform Construction Code and adopt the International Property Maintenance Code in order to preserve and enhance the safety and quality of local housing. In that way, the number and severity of fires can be reduced. Fire service should also seek the objective of being able to reach all developed properties in this region within six (6) to 10 minutes of receiving a call for fire fighting service. In the future, this could result in changing some of the fire department locations, or improving access to areas that are difficult to service with existing roadways. Inter-connecting subdivision street systems may be desirable in order to improve fire service access.

Impediments to fire service access

should be evaluated every three to five years based on the record of fires and any human injuries or fatalities that occur related to the fires.

Emergency management should be coordinated between Central Slate Belt Regional Municipalities and with the other municipalities that make up the Slate Belt Area Council of Governments. Emergency shelters should be established and identified to the public as safe places to go if there is a power outage, hurricane, flood or other disaster or terrorist attack. These shelters should have their own power generators, communication systems, and safe areas if there is contamination in the area resulting from natural or other sources.

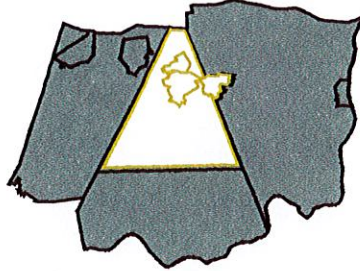
With the various efforts to provide efficient, cost effective service in part through regionalization, local identity should be preserved through the heritage center and other local community based signs, activities and newsletters. As an increasing number of local residents enter their retirement years, this corps of people could be encouraged to participate in community restoration and action programs to remember the past, the heritage of each community and help to celebrate that heritage with many local community events and neighborhood gatherings. This celebration of local places can be a means for old and young people to work together for restoration and community rebuilding.

INTER-MUNICIPAL CONSOLIDATION

This Central Slate Belt Regional Plan recommends that the local municipalities consider consolidating at some time during the next 25 year period. Consideration of this option would be enhanced if the Commonwealth of Pennsylvania provides for consolidation through a "Home Rule Charter" where special consideration will be given to representation, retention of community identity, and other issues of local importance.

Local Comprehensive Plan Sections

Central Slate Belt Region



CHAPTER TWO

BOROUGH OF EAST BANGOR

COMPREHENSIVE PLAN

Introduction Roseto Comprehensive Plan - Page 43
Future Land Use, Economic, Housing, and Natural Resources Plan - Page 46
Transportation/Circulation Plan - Page 48
Community Facilities and Public Utilities Plan - Page 68
Statement of Plan Interrelationships - Page 82

**Boroughs of Bangor, Roseto,
East Bangor, Township of Washington
in County of Northampton, Pennsylvania**

Preliminary Draft Report Sections prepared in 2004 & 2005.

This report was financed, in part, by a grant from the Pennsylvania Department of Community and Economic Development under the Land Use Technical Assistance Planning Program. This program is part of a Multi-municipal Planning Program including the Boroughs of Bangor, East Bangor, Roseto and the Township of Washington.

**Borough of East Bangor Planning Commission
Rodite & Pandl, LLC, Community Planners**

INTRODUCTION
EAST BANGOR COMPREHENSIVE PLAN

East Bangor Population Trends and projections 1960 to 2030-

The total Borough population has been relatively stable for the last 40 years. The year 2000 U. S. Census revealed that the Borough population was 979 persons or nine persons more than resided in the Borough at the time of the 1960 Census. The slight declines and increases are shown on the following table:

Borough of East Bangor Total Decennial Population 1960-2000		
Year	Population	% Change
1960	970	
		-6.7%
1970	905	
		+5.5%
1980	955	
		+5.3%
1990	1006	
		-2.7%
2000	979	

Source: U.S. Census of Population

Additional population information is presented in the tables at the end of this Background Analysis report section.

Highlight from some of those tables include:

- During the 1990 to year 2000 decade the net population increase in Northampton County was 19,961 persons. Taking all Northampton County Boroughs together, their total share of that increase was only 1,314. Almost all of the increase in population was experienced in the Northampton County Townships. (See Table #1 of Chapter Three)
- East Bangor is part of a Multi-municipal Planning Group that includes the Boroughs of Bangor, East Bangor, Roseto, and the Township of

Washington. The population of this Group experienced a net increase of 400 persons during the last decade. This was a percentage increase of 3.42% compared to 8.08% for Northampton County, 7.60% for the Lehigh Valley, 3.36% for the State of Pennsylvania, and 13.15% for the entire Country.

- East Bangor as a percent of the local Multi-municipal Planning Group dropped from 8.60% to 8.0% between 1990 and 2000.

East Bangor Population Projections 2000 to 2030-

The Lehigh Valley Planning Commission forecasts the Borough of East Bangor population to increase by 124 persons between the year 2000 and the year 2030. (See Table #2 of Chapter Three) This planning study presents a range in population: **East Bangor Borough could have a population in the year 2030 of between 870 and 1,500 persons.** The high number is based on one or more new developments taking place in the Borough. The low range forecast is based on little or no development and a continued aging and downsizing of the Borough population and household size.

CITIZENS ATTITUDE SURVEY, BOROUGH OF EAST BANGOR, PA.

The East Bangor Planning Commission conducted a community attitude survey at the beginning of this Comprehensive Planning Program. Selected questions and answers are summarized below:

Citizens were asked to **rate the public facilities and services** in the borough of East Bangor on a scale of 1 – 4. (1 being excellent and 4 being non-existent) The following items received a satisfactory to excellent rating- snow plowing, garbage disposal, sewer, recycling opportunities, parking, and street

lighting. Also receiving a satisfactory to excellent rating were fire protection, phone service, cable service, park conditions, storm drains and water supply and quality. Citizens were most concerned about the lack of leaf pick-up with 74% rating this service as poor and environmental preservation (not being provided) with 62% rating this service poor. Services for senior citizens were also a great concern with 68% of citizens rating this service as poor. Storm water control and flood control (relative to both roads and properties) was a concern with 24% and 41% respectively rating this service as poor. It seems as though the citizens of East Bangor feel secure with the services that make their life safe but are concerned with the environmental aspects of living in East Bangor.

When the citizens of East Bangor were asked, “**Is it necessary to take steps to regulate types of land uses permitted in the community?**” there was a resounding **YES!** Of the 91 completed and returned surveys 86 of those residents felt strongly that land use should be regulated. This represents 92% of the total responses.

The following are the **top ten areas of land use regulations** the citizens of East Bangor felt most important. The most important land use regulation according to the responders is creating standards for maximum noise levels. Creating standards for the location and operation of mobile home parks, restricting ADULT type businesses and restricting hours of operation for certain businesses and construction activities were also important. Responders wanted to see standards for quarry operation and reclamation for industrial and open space and to define certain portions of the community as residential only and/or commercial only. Defining separate industrial and quarry areas, creating standard for lighting intensity, separation between Businesses and Residences, and the type and size of signs

were also among the important land use regulations to responders.

Given the historic background of East Bangor, residents were asked, “**If the borough should take measures to protect buildings of historical value and in which way those buildings should be protected?**” 83% of responders agreed historic buildings should be protected. In which way should these buildings be protected was divided. 56% of the responders thought regulations that restrict the type and extent of renovation and/or alteration on the building would be appropriate. 25% thought a special “zone” or district with regulations that specifically protect these buildings would be a good land use and 19% thought identification of the historic structures would be suitable but place no restrictions on additions or alterations.

Finally the residents were asked to “**rank their greatest concerns regarding the future of East Bangor**”. Below are the top 15 concerns;

1. Better maintenance of properties by landowners, stop allowing junk
2. More Police coverage and more support for the Fire Co.
3. Better water quality/pressure
4. Control taxes to accommodate fixed incomes
5. Better controlled traffic, especially on route 512
6. We need zoning to control issues
7. Lack of interest in township by citizens
8. Keep small town atmosphere
9. Parking issues (lack of space, commercial vehicle parked on streets)
10. No recreation area for kids - Upgrade Park
11. No more apartments
12. Better street/road maintenance
13. Try to attract new businesses into town
14. Noise control
15. We need to plan for the future

The responders of this survey were very exact in what land use regulations they wanted or felt were necessary. They are residents of a small town who would like to see the small town atmosphere stay the same. They would like to preserve their history by protecting old buildings and keeping the residence areas zoned strictly residential and the industrial or business area zoned business. The noise level of business and in residential areas was also a concern. More opportunities could be made available for the aging community as well as the younger community. Senior Services and parks should be part of a revitalization plan. Responders seem secure and safe trusting in the fire department and police department but see improvements are necessary with environmental concerns i.e. flood control and leaf pick up. The responders also feel more residents should become involved in their community. The responses to this survey support that sentiment.

- The four municipalities that make up this multi-municipal plan will adopt their Comprehensive Plans each of which includes Chapter One that is common to all of the individual plans. Therefore, the multi-municipal plan recommendations will be embraced by each of the participating municipalities.
- This Plan recognizes the sense of community that exists in the Borough of East Bangor.
- This Plan considers the aging of Borough resident population and the need to keep policies, programs and expenditures in line with the fixed and retirement incomes of the increasing number of residents.
- This Plan assumes a need to the balance residential land uses with tax paying, job generating local & regional businesses.
- This Plan also respects and seeks to understand East Bangor's natural context such as the water ways, flood plains, wet lands, and soils that do not always accommodate land development.
- This Plan recognizes that by virtue of East Bangor's existing water and sewer infrastructure, the Borough could play an important role in the future environmentally safe development of adjacent lands in both Washington Township and Upper Mount Bethel Township. The Borough also has an important connection in a larger context to the Central Slate Belt Region, to the Slate Belt as a whole and the Martins Creek watershed.

PURPOSE OF THIS EAST BANGOR PLAN

The primary purpose of this plan is to recommend a set of coordinated goals and policies to preserve community assets, guide renewal of built-up areas and guide land development. This East Bangor Comprehensive Plan is consistent with the Central Slate Belt Multi-municipal Comprehensive Plan as described in Chapter One of this Plan. This Plan also seeks to be consistent with the Pennsylvania Municipalities Planning Code relative to Comprehensive Plan sections.

ASSUMPTIONS

This Comprehensive Plan is based on the following general assumptions:

EAST BANGOR VISIONING IN CONCERT WITH THE BANGOR AREA SCHOOL DISTRICT

Although the Bangor Area School District (BASD) Municipal visioning process is taking place near the end of the preparation of this East Bangor Comprehensive Plan, that visioning process is being considered. The Meyner Center for the Study of State & Local Government is sponsoring this BASD visioning

process. Three very successful regional visioning sessions have been completed. The motto of the BASD vision is to “Think Globally, Act Locally, and Plan Regionally.” There is a list of vision issues that will be translated into action through a steering committee. However, the top two issues are security and tax base. The local security issue seems to be moving in the direction of some sort of regional police service along with coordinated citizen neighborhood-watch programs. The tax base issue will relate to positive attitudes toward business retention and new development.

EAST BANGOR COMMUNITY GOALS AND OBJECTIVES

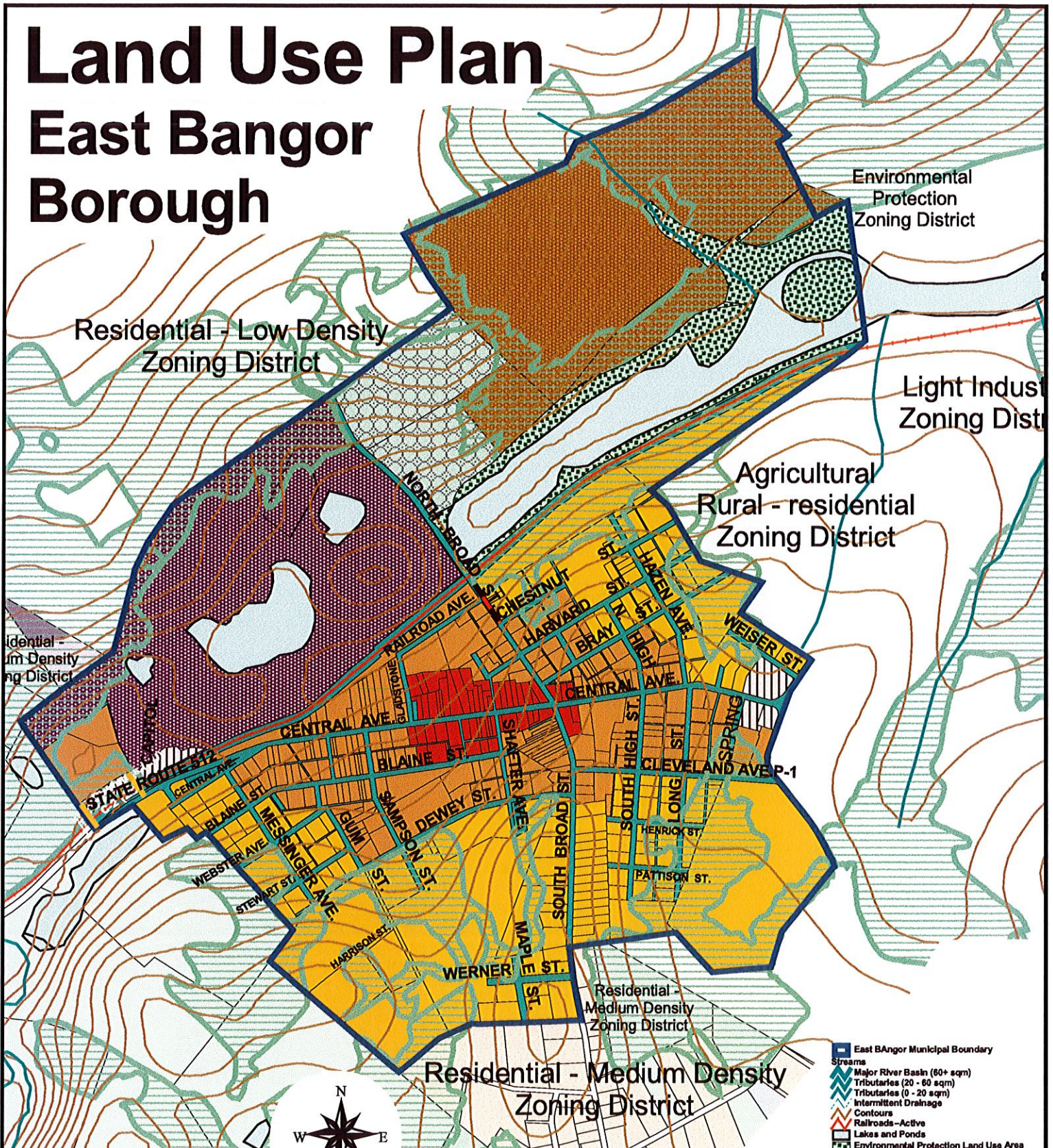
Communities are dynamic, but there are certain community interests that remain constant. As a general public interest goal, East Bangor Borough seeks to preserve the public health, safety, welfare, and general morals of the community as a good place in which to live, do business, worship, visit, socialize, recreate, and pass through on streets and walkways. East Bangor community development, preservation, and enhancement objectives are summarized as follows:

- ◆ To preserve and to enhance the feeling of small, village-like character of this Borough of East Bangor.
- ◆ To encourage higher levels of respect for neighbors relative to noise levels and general land use activities.
- ◆ To seek safe living environments in the Borough of East Bangor and respectful property maintenance.
- ◆ To protect the serenity of residential living areas both within the Borough of East Bangor and adjacent to East Bangor.
- ◆ To provide an opportunity for the creation of a limited number of new two and multiple family housing units that can serve both the needs of the Borough as well as the needs of parts of

- ◆ the Central Slate Belt Region that cannot easily provide the infrastructure or substantial land area for such housing.
- ◆ To establish standards for respectful development that will be about the same density, intensity of land coverage, size and mass of buildings as nearby, already developed areas of East Bangor.
- ◆ To permit home based businesses that are not of such intensity to become a public nuisance such as generating excessive traffic and activity that are greater than the normal single family home generates.
- ◆ To encourage the development of a small central business district within the Borough of East Bangor.
- ◆ To partner where appropriate with Central Slate Belt Municipalities in areas of public facilities, services, transportation, & walkway improvements.
- ◆ To create safe walkway loops in and greenway routes through East Bangor for residents and visitors to enjoy as a means of recreation and socialization.
- ◆ To partner with Slate Belt municipalities in appropriate areas of interest such as storm water management, leaf and yard waste recycling, housing rehabilitation and community improvements projects.
- ◆ To accommodate in appropriate areas, new economic development opportunities particularly those related to information technology, small scale manufacturing, offices, services, retail, and tourism related businesses including factory outlets.
- ◆ To cooperate with the Borough of Bangor and parts of Washington Township in their development of the proposed Bangor Business Park.

Plan Elements Related To Community Goals and Objectives- The East Bangor Comprehensive Plan elements in the remainder of this chapter are organized under the traditional comprehensive planning headings – Land Use Plan, Community Facilities & Utilities Plan, and Transportation

Land Use Plan East Bangor Borough



This map was financed [in part] by a grant from the Commonwealth of Pennsylvania Department of Community and Economic Development.

Rodite & Pandl, LLC, Community Planners & Landscape Architects March 2005

0 0.1 0.2 0.3 0.4 Miles

Central Slate Belt Region - Boroughs of Bangor, Roseto, East Bangor, and Township of Washington

- East Bangor Community Facilities**
- #1 Borough-wide Park
 - #2 Borough Hall & Fire Station
 - #3 Public Works Garage
 - #4 Water & Sewer Authority office
 - #5 Borough Police Station

- East Bangor Municipal Boundary
- Streams
 - Major River Basin (60+ sqm)
 - Tributaries (20 - 60 sqm)
 - Tributaries (0 - 20 sqm)
 - Intermittent Drainage
 - Contours
- Railroads - Active
- Lakes and Ponds
- Environmental Protection Land Use Area
- Woodland Overlay/Natural Preserve
- Reclamation & Preserve Land Use
- Business - Central Business District
- Business - Highway/Neighborhood
- Business & Industry
- Urban Residential - High Density
- Urban Residential - Medium Density
- Urban Residential - Medium Density Adj Cap
- Urban Residential - Low Density
- East Bangor land use
- Adjacent Community Existing Land Use
 - Agricultural & Vacant
 - Manufacturing & Industrial
 - Office & Business
 - Parks & Other Outdoor Recreation
 - Public & Quasi-Public
 - Residential
 - Retail & Commercial
 - Transportation, Communication & Utilities
 - Warehousing & Distribution

Plan. Each of these elements provide goals and or objectives, strategies and in some cases implementation recommendations and/or desired outcomes.

FUTURE LAND USE, ECONOMIC, HOUSING AND NATURAL RESOURCE PLAN, BOROUGH OF EAST BANGOR

INTRODUCTION

Land use is a valuable way of looking at the human and natural activities of a community. This section of the Plan looks at land use as human-economic activity along with the development that has been and will be built on the land to accommodate that activity. Natural resource preservation areas are that should be respected in the process of development.

The major land use, functional activity categories are consolidated as follows:

- ❖ **Residential Areas** – include urban-suburban housing and human living activities.
- ❖ **Public and Quasi Public Areas**- include religious, social, recreational, service and club activities. On the land use plan, these land uses are combined with residential areas.
- ❖ **Business Areas** – include economic activities such as trade, services, finance, and manufacturing activities.
- ❖ **Transportation, Communication and Utility Areas** – include streets and other land uses related to automobile, truck, and train vehicular; telephone and satellite-cable communication; electric energy, sewage and water movement activities.
- ❖ **Natural and Major Vacant Areas** – include activities that do not actively involve humans. It includes woodlands, streams, steep undeveloped slopes, wetlands, and the State Owned Lake. In addition, a special land preserve category in East Bangor includes the old

hazardous landfill property. This property has been sealed and covered, but only limited land uses should take place on the surface of this property so as not to compromise the ground cover over this area.

East Bangor is typical of many older communities in that the business areas are intermixed with residential housing land uses.

MAJOR ISSUES AND OPPORTUNITIES RELATED TO EAST BANGOR LAND USE

Several issues emerge from the existing land use background study, the community questionnaire and key person interviews. Preservation and enhancement of the residential living environment should be a high priority.

GOALS, OBJECTIVES, AND POLICIES

1) LAND USE, RESIDENTIAL GOALS

Goal No. #1 – Preserve and Improve Residential Neighborhood Quality

Objective: Adopt a new zoning ordinance and a property maintenance code. Consider adopting a tenant-landlord ordinance to assure maintenance of rental unit quality.

Goal No. #2 – Provide opportunities for more a variety of single family, some two family, and multiple family housing to be developed

Objective: To guide development consistent with the density and land use intensity standards for low, medium, and high density residential areas.

Goal No. #3 – Provide land areas in East Bangor for residential land development at various densities of land development

(allocate land areas that can accommodate Low Density Areas - lots that have square

foot area of 10,000 or more for each single family detached unit and 8,000 square foot of land area or more for single family attached or duplex unit), for Medium Density Areas (include lots that have square foot area of 7,500 or more per single family housing unit), for High Density Areas (include lots that have square foot area of 5,000 square feet per single family attached units, two family units or townhouse units, & 2,500 square feet of land area per garden or low rise multiple family housing unit).

2) LAND USE, BUSINESS GOAL

Goal – Improve Economic Opportunities

To maximize equal economic opportunities for residents of East Bangor thus providing family supporting jobs and for the collective needs of the community in terms of tax ratables to fund needed government provided services.

East Bangor Economic Objectives

- a) Encourage East Bangor businesses to identify and advertise as an East Bangor – Slate Belt Region based business.
- b) Seek to retain existing businesses.
- c) Promote new business opportunities in East Bangor related to tourism, home based businesses, offices, services, and small scale manufacturing.
- d) Permit the large industrial/auto recycling land use to evolve into a manufacturing and/or business park type of business center. It could be developed compatibly with the nearby proposed Bangor Business Park.

3. FUTURE LAND USE PROJECTIONS

The following table was derived by applying the population forecast to land use:

Land Use Present (2000) & Future (2030) In East Bangor Borough		
Land Use Category	2000 Acres	2030 Acres
Residential	103.4	128.0
Commercial	2.6	5.0
Industrial	83.8	85.0
Wholesale & Warehousing	0.0	2.0
Transp., Comm. & Utilities	79.8	82.5
Public & Quasi-Public	2.9	5.0
Parks & Recreation	25.0	30.0
Open Space & Vacant	156.5	116.5
Total Acres	454.0	454
Source: Rodite & Pandl, LLC, Community Planners		

Population and Housing Characteristics Relationship to Long Range Community Plan-

East Bangor included 417 housing units at the time of the year 2000 Census. With 30 of those units vacant, there were 387 households in the Borough. The average household size was 2.53 persons. Of the 387 occupied housing units, 279 or 72.1% were owner occupied units and 108 or 27.9% were renter units. During the 10 years between 1990 and 2000, 16 housing units were constructed in the Borough of East Bangor. (See Table #3, Chapter three)

In order to estimate the need for new housing in East Bangor over the next nearly 25 years to the year 2030, this planning study assumed that the East Bangor Borough household size will continue to drop below the current 2.73 persons per household to 2.53, as in the County for the year 2000, and even lower to 2.4 in the year 2030. A second assumption is that half (or 15) of the currently vacant units (30) will be become available as affordable rental units.

Vacant Land Opportunity - There are 156.5 acres of vacant land in the Borough of East Bangor. Nearly 90 of those vacant acres are owned by the Commonwealth of Pennsylvania. The State land is located to the East of North Broad Street and to the North of the railroad line. It includes a lake and significant wetland & flood plain areas. Even if the State would turn this land over to the Borough or into private sector land use, it would have very limited potential for more active land uses. The remaining 66 acres of vacant land is spread out in the four quadrants of the Borough.

1. **Northeast Quadrant of the Borough**— There is nearly five (5) acres of vacant land in the Northeast quadrant of the Borough East of Broad Street and North of Central Avenue. All of this vacant land has been subdivided into parcels of less than an acre. Almost half of the land has environmental limitations such as steep slope greater than 12% and or soils with one or more limiting factor that would result in more expensive land development and property maintenance over the years. Therefore, only about 80,000 to 100,000 square feet of land is conducive to development. Fortunately, this land fronts existing streets with most of the infrastructure in place.

2. **Southeast Quadrant of the Borough** – There are nearly five (5) acres of vacant land contained in 14 separate parcels of land South of Central Avenue and East of Broad Street. Most of these parcels are nearly one third of an acre or about 14,000 square feet in size. Three parcels are in the one half to one acre size. The remaining four parcels are smaller; one is only 3,600 square feet in size. Steep slope is not a limiting factor to development of these parcels, however, about one half an acre involving three small lots are not conducive to development because of soil conditions. This leaves nearly 200,000 square feet of

build-able land on 11 parcels that are near existing infrastructure.

3. **Southeast Quadrant of the Borough** – The Northampton County Geographical Information System data base lists 33 parcels in this quadrant in the vacant category. However, several of those parcels are in East Bangor Municipal Authority ownership and include land around their sewage treatment plant and land around their reservoir. Of the remaining nearly 53 acres of vacant land to the South of Central Avenue and West of Broad Street, only about 25 acres should be considered for possible development. The other lands have steep sloping surfaces, seasonally wet soils and/or other soil limitations that will be a challenge for normal development. There are several large parcels that have a combination of usable and undesirable land. They include parcels of 23.3 acres, 7.0 acres, 3.0 acres, 2.7 acres.

4. **Northeast Quadrant of the Borough** – There are seven vacant parcels in the section of the Borough North of Central Avenue and West of Broad Street. Total vacant land in this quadrant is less than 3.5 acres with the East Bangor Methodist Church owning 1.92 of those acres for their church related use. This leaves a scant 62,500 square feet of vacant land in six parcels of land. All of these remaining six lots have soil limitations that would make land development challenging.

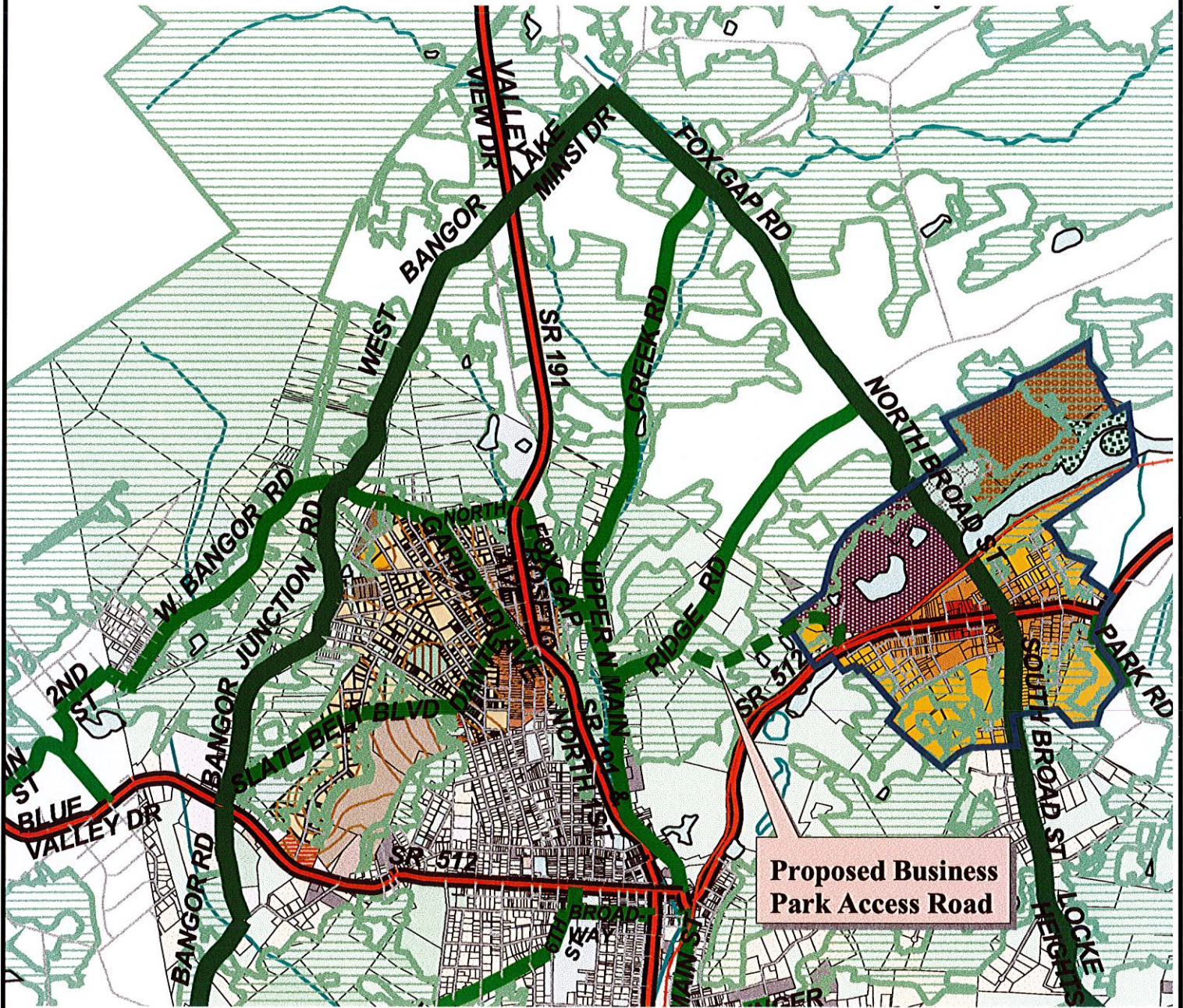
Renewal and Redevelopment – There is a realistic possibility that existing buildings and land that is partly developed could be renewed or redeveloped with new land uses. For instance the nearly 73 acres of land that are devoted, in part, to a mobile home park, could be reused for other development in the future. Similarly, the nearly 82 acre parcel on which Capital Auto Parts business is located could be redeveloped and re-used for other land uses by the year 2030 time horizon of this Plan.

Comprehensive Plan Planning Chart for Central Slate Belt Region

Boroughs of Bangor, Roseto, East Bangor, and Township of Washington, Northampton County, PA 2004

<p style="text-align: center;">Lehigh Valley Comprehensive Plan Lehigh and Northampton Counties, PA (The column below is taken from the Lehigh Valley Planning Commission 2004 report entitled <u>Comprehensive Plan, Lehigh and Northampton Counties, PA</u> <u>The Lehigh Valley ... 2030</u>)</p>	<p style="text-align: center;">Central Slate Belt Region Plan Boroughs of Bangor, Roseto, East Bangor, and Township of Washington (also referred to as the BREW Region) This Section Focuses On The Borough of East Bangor</p>
<p>TRANSPORTATION</p> <p>HIGHWAYS</p> <p>Travel across the Lehigh Valley continues to grow at a rate much greater than factors that attribute to that growth, including population, employment, licensed drivers, and vehicle registrations. Federal Highway Administration statistics show that growth in vehicle miles of travel nationally correlates closely to the growth in gross domestic product. This correlation implies that people make more discretionary trips as their disposable income increases. Other factors that contribute to growth in travel nationally and locally include an increasing number of two and three (or more) vehicle households, higher female participation rates in the work force, and a rapidly increasing elderly population that is becoming more mobile. At the same time, more Lehigh Valley residents are driving alone (up 22% over 1980 levels) while a smaller percentage are carpooling and using transit. In fact, driving alone to work was the only mode choice that increased its share over the twenty-year period. Walking to work remains the most significant of the modes not using a personal vehicle, though its share has dropped by 47% over the last twenty years. The large majority of walking continues to take place in the three Lehigh Valley cities. In 2000, 64% of all Lehigh Valley walk to work trips took place in the three cities.</p> <p>While vehicle miles of travel have grown rapidly, increases in the transportation network have not kept pace. Over the past fifteen years, the Lehigh Valley has seen notable highway improvements, including the completion of I-78, the extension of Route 33, the relocation of Route 222 (which is under construction), and widening of Route 512, Airport Road and Schoenersville Road. In fact, the regional road network is complete with the exception of the American Parkway Bridge across the Lehigh River in Allentown City. These improvements, however, were not enough to keep morning and afternoon peak hour congestion from growing in the Lehigh Valley. The ability to respond to this congestion by providing capacity improvements has been constrained by the lack of adequate Federal and state funding.</p> <p>Along with congestion, safety is a major transportation</p>	<p>V. TRANSPORTATION/CIRCULATION PLAN <i>(Note: This Plan section is generally the same as the Central Slate Belt Regional Transportation and Circulation Plan except for limited customization)</i></p> <p>GENERAL</p> <p>This Plan is prepared consistent with the Pennsylvania Municipalities Planning Code, Article III, Comprehensive Plan, section 301 (a) (3), September 2000.</p> <p>The transportation element of a comprehensive plan should identify how efficiently the existing network performs, identify hazardous conditions and outline an action plan to address deficiencies. The focus of this work element is to:</p> <ol style="list-style-type: none"> 1. Define the existing transportation network 2. Identify current deficiencies 3. Identify future congested areas 4. Recommend a strategy to address transportation needs consistent with the land use plan <p>Planning for the development and needed transportation go hand-in-hand because development generates traffic and transportation supports the community's vision. The location and character of transportation help determine the general direction of growth and are factors in the location of residential, commercial and industrial development, as well as</p>

East Bangor Transportation Plan



This map was financed [in part] by a grant from the Commonwealth of Pennsylvania Department of Community and Economic Development.

- Circumferential Radial Connector System
- Street centerlines
- Major Arterial Roads
- Collector Roads
- Other Roads
- Connector Roads
- Contour Lines of Equal Land Elevation
- Streams
- Major River Basin (60+ sqm)
- Tributaries (20 - 60 sqm)
- Tributaries (0 - 20 sqm)
- Intermittent Drainage

- Roseto Community Facilities
- Flood Plain Overlay
- Woodland Overlay
- Greenway - Trail
- Urban Residential - Low Density
- Urban Residential - Medium Density
- Urban Residential - High Density
- Roseto Central Business District
- Business - General Commercial

- Agricultural & Vacant
- Manufacturing & Industrial
- Office & Business
- Parks & Other Outdoor Recreation
- Public & Quasi-Public
- Residential
- Retail & Commercial
- Transportation, Communication & Utilities
- Warehousing & Distribution
- East Bangor Municipal Boundary



Central Slate Belt Region - Boroughs of Bangor, Roseto, East Bangor, and Township of Washington

Rodite & Pandl, LLC,
Community Planners &
Landscape Architects
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issue. Nationally, approximately 42,000 Americans die annually in traffic crashes; in Pennsylvania, about 1,500 deaths per year occur on highways; and in the Lehigh Valley, an average of 32 deaths occur annually. While the rate of fatalities per million vehicle miles traveled is steadily falling, projects that increase safety are an important priority in the Lehigh Valley. Using PENNDOT crash data, 21 corridors were identified as having significant crash problems in the Lehigh Valley. The transportation planning program conducted by the Lehigh Valley Planning Commission in conjunction with the Lehigh Valley Transportation Study (LVTS) prioritizes and programs highway, bridge, and transit improvements.

The Lehigh Valley Transportation Plan: 2003–2022 is the long range transportation plan for the region. Its purpose is to guide transportation decisions over the life of the plan and to outline the transportation planning process. The Plan is fiscally constrained and divided into a short, medium, and long range element. The highway element of the plan directs funding in the short term to the construction of three high-priority projects: Route 222 relocation in Upper and Lower Macungie townships, the extension of the American Parkway, and the Route 412 improvements in Bethlehem City. The medium range element focuses on network maintenance and addressing safety issues. The long range element continues the focus on network maintenance and safety but begins the widening of Route 22, from the bridge over Mickley Road to the Route 22 bridge over Irving Street...

Financial resources for transportation improvements are limited. Federal planning regulations require that both transportation improvement programs (four year programs) and long range transportation plans (twenty year plans) be fiscally constrained. This means that the cost of the projects included must not exceed a reasonable estimate of available funds over that time frame. In Pennsylvania, allocations are made to each of the planning areas in the state on a basis of transportation system needs. Currently, needs are defined in terms of various indicators such as population, lane miles, vehicle miles of travel, bridge ratings, and rail crossing crash history. The Lehigh Valley Surface Transportation Plan: 2003–2022 forecasts approximately \$2 billion in transportation funding being available over that twenty-year period, with \$1.3 billion going to highways, \$330 million to bridges, and \$322 million to transit. Even at that level, revenues received from the Federal and state governments will not resolve all of the region's transportation needs...

In May 2004, the U.S. Congress was considering the reauthorization of the Transportation Equity Act for the 21st Century (TEA-21). The reauthorization process will be monitored closely to determine the impact on transportation funding since the large majority of funding in the Lehigh

community facilities. However, as the BREW communities continue to grow, the role of the transportation system will change and the quality of transportation services will be challenged.

EXISTING NETWORK

HIGHWAYS

Central Slate Belt Regional streets and roads are functionally classified on the accompanying map and they are further defined and discussed below:

1. Expressways Provide connections between major cities and regions. Expressways are generally four-lane limited access highways with posted speeds of 55 or 65 miles per hour.

- **Expressways in the four Central Slate Belt Municipalities: None**

2. Arterials Provides access between major parts of counties, cities, towns and other major activity centers. Major Arterials are generally four-lanes, with access points controlled by traffic signals. Connector Arterial roads are generally two lane roads. Posted speeds are generally 35-45 miles per hour, however, some sections may be posted at 55 miles per hour.

- **Connector arterials in four Central Slate Belt Municipalities include: Route 191, Route 512 (Central Avenue in East Bangor), and Route 611.**

3. Collectors Provide connections between local streets and arterial highways; they provide access for business areas. Collectors are two-lane roads with 35 miles per hour posted speeds. Because collectors often provide the "bridge" between commercial and residential developments, more access

Valley 2003 TIP comes from Federal (75%) and state (23%) sources. Only 2% of the funds for projects currently in the TIP come from local sources. One way to further meet the transportation needs of the region would be to increase the local share for financing needed improvements. Another way to conserve scarce financial resources is for local officials to give more consideration to the transportation infrastructure in their land use decisions. The shortage in transportation funding makes it important for transportation decision-makers to scale improvements appropriately. In some instances transportation management strategies may reduce peak hour traffic and make more efficient use of existing highway capacity. Numerous strategies are available, including mass transit, carpooling and staggered work hours. The LVPC implemented a carpool program and park-and-ride program during the early 1980s. However, response to the program was poor. In 1988, the LVPC tried to implement a staggered work hour program in the LVI Airport area, but received little interest from major employers. Based on experience here and in other metropolitan areas, transportation management strategies appear to be best suited as a supplement to projects that add capacity by extending the life of the improvements.

Intelligent Transportation System (ITS) strategies can enhance the efficiency of the existing network by providing real time information to the motorist through means such as variable message signs and highway advisory radio. ITS strategies were used during the 22/Renew reconstruction project and were a major factor in minimizing congestion during construction. LVTS must investigate the use of these strategies in the future to extend the capacity life of the existing roadway network. In addition to developing a balanced capital program, transportation planners are required to balance the need to build roads and the need to protect other public interests. A number of Federal and State laws regulate highway construction relative to environmental features, historic structures, agricultural operations, and displacement of homes and businesses. These laws require that highways minimize and mitigate environmental damage and disruption to communities.

They also require lengthy and expensive planning and design studies that slow the highway construction process. Major capacity improvements take an average of 12 to 15 years to proceed from the planning stage to construction. Some major local projects, including I-78 and the Route 33 extension, took twice as long to come to fruition.

Providing good access to development is another highway planning challenge. Good access is necessary to attract business in areas designated for economic development. It is also important to existing industrial parks and central business districts to maintain movement of goods and accessibility to workers and consumers. Finally, good access is necessary in residential areas for smooth traffic

points are often found than for arterials but fewer than Local. Collectors with substantial residential access should be posted at 25 miles per hour. Maintaining safe driving speeds is critical for the safe movement of pedestrians and vehicles.

- Collectors identified in and in the vicinity of the Borough of East Bangor include: Richmond Road, Ridge Road, Fox Gap Avenue, However, Broad Street (both North Broad and South Broad Streets) function more and more like a collector street. Two other East Bangor area roads have the potential of becoming collector roads; they are the Bunny Trail and Park Road. For purposes of this East Bangor Comprehensive Plan, all three of these roads are classified as collector streets.

4. Local Streets and Roads provide direct access to abutting residential properties and channel traffic to other streets. Local roads are generally posted at 25 miles per hour. Maintaining safe driving speeds is critical for the safe movement of pedestrians and vehicles. Traffic calming is critical to protecting neighborhood children and activities.

- Local Roads in Central Slate Belt Regional Study Area: All remaining streets not already classified as arterial or collector streets.

PUBLIC TRANSPORTATION

Lehigh and Northampton Transportation Authority (LANTA) provides fixed route bus service with posted stops in the study area, however, the LANTA bus will stop for passengers anywhere along their route. The Valley Association for Specialized Transportation (VAST) provides door-to-door service to physically handicapped persons who are unable to use LANTA's fixed route service and other persons requiring special transportation

flow and convenience to work, shopping and other trip destinations.

LVPC TRANSPORTATION GOAL

To provide a safe, well-maintained road network that facilitates the movement of traffic.

POLICIES

- Highway and bridge projects that improve safety and maintain the existing system are a program priority.
- Upgrade unsafe roads and intersections with substandard design and confusing traffic patterns to current design standards.
- Rehabilitate or replace deficient bridges.
- The system of collector and arterial roads should be upgraded and expanded to cope with increasing traffic.
- Access management practices should be initiated in accord with recommendations of the LVPC report entitled Access Management on Arterial Roads.

LVPC TRANSPORTATION GOAL

To alleviate and mitigate traffic congestion and to provide access to major traffic generators.

POLICIES

- Coordinate development with the availability of road capacity and public transit service.
- Plan, program and build highway capacity improvements in areas recommended for urban development within this comprehensive plan.
- Congestion relief and access improvement projects shall address inter-modal connections where such connections are appropriate.
- Ensure that the arterial and expressway systems accommodate interregional and interstate travel needs.

LVPC TRANSPORTATION GOAL

To construct highway and bridge improvements that are compatible with the built and natural environments.

POLICIES

- Major highway and bridge projects should be studied, de-

assistance.

PEDESTRIAN AND BICYCLE FACILITIES

A municipality's pedestrian and bicycle paths should be designed to provide residents the opportunity to move safely about the area by non-motorized means. This valuable transportation resource enables children and adults alike to access education facilities, the community center(s) and neighborhood parks safely without the need for motorized vehicles. The path system should, where practical, be connected to adjacent municipalities. Where possible, the path system should be physically separated from the road system. When it is necessary for pedestrians, bicycles and vehicles to share cartways, extra attention to safety is necessary with cross walks, pedestrian activated signals and cautionary signage.

CURRENT DEFFIENCIES AND CONCERNS

Background studies for this Plan identified existing conditions and deficiencies from secondary data sources. Three Crash Corridors were identified in the Study Area. Two were high frequency crash corridors, where the number of reportable crashes is higher than the statewide average for similar roads throughout the state. There is also one severe crash corridor, which is a corridor that experience more than (4) four serious crashes over a five-year period. None of these crash corridors are located within or close to the Borough of East Bangor. However, several intersections and roadway segments are of concern. The intersection of Central Avenue (S.R. 512 in East Bangor) and Broad Street is challenged by the limited sight distances at the intersection. Buildings are close to this intersection and make it difficult to see on-coming traffic particularly if the opposing traffic is vehicle is traveling fast or does not fully stop at the stop sign. Slippery road conditions, low sun angles,

signed and constructed in accordance with the most recent environmental regulations.

- Through traffic should be diverted away from existing residential settlements using traffic calming techniques to the degree that alternatives are technically and financially feasible.
- Hydrocarbon and nitrogen oxide emissions from vehicles should not exceed the prevailing Federal standards for clean air.
- Highway projects that add capacity should be appropriately scaled taking into consideration the needs of the traveling public and the built and natural environment.

LVPC TRANSPORTATION GOAL

To promote economy and efficiency in highway planning, design, and function.

POLICIES

- Preserve arterial roads for their through traffic carrying function by reducing on-street parking and curb cuts for driveways through access management techniques.
- Travel demand on existing facilities should be met to the greatest degree possible with low cost improvements that meet the needs of the project.
- Wherever feasible, transportation management strategies should be implemented to reduce peak hour travel demand.
- Intelligent Transportation System strategies should be implemented where appropriate to maximize the efficiency and safety of the current highway system.
- The average trip length should be minimized through compact land use patterns and mixed use developments.
- Adequate financing mechanisms should exist to pay for needed improvements and maintenance.
- As part of highway maintenance projects, shoulders should be widened to safely accommodate motor vehicles, bicyclists, and pedestrians.
- Improve sidewalk, trail, and local street connectivity to reduce the number of vehicle trips taken on the major highway network.
- Employ context sensitive design strategies to assure transportation projects are appropriately scaled and designed to fit their location.

and night conditions can add to the challenge of safe passage through this intersection. Park Road is another area of concern. As traffic volumes increase along with development in the region, the intersection of Park Road and Central Avenue could become more challenged. Also ingress and egress to the Borough Memorial Park could become more challenged as traffic volumes and park usage increase.

Five (5) bridge projects were identified in the Lehigh Valley Transportation Study's (LVTS) Long Range Transportation Plan (LRTP). The LRTP generally establishes the transportation priorities over a 20-year period. It is broken into short, medium and long time periods. The short period time frame is four (4) years and it is the equivalent to the Transportation Improvement Program (TIP). Any project that receives State or Federal funding must be on the TIP. Of the five (5) bridge projects, four (4) are programmed on the TIP. No other transportation projects in the Central State Belt municipal area are included in the TIP or the LRTP.

EAST BANGOR BOROUGH TRANSPORTATION AND CIRCULATION GOALS

A. A transportation network that provides for safe and efficient circulation of people and goods in East Bangor Borough within and through the Central State Belt Municipalities.

- 1. Policy #1 – Annually evaluate the use of local and collector streets in terms of the ability of vehicles to use the streets safely in view of both street surface conditions and the on-street parking usage.**

PUBLIC TRANSPORTATION

The Lehigh and Northampton Transportation Authority (LANTA), was formed by Lehigh and Northampton counties in 1972 to provide public transportation services for the inhabitants of the Lehigh Valley. LANTA's operations are comprised of two operating divisions – Metro and Metro Plus. The Metro division provides fixed-route services along twenty-six routes and carries about 4.3 million trips annually. It serves the Lehigh Valley metropolitan area including the cities of Allentown, Bethlehem, and Easton and their surrounding environs. The Metro Plus division provides door-to-door service for the region's elderly and those with disabilities. This coordinated transportation system is operated through contracts with private transportation providers and provides nearly 500,000 trips annually. Transit service is essential for providing mobility for the disabled, elderly, low-income individuals, and those not owning automobiles. Other potential benefits of mass transit include improved air quality, reduced congestion, and more efficient use of existing road capacity. Current land use development patterns have not favored the use of public transportation.

Development densities in the Lehigh Valley are low and development is spread out rather than concentrated in high density core areas. Populations and jobs are moving out from the cities to suburban locations. This has resulted in an increase of suburb-to-suburb commutes, increasing travel times and generating significant obstacles for public transportation to overcome. While transit usage in the urban core remains high, most new system demand comes from these less financially productive outlying areas. LANTA's Strategic Plan 2004–2015 focuses on the maintenance of core urban area services, but with an emphasis on connections to job centers at the fringe of the Lehigh Valley's growing urbanized area. Route frequency has increased, routes were extended into suburban job locations, late night operations were initiated, and the reinstatement of Sunday service occurred to meet market demand. The Strategic Plan will continue to guide system improvement efforts as Lehigh Valley demographics change.

An intermodal center was developed in the City of Bethlehem to serve as a transportation hub. The center provides a protected terminal and transfer center for transit passengers and includes items of convenience such as ticket vending, electronic bus information, beverages, and newspapers. Similar facilities are being developed in Allentown and Easton

A sufficient supply of convenient, affordable, and reliable

2. Policy #2 – Recognize that the minimum safe travel-way (the lanes provided for moving vehicles) for any street in the Borough of East Bangor should be 19 and 20 feet. The cartway (curb to curb) dimension to accommodate on-street parking would be eight feet for each side that parking is permitted. If the remaining travel-way becomes narrower than the minimum because of winter snow conditions or other factors, then either parking should be removed from one or both sides of the street or the street should be converted to one-way operation.

3. Policy #3 – Provide a travel-way of 11 to 12 feet for a one-way street. If there are curbs but no on-street parking on a one-way street, then provide for an additional two feet for lateral curb clearance against any curb where there is no on-street parking.

B. A roadway network that provides good access to business areas and to areas designated as urban, suburban, and village residential areas.

C. A roadway network that seamlessly interconnects the four Central Slate Belt Regional communities as if they were all one community.

D. A way and means of achieving improvements to the Central Slate Belt Regional Arterial and Collector street systems in

inter-city bus service exists to popular destinations such as New York City and Philadelphia. This service is provided by private, unsubsidized bus operators Carl R. Beiber and Trans-Bridge Lines, Inc.

LVPC TRANSPORTATION GOAL

To promote economy and efficiency in public transportation planning, design, and function.

POLICIES

- Fixed route transit service should be provided only in those areas where service is financially feasible through operating revenues and necessary subsidies.
- Privatization of mass transit service should be considered when such service is provided at equivalent service levels with lesser public subsidies.
- Public transportation equipment and facilities should be replaced and upgraded as needed to provide safe, reliable and cost-effective service.
- Fixed route service scheduling and routing should be evaluated and adjusted as needed to produce efficient and market-responsive service.
- When feasible, mass transportation should be used to mitigate short term, high volume traffic destinations such as special events rather than building permanent capacity improvements.
- Support development of park and ride lots where there is documented demand for such facilities.
- Major shopping and employment facilities should locate where transit service exists or is feasible.
- Site plans should include features that make the use of mass transit easy, safe and convenient.
- Higher density housing and employment facilities should be developed along transit service routes. In the portions of the LANTA Market Area recommended for urban development, a minimum density of five dwelling units per acre should be developed.
- Maintain and update facilities to keep up with new technologies.

LVPC TRANSPORTATION GOAL

To provide adequate mobility for the elderly, the handicapped, the poor, and those who do not own an automobile.

regard to improved safety, widenings, alignment improvements, and extensions.

1. Policy #1- Create an official map for the Central Slate Belt Regional and/or each community within the Region.
2. Policy #2- Create a multi-municipal transportation improvement advocacy sub-committee.

E. An improvement to all street surfaces and storm water drainage systems related to those streets so that any street that has a failing surface or subsurface in the year 2005 will have been repaved or repaired at least once before the 2030 horizon year of this East Bangor Comprehensive Plan. (Policy: continue to cooperate with adjacent municipalities in improving streets through shared equipment, labor and joint purchasing to do more street improvement for less tax outlays.)

F. A roadway system that efficiently serves proposed business areas with a minimum of impact upon residential areas.

1. Policy #1- Require business development to help fund improvements to provide the shortest, safest connections to the arterial road and/or railroad systems. This could include tax increment financing of improvements (TIF). TIF financing will permit new businesses to

POLICIES

- Provide convenient and reliable fixed-route service between higher density residential areas, major employment concentrations, important shopping areas, key government facilities, medical facilities, and other activity areas.
- Provide coordinated specialized public transportation for people who cannot use conventional bus services.
- Meet basic transportation needs, support desired economic and environmental goals, and appeal to an increasing number of people.
- Shopping, workplace, government, and housing facilities designed for the transit dependent should be sited at locations where transit service exists or is feasible.
- Mass transit facilities should meet the requirements of the Americans with Disabilities Act.

LVPC TRANSPORTATION GOAL

To support expansion of the public transit system and to advocate transit use as an alternative to single occupant driving.

POLICIES

- LANTA should continue to offer and improve a wide range of service options to meet a variety of mobility needs in the Lehigh Valley.
- Evaluate and incorporate Intelligent Transportation Strategies where appropriate to increase efficiencies.
- Fixed route service scheduling and routing should be regularly evaluated and adjusted as needed to produce efficient and market-responsive service.
- Public transportation equipment and facilities should be replaced and upgraded as needed to provide safe, reliable, and cost-effective service.
- Fixed route transit service should be provided only in those areas where service is financially feasible through operating revenues and necessary subsidies.
- Higher density housing and employment facilities should be developed along transit service routes. In the LANTA market area, a minimum density of five dwelling units per acre should be developed.
- Plan, program, and build inter-modal transportation

extend their payment for such improvements over an extended time period and permit local governments to partner in that payment process by designating a part of the business property tax payment for the payment of such improvements.

- 2. Policy #2- Pursue the shortest possible connections between business areas and the arterial system.**
- 3. Policy #3- Seek State and Federal assistance with improved access to business areas.**

G. A bikeway and pedestrian walkway system that connects neighborhoods to business areas and to parks and to other public areas of the community by using sidewalks and existing cartways where necessary and separate greenway trails where possible.

- 1. (Policy- All new developments should provide for pedestrian and bike facilities as part of the municipal subdivision and land development requirements)**
- 2. (Policy – Sidewalks should be required along streets that are recommended to be in the East Bangor walkway loop system. All sidewalks should be kept in good repair. At all intersections, curbs**

improvements to accommodate current and future travel demand.

LVPC TRANSPORTATION GOAL

To have a sufficient supply of convenient inter-city public ground transportation available to popular destinations such as New York City and Philadelphia.

POLICIES

- This service should be met through unsubsidized privately owned bus operators, to the degree possible.
- New publicly subsidized service should not be established unless established unsubsidized bus operators are unwilling or unable to supply a sufficient convenient service.

- Adequate and convenient terminals should be available for inter-city buses.

- Service opportunities to important destinations outside of the Lehigh Valley should be reviewed on a regular basis or as significant changes dictate.

- Rail rights-of-way should be preserved for future rail reuse if analysis shows that the reestablishment of future service could be advantageous.

RAILROADS

Railroads remain a significant part of the transportation system. Good rail service is essential for the siting of numerous types of businesses. For instance, distribution centers utilize rail service. Railroads no longer play the dominant force in the movement of goods. Based on data from PENNDOT, the amount of rail traffic originating or terminating in the state has barely changed in the last twenty years. In 1984, Pennsylvania originated 62.5 million tons and terminated 54.1 million tons, totaling 116.6 million tons. In 2001, a total of 118 million tons originated or terminated in the state. Of this, 60 million tons originated and 58 million tons terminated. These tonnages are in addition to the overhead traffic that passes through Pennsylvania but originates and terminates elsewhere.

In an era where rail service is declining or threatened in some communities, the Lehigh Valley remains in a relatively strong position. The dominant class 1 rail freight carrier in the Lehigh Valley is the Norfolk Southern Railroad, which operates lines that were formerly operated by Conrail. The railroad's Newark, New Jersey to Harrisburg main line passes through the two counties. This line is one of the busiest in the state. A secondary main line extends north from Allentown to the Scranton area. Numerous branch lines provide Norfolk Southern service to area shippers. The

should be depressed with the sidewalk ramped from its normal elevation to the depressed curb elevation to accommodate those with handicaps and others who need a safer means to cross at an intersection. Finally, whenever a street is to be repaved, the Borough should require property owners adjacent to those streets to repair or construct proper curb and sidewalks.

- H. An accessible transportation system consistent with the American Disabilities Act.**

- I. A pedestrian/bikeway system that will provide an alternative to motorized vehicles transportation for short, local trips.**

- J. Increased use of the public LANTA and VAST, public transportation systems.**

- K. Automobile parking that is adequate in every section of the Borough of East Bangor .**
 - 1. Policy – Require all new development and conversions of older buildings to meet a standard of two parking spaces for every housing unit and standards for businesses that reflects both the employee and the customer needs for parking**

 - 2. Policy – Cooperate with the**

Cement Secondary which serves the Forks Industrial area and the C&F Second-ary which serves the Fogelsville area are the most prominent of the branch lines. A second class 1 carrier also serves the Lehigh Valley via trackage rights. CP Rail has assumed the operations once provided by the Delaware and Hudson Railway. The area is also served by six short line railroads, RJ Corman-Allentown, the East Penn Railway, the Northampton Development Corp. Railroad, the Belvidere & Delaware River Railroad, the Delaware Lackawana Railroad and the Lehigh Valley Rail Management Railroad (LVRM). These railroads operate several significant rail facilities within the Lehigh Valley. The Allentown Classification Yard is one of the major yards in the Norfolk Southern System. The LVRM operates an inter-modal terminal in Bethlehem. The LVRM also operates a Triple Crown container terminal in Bethlehem.

Three line abandonments have occurred since the 1980s. These abandonments have not resulted in the loss of service to active customers. The Lehigh Valley Rail Freight Study, conducted in 1997, identified three active rail lines potentially

at risk. Of the three, the Odenwelder Industrial Track has the greatest potential of being at risk. Assistance may be necessary for assuring continued service. Numerous rail carriers and shippers have been able to use funding available from the Commonwealth of Pennsylvania to upgrade existing track and to construct new track. This funding, available either under the Rail Freight Assistance Program or through the PA Capital Budget process, has allowed new customers to use rail service and has upgraded service for existing shippers. The use of these programs has supported economic development efforts in the Lehigh Valley. The LVPC has assisted economic development efforts by compiling an inventory of available rail-served sites.

Rail abandonments create unique opportunities for the reuse of the right-of-way, when the land does not revert to the adjoining landowners. The relatively flat, linear nature of the rights-of-way often make their retention and reuse advantageous. Lehigh County, Northampton County and several municipalities have acquired abandoned rights-of-way for recreation and other uses. Rights-of-way are well suited for hiking trails and bicycle paths.

No commuter or inter-city passenger service is available in the two counties. The most recent passenger train to actually enter the two counties was the Southeastern Pennsylvania Transportation Authority service to Philadelphia which ended in 1981. Passenger service from nearby Phillipsburg, New Jersey to Newark was ended in 1983 by New Jersey Transit. A recent demonstration project in which the Lehigh Valley was made a destination in the Amtrak system, by the introduction of "Amtrak Thruway Express Motorcoach Service" (bus service) to Amtrak's 30th

neighboring municipalities to create park and ride facilities in the less developed sections of this planning area so that commuters could park and ride transit or commuter busses to work and or excursion trips.

3. Policy – consider the creation of municipal parking areas in the vicinity of SR 512 in the proposed East Bangor Central Business District could attract tourist customers as well as local and regional people to conduct business.

L.

FUTURE CONDITIONS

This East Bangor Plan seeks movement toward the above goals and successful implementation of the recommended transportation policies as a means of helping this region to manage growth and support development in the best-suited areas.

For this transportation element we assume that the population and job forecasts are consistent with LVPC's projections. Overall growth in the area is expected to be relatively low; therefore major transportation related problems are not anticipated assuming the existing issues identified are addressed.

GENERAL RECOMMENDATIONS FROM CENTRAL SLATE BELT REGIONAL PLAN

Maintaining the transportation system is an expensive task, LVPC estimates \$225,000 per mile, and building new infrastructure is even more expensive, \$2,500,000 per lane mile according to

Street Station in Philadelphia ended in 1999. In each case, inadequate ridership resulted in unsustainable financial losses. Two rail passenger initiatives could involve the Lehigh Valley at some future time. The first is an attempt to restore service between Upper Bucks County and Philadelphia. The service would terminate in Shelly (between Coopersburg and Quakertown). A park and ride lot would be available for Lehigh Valley residents wishing to ride the train. A feasibility study was completed in 2000 for the Bucks County Planning Commission. The study identifies one main alternate and two sub-alternative proposals. These alternatives had total capital costs ranging from \$180 million to \$215 million. Ridership was forecast as ranging from 2,620 to 6,809 daily trips, depending on the alternative. New trips generated by the proposed service would range between 1,703 and 3,200 per weekday. Annual operating deficits of \$1.6 million to \$1.9 million were forecast, differing by alternative. At this writing, an alternatives analysis study is awaiting funding. Some advocates of this line have suggested that it be extended north to Bethlehem using the now-abandoned Bethlehem Secondary Track. The City of Bethlehem is in the process of acquiring this line for the purposes of developing a linear park. The City's actions reduce the feasibility of such routing. In addition the proposals have failed to attract much support by planners and other officials in the Lehigh Valley because they are expensive; ridership estimates are low, and the Lehigh Valley Transportation Study has focused on other local transportation priorities. The second proposal would pass through the north-eastern corner of Northampton County. No service is proposed within the county. The proposal is part of a planned Scranton to New York service. Capital costs for this project are expected to exceed \$150 million. A 1998 feasibility study indicated that annual operating deficits would require subsidy. This project also does not meet the criteria set in this plan for LVPC support.

LVPC TRANSPORTATION GOAL

To have available and dependable rail freight service to support existing businesses and to attract new businesses.

POLICIES

- The private sector should meet this goal to the greatest extent possible.
- Public financial assistance for upgrading railroad facilities should be undertaken in support of economic development opportunities when those opportunities are consistent with the criteria of this plan.
- Public financial assistance for upgrading railroad facilities

LVPC. We do not recommend pursuing major transportation improvement projects like a "Slate Belt Bypass". Large projects, like a bypass are extremely expensive, negatively impact the environment, and take an extraordinary amount of time to move through PennDOT's Transportation Development Process. A "maintenance first" policy should always be the highest priority in transportation policies.

The availability of Transportation funds is extremely tight. The number of projects exceeds the funding to implement them. For example, the LVL RTP identifies 21 high priority crash corridors. A high priority crash corridor has both frequent and severe crashes. Over the 20-year life of the plan, LVPC estimates that there will be sufficient funding to study about 17 high priority crash corridors and implement safety improvements/recommendations for about 9 of the corridors studied. The three (3) crash corridors identified in the study area are not considered high priority crash corridors.

Fortunately, the Central Slate Belt Region has a distinct advantage over other municipalities if the area combines its resources and speaks with one voice. A transportation subcommittee should be formed to coordinate the transportation recommendations in this report. The subcommittee should be comprised of equal representation from each municipality. Activities of the subcommittee should include:

- Strengthen relationship with PennDOT and local legislators.
- Monitor progress of TIP projects other projects/studies of concern
- Establish priorities for transportation projects

should be undertaken when such improvements represent a cost-effective means of reducing highway travel.

- Public acquisition, upgrading and operation of rail lines proposed for abandonment should be limited to instances where the investment is cost-effective relative to employment opportunities and tax revenues.

- Land near rail lines which meets the Comprehensive Plan's criteria for industrial siting should be designated for industrial uses.

- Support access to facilities and freight terminals that are otherwise compatible with this plan.

- Provide safe at-grade crossings by upgrading to current safety standards.

LVPC TRANSPORTATION GOAL

To meet recreation, transportation and utility needs by acquiring or retaining abandoned rail rights-of-way.

POLICIES

- Rail rights-of-way proposed for abandonment should be acquired if analysis shows that they are desirable for recreation, road right-of-way, utility right-of-way or other uses.

- Rail rights-of-way should be preserved for future rail reuse if analysis shows that the reestablishment of future service could be advantageous.

LVPC TRANSPORTATION GOAL

To have a sufficient supply of convenient intercity public ground transportation available to popular destinations such as Philadelphia and New York.

- This service should be met through unsubsidized privately-owned carriers to the degree possible.

- Publicly subsidized services should be established only if unsubsidized operators are unwilling or unable to supply a sufficient convenient service and if there are clear and substantial public benefits to be derived from such service.

AIR TRANSPORTATION

Lehigh and Northampton Counties are well served by air passenger carrier, air cargo, and general aviation service. The Lehigh Valley International Airport (LVIA) provides a full range of passenger, general aviation, and air cargo services. In

- **Coordinate the implementation of studies and projects**

- **Allocate revenues from impact fee's collected to priority projects and studies**

PROJECTS AND STUDIES FROM CENTRAL SLATE BELT REGIONAL PLAN

1. Implement projects currently on the Lehigh Valley Transportation Study (LVTS) Transportation Improvement Program (TIP).

- a. Ackermanville Bridge**
- b. County Bridge No. 189**
- c. County Bridge No. 191**
- d. Messinger Street Bridge**
- e. Oughoughton Creek Bridge**

There are five (5) bridge projects that are currently programmed on the current FFY 2003-2006 TIP and the Draft FFY 2005-2008 TIP. The study area municipalities should monitor the programmed projects on a regular basis. The study area municipalities should meet with their local legislators and PennDOT District 5-0 regarding the current status of the projects. For details regarding funding and locations of the projects please see Appendix A: 2005-2008 LVTS Draft TIP.

Of particular concern, is the progress of the Ackermanville Bridge. The bridge provides access the Majestic factory, a major employer of the area.

The LVTS technical committee meets monthly. Each month, the Committee receives a status report on capacity, bridge or maintenance projects. These meetings are open to the public.

2. Perform necessary traffic studies

addition, large international airports in Philadelphia and the New York City area are within a two-hour drive of the region. Queen City Airport in Allentown, Braden Airpark in Forks

Township, the Slatington Airport, and the Flying "M" Aerodrome in Heidelberg Township also serve general aviation aircraft needs... It occupies a 1,000 acre site. The main runway is 7,601 feet long and 150 feet wide. The crosswind runway is 5,790 feet long and 150 feet wide. The airport's tri-level passenger terminal building was opened in 1975. A new departure building, the Wiley M. Post Concourse, opened in 1997. A new flight control tower became operational in 1995. The major issues facing the airport in the next decade include planning for future runways/runway extensions to meet projected demand, and working with local, state, and federal governments to achieve compatible off-airport land use in the noise impact areas. Between 1972 and 2002, total passenger movements at LVIA increased from 368,689 to 798,154. During the same period, operations (take-offs and landings) increased from 111,674 to 142,341. This rate of growth has been moderated by the events of September 11, 2001.

To deal with growth, the LVIA Master Plan assumes that the current level of airline service will remain during the 20-year planning period from 1989 – 2009. Most of the increased passenger activity occurring in the 1990s was accommodated by larger narrow-body aircraft and an increased number of flights by regional jet and turboprop aircraft. The LVIA Master Plan presented four alternatives for meeting airfield capacity needs through 2009. The recommended alternative was the most conservative and could be implemented on the existing airport property - a 2,400 foot extension to the main runway and the construction of a runway parallel to the main runway with a 700 – foot separation distance to the north. LVIA continues to implement elements of the Noise Compatibility Study which includes, land acquisition, soundproofing structures, relocation, acquisition of aviation easements, zoning overlay districts, comprehensive plan revisions, real estate disclosure, revision of building codes and environmental impact review procedures. Queen City Airport is owned and operated by LVIA. The airport is located on a 198 acre tract of land in southwest Allentown, adjacent to I-78 and Lehigh Street. The airport's primary east-northeast/ west-southwest oriented runway is 3,940 feet long and 80 feet wide. The crosswind runway is 3,380 feet long and 80 feet wide. The airport serves as a general aviation airport for private aircraft. Braden Airpark is located on a 71.3 acre Forks Township tract just east of Tatamy. The general aviation airport has a paved runway that is 1,950 feet long and 50 feet wide. The airport was acquired by LNAA from private ownership in 1999. Slatington Airport is a general aviation airport located on a 56.5 acre tract along the Lehigh River in Slatington. The privately-owned airport has a 2,500 foot

to address identified crash corridors.

Three crash corridors have been identified within the study area, two (2) High Frequency Crash Corridors and one (1) Severe Crash Corridor. For discussion purposes the severe crash corridor will be known as the Downtown Bangor Crash Corridor, while the high frequency crash corridors will be known as the Ackermanville Crash Corridor and the Eastern Gateway Crash Corridor. The Downtown Bangor Crash Corridor should be the first studied due to the severity of accidents. The transportation subcommittee will prioritize the implementation of the remaining crash corridors

The primary focus of each traffic study should be addressing the associated crash corridor. That being said it is important to take a comprehensive approach when examining the impacts of a traffic situation and possible alternatives. Unfortunately, there is no cure all when dealing with these types of issues. Many times a series of trade-offs are required to find the proper balance.

3. Develop Access Management Policy/Plan

In the Commonwealth of Pennsylvania, local municipalities control land use decisions including local roadway design. Sound land-use decisions should be looked at as preventative maintenance for the transportation system. The practice of preventative maintenance techniques on existing transportation infrastructure will increase the overall life expectancy of those facilities and decrease costs over the long haul. Preventative maintenance techniques, like Access

north-south runway (2,000 feet are paved) that is 30 feet wide. The Flying "M" Aerodrome is located at the base of Blue Mountain in northern Heidelberg Township. The privately-owned airport has a 2,375 foot long by 100 foot wide east-west oriented grass landing strip.

LVPC TRANSPORTATION GOAL

To have air passenger carrier, air cargo and general aviation services that meet the needs of present and future Lehigh Valley residents and businesses.

POLICIES

- The LVIA should serve as the region's air passenger carrier, corporate aviation, and air cargo airport. All other airports should serve general aviation and specific corporate aviation needs.
- The LVIA should continue to be developed to service existing and forecast demand for scheduled and non-scheduled air carrier services, corporate aviation and air cargo in an adequate, safe and efficient manner.
- The LVPC prefers that all future runway expansions at LVIA be limited to the main airport property bounded by Airport Road on the east, Race Street on the north, and LVIP #3 on the south. Any proposed expansion beyond these limits should be based on demonstrated need and designed to mini-mize impact on adjoining land uses and the environment in concert with affected municipalities.
- Local highway access to the LVIA should be improved as necessary on the basis of periodic evaluation of access needs in connection with the LVIA Master Plan and in conjunction with the Airport's relationship to the surrounding industrial parks and future development of airport property located contiguous to industrial park uses.

LVPC TRANSPORTATION GOAL

To maximize the compatibility of LVIA operations and nearby land uses.

POLICIES

- Future development in the LVIA area should be compatible with existing and projected air traffic operations.
- Remedial and preventive measures such as land acquisition, relocation, zoning overlay districts, environmental review, soundproofing, revised building codes, real estate disclosure and easement acquisition should be used as needed to pro-mote compatibility with existing and future LVIA operations.

Management, are extremely effective in improving safety and efficiency of existing infrastructure. An effective access management plan can actually add capacity to the transportation system while remaining relatively low in cost to implement.

An Overall Access Management Policy Plan should be developed for the entire multi-municipal area. The overall policy plan should outline design standards, best management practices for managing access on to the transportation system, and prioritize areas needing to retrofit access management. Access Management increases safety and decreases congestion. It is a relatively low-cost means of improving the transportation system. We recommend that implementation of the Access Management Plan begin in the growth centers.

4. Develop Impact Fee Ordinance

An Impact fee ordinance should be developed to offset cost of impacts to the transportation system associated with new development. This study should address all requirements for establishing an Impact Fee Ordinance authorized by Act 209 of 1990

5. Create an Official Map

While no major improvements are recommended at this time, eventually as traffic studies are completed and improvement plans are developed, an official map will be helpful in showing the future improvements. The official map should also show Access Management improvements from the aforementioned study.

6. Cooperate with Bangor in the

- Encroachment of airport operations on existing residential areas should be minimized. New residential development should not encroach on LVIA or its glide paths.

- Airport operations should seek to minimize the noise impacts on existing developed areas as much as possible without compromising safety.

LVPC TRANSPORTATION GOAL

To optimize to operational efficiency, effective-ness, and safety of the facility.

POLICIES

- The LVIA should continue to conduct and revise, as necessary, the LVIA Master Plan, FAR 150 Airport Noise Compatibility Study, Regional Aviation System Plan, and any other pertinent studies to ensure efficiency, effectiveness, and safety.

BICYCLES AND PEDESTRIANS

The 2000 census estimated 10,300 commuters that walked to work and another 550 that biked to work, representing 3.8% and 0.2%, respectively, of all Lehigh Valley commuters. Pedestrian safety is an issue in the Lehigh Valley. From 1996 to 2000, 42 pedestrian deaths have occurred in the region. Pedestrian fatalities account for 13% of transportation-related deaths over that five year period. There were 221 pedestrians injured in the Lehigh Valley in 2000, down 11% from 1999. The issue of developing and enhancing the Bicycle/Pedestrian (B/P) network in the Lehigh Valley is one of increasing options available to the public. While most municipalities can and should do a better job of providing pedestrian facilities like sidewalks and bikeways, it is unlikely that such facilities will relieve the Lehigh Valley of its current air quality problems or future congestion problems. Potential users of the B/P network still must contend with low-density land development patterns (resulting in longer trips for all purposes) and a climate that is not always conducive to B/P activity. However, to the degree feasible facilities should be developed to improve the safety and convenience of walking and biking. Properly designed and available facilities will produce more users and increase the frequency of use.

The B/P network is made up of two distinct components. The first encompasses the highway and sidewalk network. Bicycles and pedestrians are allowed on the current highway network with the exception of expressways. Sidewalks are part of the pedestrian network as well. Most sidewalks in the Lehigh Valley are in the cities and

Bangor Business Park planning and development

This East Bangor Comprehensive Plan envisions the need for improved access to the proposed Bangor Business Park just to the west of the Borough of East Bangor. An access study was recently approved for funding by the Commonwealth of Pennsylvania. This East Bangor Comprehensive Plan identifies a possible access route to this Business Park (BBP) that could help East Bangor's economic development as well as enhance access to the BBP. The proposed alignment is a possible option that could be evaluated as part of this recently announced grant.

FUNDING

PennDOT's Project Development Process is long and cumbersome. However, if a municipality is willing to invest some money upfront this process can move faster. Working closely with PennDOT, the transportation subcommittee should be the lead on projects at least through the Preliminary Design Phase, which includes all of the feasibility studies. It has been our experience that PennDOT is more likely to fund a project if the municipality is willing to invest their own funds in the planning and design of the project.

ACTION PLAN

Immediate Actions (Less than 1 year)

- **Form Multi-municipal transportation subcommittee**
- **Transportation subcommittee meet with State and County elected officials and PennDOT District 5-0 regarding status of TIP projects**

boroughs. Highways can be made more B/P friendly by widening and stabilizing shoulders on roadways and keeping them clean to allow for safe bicycling. Existing and potential B/P usage should be taken into account when designing a new road or widening an existing road. In urban and suburban areas without sidewalks municipalities can mandate installation in new subdivisions in the future. Sidewalks must be present, continuous, well-designed, and maintained to provide for a safe and usable network. Consideration should be given to pedestrian crossing phases for traffic signals located in urban areas. In some residential neighborhoods it may be appropriate to consider traffic calming measures to lessen the dominance of the automobile and increase safety. The second component of the B/P network consists of multi-use paths, distinguished from the previous network by protected rights-of-way.

This network is developing but not truly regional at this point. The parts in place have come about primarily through efforts of local municipalities such as Whitehall Township, Palmer Township, and Plainfield Township, and through the development of the Delaware and Lehigh Canal and State National Heritage Corridor (D&L Trail). Emphasis should be placed in developing a series of multi-use paths that address regional transportation needs. Of particular interest should be "missing links" in the network, with the goal of developing a network of paths that allow users to move around the region.

Also, communities should consider linking adjacent residential developments through B/P paths to reduce the dependence on the automobile and to increase alternatives to the user. The LVPC has been involved in identifying and addressing B/P issues. The first effort was a regional Bicycle/Pedestrian Advisory Committee, formed as a sub-committee to the LVTS

Technical Committee. The idea in the formation of this group was to look at this topic from a regional perspective. In practice, however, the process did not produce tangible results for a number of reasons, one being that these issues are more

able to be identified and addressed from a local perspective. In response, the LVPC asked to be included in citizen traffic advisory committees established in the cities of Bethlehem and Allentown. These committees have identified high priority activities to address B/P issues, primarily safety-related issues. A joint thermo-plastic crosswalk project was developed and programmed for the two cities. The LVPC will continue to work with these committees to develop viable B/P projects and encourage other communities that have B/P issues to set up similar committees. Most Lehigh Valley communities and PENNDOT need to be more active in addressing B/P issues.

In addition to the measures mentioned above site design can be accomplished in a way to be more conducive to pedestrian travel. Allowing higher densities and mixed use

- Request bi-monthly or quarterly meeting with PennDOT District 5-0 for status report on TIP projects.

- Prioritize recommended studies

Intermediate Action Items (1-5 Years)

- Perform Recommended Traffic Studies
 - Downtown Bangor Traffic Study
 - Eastern Gateway Traffic Study, Bangor
 - Ackermanville Traffic Study

- Develop Traffic Impact Fee Ordinance

- Prepare Overall Access Management Policy/Plan

- Ackermanville Bridge
- County Bridge No. 189
- County Bridge No. 191
- Messinger Street Bridge
- Oughoughton Creek Bridge

Long Term (5 + Years)

- Implement findings from:
 - Downtown Bangor Traffic Study
 - Eastern Gateway Traffic Study, Bangor

developments under the zoning ordinance often will shorten trip lengths, thus making them more attractive to be taken on the B/P network. Limiting access points along arterials can also make B/P travel safer along those routes.

LVPC TRANSPORTATION GOAL

To meet recreation, transportation and utility needs by acquiring or retaining abandoned rail rights-of-way.

POLICIES

- Rail rights-of-way proposed for abandonment should be acquired if analysis shows that they are desirable for recreation, road ROW, utility ROW or other uses.

LVPC TRANSPORTATION GOAL

To support bicycle and pedestrian activity and to provide safe access to the transportation system for cyclists and pedestrians in the Lehigh Valley.

POLICIES

- Promote transportation infrastructure improvements such as shoulder improvements, sidewalks, and crosswalks to resolve bicycle and pedestrian safety issues. The appropriateness of bicycle facilities should be considered as part of all road projects.
- Support the development of regulations in local municipalities that mandate construction of sidewalks and pathways to serve pedestrian and other non-motorized traffic.
- Support the construction of rails-to-trails projects for use in both recreation and transportation.
- Promote the construction of missing links in the bicycle and pedestrian networks.
- Support future development patterns conducive to non-motorized travel.
- Provide safe, convenient bicycle parking and storage facilities in urban areas.
- PENNDOT should adopt B/P design and performance standards; consideration of pedestrians and bicyclists should be given when designing and locating traffic control devices, signs, and crosswalks.

CLEAN AIR ACT/AIR QUALITY COMPLIANCE

- **Ackermanville Traffic Study**
- **Access Management Study**

Summary of Transportation Recommendations

1. **Recommendations to improve access and interconnections to all parts of the Multi-municipal area proposed for future development.**
 - **This Plan does not recommend any major highway construction projects. The existing network is sufficient for future growth.**
2. **Recommendations to improve the safety and operation of the street system including re-alignments, studies for traffic control etc.**
 - **Three two (2) high frequency crash corridors and one (1) severe crash corridor have been identified within the study area. A traffic study for each corridor should be performed to find solutions that address the safety issues.**
3. **Recommendations to deal with one-way streets and traffic calming.**
 - **More analysis is needed to determine the need for one-way streets and traffic calming measures. The use of one-way streets and traffic calming measures would be examined as part of a Downtown Bangor Traffic Study.**
4. **Generalized recommendations for off-street parking concepts.**

Congress passed the Clean Air Act in 1970. This Act was amended in 1977 and, most recently, in 1990. The Act contained National Ambient Air Quality Standards (NAAQS) for three measures of air quality: ozone, carbon monoxide and particulate matter. The 1977 Clean Air Act Amendments (CAAA) set 1982 as the deadline for urban areas to meet NAAQS. Areas which could not meet the standards by 1982 were designated as non-attainment areas and given an extension to 1987 to meet the standard. The Lehigh Valley was able to meet all pollution standards except ozone. Therefore, the Lehigh Valley was designated as an ozone non-attainment area. Ozone is formed by a chemical reaction between volatile organic compounds, oxides of nitrogen and sunlight. Because a high percentage of volatile organic compounds comes from tailpipe emissions, a plan to reduce mobile source emissions was required. The responsibility for developing that plan was placed on the Lehigh Valley Planning Commission in conjunction with the Lehigh Valley Transportation Study (LVTS). The resulting plan had two main strategies to reduce tailpipe emissions. The first, under the auspices of PENNDOT, was an automobile inspection and maintenance (I/M) program designed to have vehicles burn fuel more efficiently thereby reducing emissions. The second strategy dealt with the development and implementation of transportation control measures such as carpooling and ridesharing, elimination of four-way stop controlled intersections, coordination of traffic signal timing and increased transit usage. The 1982 Air Quality/Transportation Plan became part of the State Implementation Plan (SIP). It was submitted to EPA in 1982 and subsequently approved. The implementation of the I/M Program and most of the transportation control measures did not result in meeting the standard. Therefore, in the 1990 CAAA, the Lehigh Valley was categorized as a "marginal" non-attainment area, the least severe of non-attainment categories. While the Lehigh Valley met the ozone standard through the mid and late 1990s, its "marginal" status never changed due to the anticipation that a new, more stringent standard would be adopted for ozone. EPA tried implementing the new standard (80 parts per billion averaged over 8 hours) in 1997 but delays caused by legal challenges and the drafting of regulations caused implementation to be delayed until 2004. Now that the new standard is in place, practitioners are awaiting further guidance regarding how conformity will be applied under this new standard. The guidance is due to be released later in 2004. All areas must either meet the standard or develop a plan to meet the standard by June 15, 2005. EPA is also drafting new standards for particulate matter measuring 2.5 microns or larger, referred to as PM_{2.5}. EPA will be formally designating PM_{2.5} areas by December 2004. Preliminary designations released by EPA listed both Lehigh and Northampton counties as meeting the standard.

LVPC TRANSPORTATION GOAL

- **The boroughs should consider acquiring properties as opportunities arise for conversion into off-street parking.**
- 5. General recommendations for mass transit and walkway corridors.**
- **LANTA currently serves the area with two stops, one in Bangor and one in Roseto. We recommend working with LANTA to add stops at the Majestic Facility and at the proposed Veterans Hospital.**
 - **Walkway corridor recommendations will be addressed as part of the recreation plan.**
- 6. List of highway improvement projects and procedure to fund them.**
- **We recommend implementing the projects programmed in LVTS's TIP**
 - **Ackermanville Bridge**
 - **County Bridge No. 189**
 - **County Bridge No. 191**
 - **Messinger Street Bridge**
 - **Oughoughton Creek Bridge**
- 7. Recommendations for speed limit studies and traffic impact fee studies, and any other follow-up studies.**
- **Downtown Bangor Traffic Study**
 - **Western Gateway of Bangor Traffic study**

To ensure that air quality in the Lehigh Valley meets the National Ambient Air Quality Standards for ozone.

POLICIES

- Highway improvement projects that have a negative impact on air quality should not be programmed (as mandated by the Clean Air Act Amendments of 1990).
- Transportation control measures such as carpooling and encouraging increased transit usage should be implemented, where feasible, to reduce vehicle miles traveled and emissions.
- The average trip length and number of trips should be minimized through compact land use patterns and mixed use developments.
- The LVTS should plan and program road improvements that reduce congestion.
- New development should be located in areas with available road capacity, thereby reducing the creation of new areas of congestion.

- **Ackermanville Traffic Study**
- **Traffic Impact Fee Study**
- **Access Management Policy Study**

8. In East Bangor, there is a need to study the opportunities to improve safe use of the intersection of Broad Street and Central Avenue. There is a sight distance problem at this intersection due to the construction of buildings close to the intersection.

**Lehigh Valley Comprehensive Plan
Lehigh and Northampton Counties, PA**

(The column below is taken from the Lehigh Valley Planning Commission 2004 report entitled Comprehensive Plan, Lehigh and Northampton Counties, PA The Lehigh 2030 Valley ...

**BOROUGH OF EAST BANGOR
COMMUNITY FACILITIES AND
PUBLIC UTILITIES PLAN**

SEWAGE DISPOSAL

The primary state legislation for the protection of water quality is the Pennsylvania Clean Streams Law. To execute this law, the Pa. Department of Environmental Protection (DEP) has been granted the power to write, adopt and enforce regulations. The Pennsylvania Sewage Facilities Act of 1966 (as amended), more commonly called "Act 537," is the primary law controlling individual and community sewage disposal systems. Act 537 requires municipalities to submit official sewage facilities plans to the DEP for approval. These plans show the current and future needs of the municipality and assess wastewater facility choices to meet these needs. They are reviewed by appropriate planning agencies, including a county planning agency, to determine consistency with land use goals and policies. The Lehigh Valley Planning Commission has maintained a long range plan for sewage disposal in Lehigh and Northampton counties since 1967. The latest version of this Plan was prepared in 1995. It contains the detailed sewage disposal policies that are the basis of LVPC project reviews. The plan identifies existing sewage disposal systems as well as sewage disposal concerns for the region. The systems are divided into two categories based on the type of service area involved as follows:

- Public sewer systems — publicly-owned systems which serve a generalized service area and designed independently of specific land developments or subdivisions.
- Central sewer systems — publicly or privately-owned systems designed primarily to serve a single subdivision, land development or rural public use involving two or more lots or domestic sewage disposal in excess of one equivalent dwelling unit (EDU) per lot.

There are currently 17 public and 25 central sewage treatment facilities in the two-county region. The location of major public sewer facilities is a key factor in the management of growth in the Lehigh Valley. Approximately 84% of all approved building lots during the 1994 to 2003 period were served by public sewers. Many municipalities within the two counties need to examine their sewage treatment needs, particularly the need for future allocation of public sewage treatment plant capacity. Addressing these needs requires a

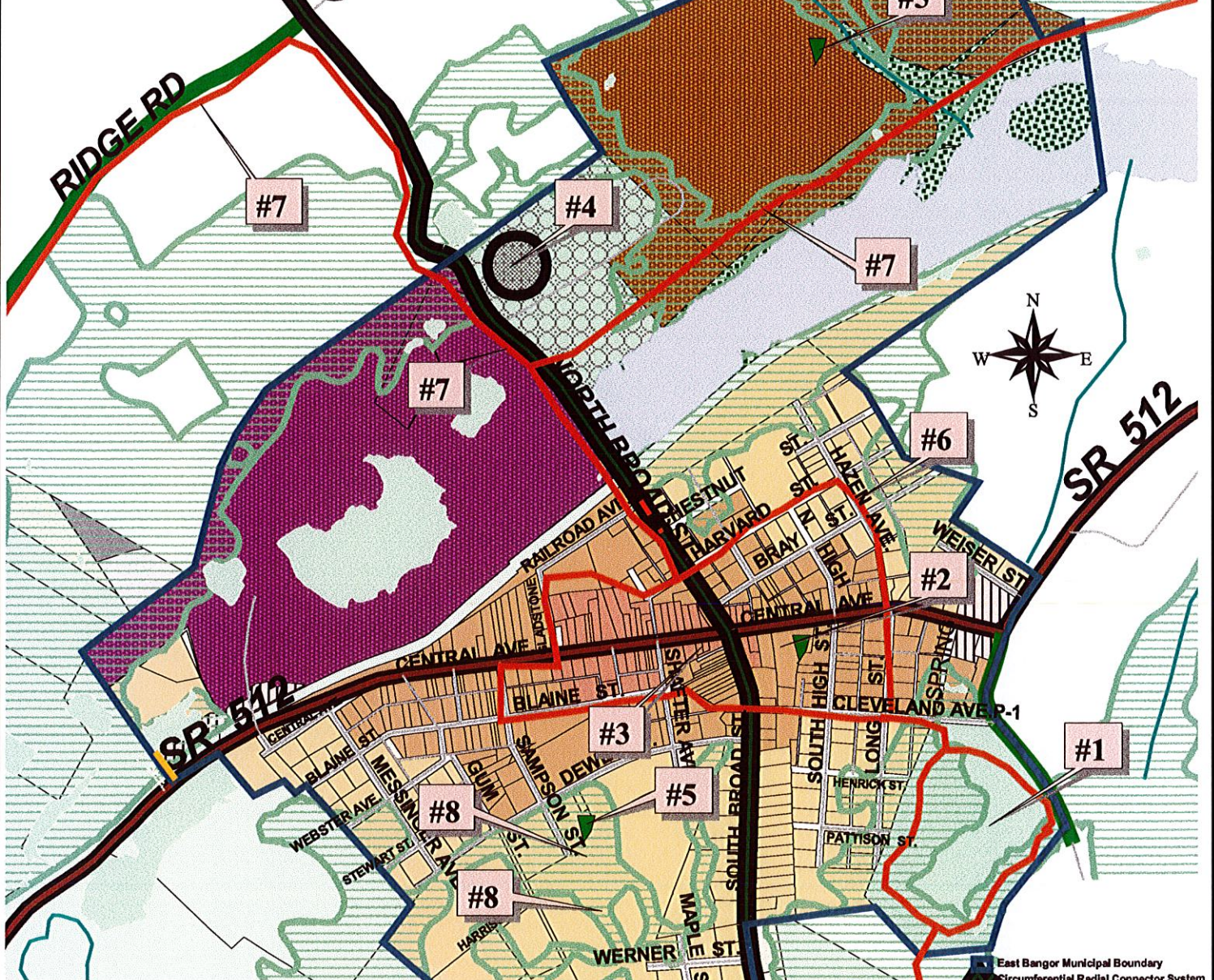
**COMMUNITY UTILITIES SEWAGE
DISPOSAL & WATER, STORMWATER**

The availability of centralized water and sewerage utilities is important in this Central Slate Belt Regional Plan for the following reasons:

- The protection of human health.
- The preservation of environmental qualities.
- An incentive for economic development and creation of local jobs.
- An opportunity to influence the location and intensity of housing and other land use development.

Although the availability, capacity, and cost of public utilities are very powerful as a community building and preservation tool, our plan places this Public Utility Plan element last in the three major components of the Central Slate Belt Regional Plan after the Land Use Plan and the Transportation Plan elements. This regional plan first established a set of cultural, economic, and environmentally influenced land use goals and then seeks to have transportation and community utility policies organized to help carry out those plans.

Community Facilities Plan Borough of East Bangor



- East Bangor Community Facility & Utility Recommendations**
- #1 Borough-wide Park - Improve & add walking trail
 - #2 Borough Hall & Fire Station - Preserve & add recreation facility
 - #3 Borough Police Station - Convert to Substation
 - #4 Borough Garage -with leaf & yard waste recycling
 - #5 Proposed Neighborhood Parks - Create as part of new development
 - #6 Proposed Pedestrian Walkway loop
 - #7 Proposed Bicycle and Pedestrian greenways
 - #8 Proposed Stormwater & Detention Basin Improvements

- East Bangor Municipal Boundary
- Circumferential Radial Connector System centerlines
- Major Arterial Roads
- Collector Roads
- Other Roads
- Connector Roads
- Streams
- Major River Basin (60+ sqm)
- Tributaries (20 - 60 sqm)
- Tributaries (0 - 20 sqm)
- Intermittent Drainage
- Pond
- Natural Lake
- Woodland Overlay/Natural Preserve
- Theme276shp.shp
- Environmental Protection Land Use Area
- Reclamation & Preserve Land Use
- Business - Central Business District
- Business - Highway/Neighborhood
- Business & Industry
- Urban Residential - High Density
- Urban Residential Medium Density
- Urban Residential Low Density
- Central State Belt Community Land Use
- Agricultural & Vacant
- Manufacturing & Industrial
- Office & Business
- Parks & Other Outdoor Recreation
- Public & Quasi-Public
- Residential
- Retail & Commercial
- Transportation, Communication & Utilities
- Warehousing & Distribution

This map was financed [in part] by a grant from the Commonwealth of Pennsylvania Department of Community and Economic Development.



Rodite & Pandl, LLC, Community Planners & Landscape Architects March 2005
Central Slate Belt Region - Boroughs of Bangor, Roseto, East Bangor, and Township of Washington

revised Act 537 Sewage Facilities Plan. Based on 2000 information, 40 of the 62 municipal Act 537 plans in the region are at least 10 years old. Act 537 requires municipalities to re-view and revise their official plans whenever the municipality or DEP determines that the plan is inadequate to meet existing or future sewage disposal needs of the municipality. Building new sewage collection and treatment facilities involves substantial planning, engineering and construction costs. Most Federal funding was eliminated by the Water Quality Act of 1987. The Pennsylvania General water Assembly passed PENNVEST's financing package for clean projects on February 24, 1988. It provides low interest loans and grant assistance to local communities for financing sewer and water projects. Projects are prioritized for funding by the PENNVEST Board based on health, safety, environmental and economic development factors.

The PENNVEST loan program reflects financial need by using a formula to generate a set interest rate for each applicant within the range of 1% to 6%. Even with PENNVEST, however, sewage projects are currently funded predominantly with local funds. Within the two counties, both Lehigh Township and East Bangor Borough have had projects funded by PENNVEST since 1993. Under Act 537, municipalities are responsible for assuring that safe and reliable sewage disposal is provided within municipal boundaries. One way to accomplish this goal for on-lot sewage disposal is for municipalities to require a fully tested replacement absorption area for new development proposed for on-lot sewage disposal. Fully tested refers to both soil probes and percolation testing. The provision of an undisturbed tested replacement area would ensure a future safe-guard in the event of a non-repairable primary area malfunction. This could also prevent the potentially costly alternative of extending sewers, constructing a treatment plant or providing some other method of treatment and disposal...

COMMUNITY UTILITIES

GOAL

- ✘ To provide environmentally sound sewage disposal for all persons.

POLICIES

This Central Slate Belt Regional Comprehensive Plan for 2005 to 2030 puts forth the following goals related to community utilities:

GOAL

- ✘ To seek economical, efficient sewage collection and disposal for existing areas of urban development, areas nearby to existing service areas that have failing on-lot sewerage systems even if they are low density, and finally areas designated for future urban development in this plan, but no sewerage service is proposed for areas designated for farmland preservation, open space protection, and environmental preservation areas.

POLICIES

- Urban development should locate in areas where the public sewer system can accept additional growth, either at present or through limited expansion and upgrading, consistent with the Comprehensive Plan recommendations for urban development. *(Note: Public sewerage service may include publicly owned collection of sewage, sewage treatment in innovative ways and spray irrigation of the clean effluent in field or forest areas)*
- Urban development within the Borough of East Bangor should be given a priority for utilization of existing sewage treatment capacity, however extension of sewerage service to nearby township areas should be considered in any new Act 537 Sewerage Facilities Plan updated completed by the Borough of East

- Tested primary and replacement absorption areas should be provided for each lot proposed for on-site sewage disposal.
- Adequate up-to-date Municipal Official Sewage Plans should be maintained consistent with Act 537 - the Pennsylvania Sewage Facilities Act of 1966.
- Areas with malfunctioning on-lot sewage disposal systems or malfunctioning central systems should be provided with adequate sewage disposal. The most cost-effective solution to the problems should be implemented after an evaluation of appropriate alternatives is completed.

IMPLEMENTATION...

GOAL

- ✘ To coordinate economical, efficient sewage disposal with existing and future development.

POLICIES

- Urban development should locate in areas where the public sewer system can accept additional growth, either at present or through limited expansion and upgrading, consistent with the Comprehensive Plan recommendations for urban development.
- Urban development should be discouraged in areas where it can only be served by on-site sewage disposal systems or new central sewage facilities. However, urban development in this Comprehensive Plan may be served by existing or expanded publicly owned central sewage facilities under the following conditions:
 1. The area is clearly defined for urban development and sewer service in the municipal comprehensive plan, Act 537 plan and zoning ordinance;
 2. The defined urban area is a limited and contiguous expansion to the existing service area; and
 3. the municipal zoning ordinance is effective at steering urban land uses to the defined area and otherwise preserving agriculture and natural features.
- Public system treatment plant expansions and included in the LVPC Sewer and relief interceptors should be constructed to accommodate new development that occurs consistent with this

Bangor during the time period of this Comprehensive Plan.

GOAL

- ✘ To require environmentally sound sewage disposal for all persons, businesses, and other human activity within the Central State Belt Region.

POLICIES

- Adequate up-to-date Municipal Official Sewage Plans should be created and be maintained consistent with Act 537 - the PA Sewage Facilities Act of 1966.
- Areas with malfunctioning on-lot sewage disposal systems or malfunctioning central systems should be provided with adequate sewage disposal. The most cost-effective solution to the problems should be implemented after an evaluation of appropriate alternatives.

WATER SUPPLY PLAN

The Central State Belt Planning Region includes two Community Water Systems:

- Public System owned and operated by the East Bangor Municipal Authority.
- Private System owned and operated by the Pennsylvania American Water Company.

In addition to the Community Water Systems, there are private on-lot water systems that serve properties

Comprehensive Water Plan or suitable alternate forecast prepared by the municipality.

- In areas where the Comprehensive Plan recommends urban development, but where public sewers are not yet available, lot sizes smaller than one acre served by on-site sewage disposal should be allowed if the project is consistent with the municipal Act 537 Plan and if a viable financing commitment exists for extension of sewer lines. A tested primary absorption area should be provided for each lot and a capped sewer system should be installed. The capped sewer system should be connected to the public system when available.
- Rural development should be served by on-lot sewage disposal facilities except where local zoning allows conservation design techniques...
- In areas recommended for urban development, interim central sewage facilities should be allowed if properly installed and maintained, and if the development can be connected to public sewers within five years.
- If, after an evaluation of alternatives, it is determined that a public sewage system is the Plan. The timing and sizing of these facilities should be consistent with the sewage flow forecasts...

IMPLEMENTATION...

WATER SUPPLY PLAN

Preservation of water resources is a major priority of the regional water supply plan. Pollution and/or loss of potable water are potential problems facing many municipalities. Overall, water of adequate quality and quantity is available to meet current demands in the Lehigh Valley. However, the ability to provide a safe, reliable water supply could be adversely impacted without careful county and local planning. Water suppliers need to have emergency plans, establish emergency interconnections with other systems and implement water source protection programs to assure a safe, reliable supply...

The LVPC previously prepared a long range water supply plan in 1995. That plan contains the detailed water policies that are the basis of LVPC project reviews. Its primary purpose is to guide water supply decisions for the region. The 1995 plan evaluates existing and future water use for community and central water systems. Water

primarily in Washington Township.

Direct local government control over the quality and quantity of potable (*suitable for drinking*) water is minimal. Local Central State Belt Regional municipalities should require that minimum health and safety standards for potable water be included in the initial development. However, the monitoring, supervision and enforcement of water quality standards after development takes place is the responsibility of higher authorities such as the PA Public Utilities Commission and the PA Department of Environmental Protection.

However, since all of these water systems rely upon subsurface water, rainwater recharge of the subsurface aquifers, and surface water recharge of the subsurface aquifers, the municipalities do have an indirect involvement in the protection of water quality and quantity available for public consumption. The municipal Land Use Plan element of the Regional/ local Comprehensive Plan and the Municipal Zoning Ordinance are municipal opportunities to help assure safe potable water supplies.

This Central State Belt Regional Plan seeks to assure that there is a safe, reliable water supply. Preservation of major community water system watershed areas in open space and forest use, as recommended in the Regional Comprehensive Plan, is an important part of this Regional Plan.

This Central State Belt Regional Plan is also concerned about safety of water supply sources,

usage and facility data is available annually from the DEP for each system. Community and central water systems are defined as follows:

— Community water systems — publicly or privately-owned systems which serve a generalized service area and are designed independently of specific land developments or subdivisions.

— Central water systems — publicly or privately-owned systems designed primarily to serve a single subdivision, land development or rural public use involving two or more lots or domestic water use in excess of one EDU on a single lot. The availability of community water systems has been a factor influencing the location of urban development within the two counties.

Approximately 85% of all approved building lots during the 1994-2003 period were served by community water systems. ..

Coordination of community water system development with comprehensive land use planning is essential for assuring long-term, reliable water supplies...

The cost for providing water will increase as amendments to federal and state regulations are enacted requiring water systems to meet more stringent standards. Large community water systems, through economies of scale and diverse customer bases, should have less trouble meeting new standards. However, new pollutant regulations could have a serious impact on central water systems.

In 2002, the LVPC completed a preliminary assessment of the Valley's water resources to identify current and future well water users of all types through 2030 and water availability during normal and drought conditions. From the available data, it was found that well water demand will not exceed groundwater supply during normal and drought conditions through 2030. However, one of the main findings of the assessment was the lack of up-to-date, reliable data on water usage, groundwater recharge and water quality. DEP and DRBC need to create both consistent, current databases for the data and comprehensive water management policies addressing various hydrologic settings. These issues may be resolved as part of an updated State Water Plan. In December 2002, the state passed the Water Resources Planning Act. The Act mandates that the

water storage, and water conveyance systems. The level of concern was broadened starting from the terrorist attacks in New York City and Washington, D.C. on September 11, 2001. Therefore, this plan encourages the two Community Water System suppliers to create and implement emergency plans that would respond to natural and human and other adverse impacts upon these local water systems.

WATER PLAN GOAL

GOAL

✕ To coordinate economical, efficient Community Water System, water service with existing land use and the Central Slate Belt Regional recommended future development. The primary goal in East Bangor is to provide water to every developable lot within the Borough with developers assisting the authority with extensions of the water system to the newest development areas of the Borough.

POLICIES

- Urban development should locate where the existing community water system can accept additional growth, either at present or through limited expansion and upgrading, in areas where the Comprehensive Plan recommends urban development.

STORMWATER MANAGEMENT

The Central Slate Belt Region is primarily located in the Martins Creek Watershed (about two thirds of area). Since the Planning Area is in the

State Water Plan be updated within five years. Changes to the Pennsylvania Municipalities Planning Code (MPC) in 2000 require municipal and county comprehensive plans to contain a plan for the reliable supply of water. This section of the comprehensive plan contains policies and implementation strategies to address the MPC amendment. The water supply goals and policies of this plan are generally consistent with those of the current State Water Plan and Delaware River Basin Commission Comprehensive Plan...

GOAL

- ✘ To provide water supplies of adequate quantity and quality to meet both the existing and future needs of all persons.

POLICIES

- The quality and quantity of existing ground and surface water should be protected. Proposed water withdrawals should be accomplished without adversely impacting the present or future uses of the Basin's water resources during both drought and non-drought conditions. Lawful activities, such as extraction of minerals, impact water supply sources and such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities...
- Water conservation measures should be implemented by all existing and future systems during both emergency and non-emergency operations...
- Existing central water systems should be operated and managed in accord with DEP public water system standards.

IMPLEMENTATION ...

GOAL

- ✘ To coordinate economical, efficient water service with existing and future development.

POLICIES

- Urban development should locate where the existing community water system can accept additional growth, either at present or through limited expansion and upgrading, in areas where the Comprehensive Plan recommends urban development.

foothills of the Blue Mountain, these watersheds are near their headwaters where the streams and valleys are somewhat smaller but any rain event has a much quicker impact on the stream. There isn't as much time to react and prepare for a stormwater runoff or a flood event as there is in the lower reaches of these watersheds. As a result, the hazards to property and life are somewhat different in that there is not as much time to prepare. The best preparation is in the planning of land development and the management of ground cover in open space area and along stream corridors.

The Borough of East Bangor has several poorly drained areas. These areas contribute to the surface water runoff problem that affects nearby streets and other nearby properties.

GOAL

- ✘ To work with property owners of properties that have poor soils and a surface runoff problem to mitigate those problems within the confines of their property.
- ✘ To establish an intercommunity stormwater cooperative approach to manage the rate, volume and quality of stormwater runoff for protection of public safety and welfare, property and the environment.
- ✘ To study ways and means for the mitigation of existing stormwater runoff problems in the Martins Creek Watershed in each of the Central Slate Belt Communities.
- ✘ To implement solutions for the existing stormwater problems

• Urban development should be discouraged in areas where it can only be served by on-site water systems or new central water facilities. However, urban development in areas recommended for rural development in the Comprehensive Plan may be served by existing or expanded publicly-owned central water facilities under the following conditions:

1. the area is clearly defined for urban development and water service in the municipal comprehensive plan and zoning ordinance;
2. the defined urban area is a limited and contiguous expansion to the existing service area; and
3. the municipal zoning ordinance is effective at steering urban land uses to the defined area and otherwise preserving agriculture or open space...

IMPLEMENTATION...

STORMWATER MANAGEMENT

Historically within Pennsylvania, stormwater management design criteria were crafted by individual municipalities without the ability to consider watershed-wide impacts. The weakness of this approach was that stormwater runoff rarely conforms to municipal boundaries. Adequate planning cannot be done on a parcel-by-parcel, municipality-by-municipality basis... Act 167 requires counties to prepare storm-water management plans on a watershed-by-watershed basis. The plans must be developed in consultation with the affected municipalities. Standards for control of runoff from new development are a required component of each plan and are based on a detailed hydrologic assessment. A key objective of each plan is to coordinate the stormwater management decisions of the watershed municipalities. Implementation of each plan is through mandatory municipal adoption of ordinance provisions consistent with the plan... All of the LVPC storm water planning to-date has dealt solely with runoff quantity and does not deal with runoff quality. The National Pollutant Discharge Elimination System (NPDES) regulations from the Environmental Protection Agency affect 59 of the 62 municipalities in Lehigh and Northampton counties. The City of Allentown was the only municipality subject to the Phase I

through intercommunity cooperation.

This Plan embraces the LVPC stormwater management policies. This Plan also recommends that a the Slate Belt COG seek a Growing Greener (or similar) project to reduce the stormwater runoff from Township areas that surround the Boroughs thereby mitigating future flood hazards.

SOLID WASTE

Solid waste management is becoming a very expensive service for the residents of the Central Slate Belt Planning Area. In the long range, research needs to be conducted into ways and means for reducing the amount and cost of waste disposal. In the meantime, the primary way to reduce costs is to increase the amount of solid waste that is recycled and reduce the stream of materials that is conveyed to the land fills.

Leaves, grass, tree, and yard waste disposal is an area that the newly formed Slate Belt Region Council of Governments decided to study. Their plan is to identify ways and means by which these yard waste products could be recycled through composting via an inter-municipal program. There is land in East Bangor Borough that could be used for a Borough or regional transfer station for leaf and yard waste. One area is along North Broad Street on the old recycling land fill site.

The Commonwealth of Pennsylvania provides incentive grants for recycling of waste materials. The larger grants go to those communities that achieve the highest rate of recycling.

regulations. NPDES Phase II regulates operators of small municipal separate storm sewer systems (MS4s) located in urban areas and operators of construction activities that disturb between one and five acres of land. During the 5-year permit term, the MS4s must adopt and implement an ordinance that requires the use of storm water Best Management Practices (BMPs) to reduce or prevent the discharge of pollutants into receiving waters...

Plans prepared under the Stormwater Management Act will not resolve all drainage issues. A key goal of the planning process is to maintain existing peak runoff rates throughout a watershed as land development continues to take place. This process does not solve existing flooding problems although it should prevent these problems from getting worse. Correction of existing flooding problems is the responsibility of the municipalities.

GOAL

- ✘ To manage the rate, volume and quality of storm runoff for protection of public safety and welfare, property and the environment.

POLICIES

- New development should be designed with respect for natural drainage patterns to avoid future storm drainage problems.
- To assure preservation of adequate areas for carrying storm runoff, structures should not be developed in natural swales identified in the LVPC report entitled Regional Storm Drainage Plan (1975).
- Open channels may be constructed where a natural swale, as identified in the Regional Storm Drainage Plan, inhibits reasonable use of a property. Open channels should follow the course and grade of the existing swale and should be designed to minimize erosion.
- In watersheds governed by an approved stormwater management plan under Act 167 of 1978, stormwater controls should be provided to meet the performance standards specified in the plan.
- In watersheds not governed by an approved stormwater management plan, the municipality, in consultation with the municipal engineer, should determine the appropriateness of stormwater

Therefore, there are financial incentives for recycling these materials..

GOAL

- ✘ To initiate a successful leaf, grass, and yard waste disposal program through the Slate Belt Council of Governments.
- ✘ To substantially increase (50% increase) the amount of solid waste that is recycled in the Central Slate Belt Region.

POLICY

- The Slate Belt Area Council of Governments should take the lead in establishing an improved recycling program and a new leaf and yard waste recycling program.

PARKS AND RECREATION PLAN

Each of the four Central Slate Belt Communities contains a community-wide park. The newest of these is in Washington Township. In-fact Washington Township is currently in the process of enlarging the developed section of their Township Park that is located to the rear of the Washington Township Municipal Building located on S.R. 191 just south of the village of Ackermanville.

The Borough of East Bangor has a in-town park that contains a baseball field, a football field and a multi-purpose play area and concert area, basketball court, children's play apparatus area, a picnic pavilion, and restrooms.

This Plan recommends that the

detention for new development.

- Stormwater management during construction should be accomplished in a manner that is consistent with the Department of Environmental Protection regulations as administered by the County Conservation Districts. Standing water on construction sites should be managed in a manner that protects public health, safety and welfare.

IMPLEMENTATION...

SOLID WASTE

The solid waste crisis of the late 1980s has become a distant memory. Today, solid waste management follows the provisions of the Municipal Waste Planning, Recycling and Waste Reduction Act of 1988 (Act 101). The Act grants powers and duties to counties and municipalities relating to solid waste management. Counties are responsible for the preparation and implementation of a municipal waste management plan. The plan must contractually assure the existence of waste disposal capacity for a ten-year period. Municipalities may opt out of a county plan if they have their own plan. Municipalities with a population greater than 5,000 and a population density of 300 or more persons per square mile are required to have a curbside collection recycling program. The Act remains in effect although the Courts have ruled that flow control, the primary means of implementing the municipal waste management plans, is unlawful. Lehigh and Northampton counties have each prepared a solid waste plan to meet the Act 101 requirements. The most recent adopted plans are dated 1990 (Northampton County) and October 1996 (Lehigh County). These plans have been approved by DEP. Northampton County has also completed a revised plan dated March 2003. Plan adoption is pending at this writing. The draft Northampton County Municipal Waste Management Plan allows municipal waste to be taken to a number of facilities, each of which has a contract with the County to accept the waste...

GOAL

- ✘ To assure environmentally responsible and economical waste disposal.

POLICIES

Borough-wide Park be further improved with a loop walking trail within the park. This Plan also recommends that several walking trail loops and connecting bicycling trails be developed so that they could be connected to the park and connected to other municipalities from the East Bangor Memorial Park. Finally, if the Borough vacant lands are proposed for development, then this Plan recommends the development of neighborhood parks especially where there is a natural pond or wetland area that could be preserved and integrated into a small playground facility primarily for the residents of the new houses.

SCENIC RESOURCES

The Ridge Road could be a scenic resource highway along with part or all of State Route 512.

GOALS

- ✘ To preserve open space and important natural areas.
- ✘ To create an interconnected greenway system that links all four Central Slate Belt Municipalities with a walking an/or bicycling trail.
- ✘ To increase the number of recreation playing fields available within the Planning Region and to provide coordinated, inter-community use of these fields.
- ✘ To increase the number of safe play apparatus areas for children in each community.
- ✘ To provide specialized recreation facilities for adults and particularly

- Disposal of waste generated in Lehigh and Northampton counties should be in accord with the Northampton County Municipal Waste Plan...
- Material should be recycled and reused to the degree economically feasible. (Economic feasibility considers avoided disposal costs as well as direct revenues.)
- Solid waste facilities should be sited in areas with adequate access and in accord with the policies of this plan, including those relating to land use, natural resource protection, farmland preservation, recreation and open space and highways.
- Solid waste facilities should be sited, designed and operated to minimize the impact on existing residential areas in accord with the policies of the housing section of this plan.
- Solid waste facilities should be designed in accord with the relevant stormwater management plan and should mitigate the offsite traffic impacts.

IMPLEMENTATION...

PARKS AND RECREATION

Residents of the Lehigh Valley have grown accustomed to high quality local and regional parks. Allentown, Bethlehem and a number of smaller municipalities have long been committed to parks. In 2000 the Lehigh Valley Green Future Fund was created to explore the possibility of park and open space bond issues in each county. The group, com-posed of local civic leaders and government officials, came up with the recommendation that each county should have a \$30 million bond issue. The monies from the bond issue would be used to acquire important natural areas, land for future parks, and agricultural conservation easements to preserve farmland. Nonbinding referendums were held in both counties in 2002. The initiatives were strongly supported in each county (70% in Lehigh and 64% in Northampton).

Lehigh and Northampton counties started major county-wide park programs in the late 1960s in response to recommendations made by the LVPC. The counties and the LVPC have been actively involved in park planning, acquisition and development ever since. The park and open space goals presented here are based on a LVPC

- ✘ To provide specialized recreation facilities for adults and particularly for senior citizens.
- ✘ To seek private sector partnerships with regard to the creation, operation and maintenance of recreation facilities.
- ✘ To prepare a Slate Belt COG regional park and recreation plan.

BOROUGH GARAGE FACILITY

East Bangor Borough owns a Borough Garage building and property that is located almost in the center of the town on Central Avenue. This garage building is in fair condition. More and better space for Borough street and park equipment could enhance the delivery of public work services and could provide better storage for vehicles, equipment, road salt and cinders. If market forces and the demand for land use increase in the next 25 years to the year 2030, the East Bangor Borough Garage property could be put to a higher and better use.

PUBLIC WORKS AND RELATED LAND USE GOALS

- ◆ To relocate the Borough Garage land use to another more remote part of the Borough of East Bangor.
- ◆ To convert the prime land that the Borough Garage now occupies on Central Ave to a private land use that could provide local jobs, tax ratables for the Borough and School

document entitled Regional Recreation and Open Space Plan and detailed plans prepared for each county....

The amount of land in parks and other outdoor recreation in the Lehigh Valley has increased substantially since the LVPC completed the first recreation and open space plan for the Lehigh Valley. Between 1970 and 2003, outdoor recreation acreage in the two counties increased by 15,556 acres, or about 76%. The greatest increase was in Northampton County - 99%. The increase in Lehigh County was 60%. The amount of parkland owned by the two counties increased 2,795 acres, or 190% during the 33-year period. Municipal parkland grew 3,683 acres, or 120%, between 1970 and 2003. The remaining increase in acreage was largely due to acquisitions by the Wildlands Conservancy, the state and federal government. The development of five new 18-hole golf courses since 1990 added 896 acres to the regional recreation inventory. Most of the recommendations of the 1971 Recreation and Open Space Plan have been fulfilled. One measure of a region's park and open space system is the acres per 1,000 population standard.

The National Recreation and Park Association (NRPA) suggests that a core park system should have 6.25 to 10.5 acres of developed open space per 1,000 population. This is local, close-to-home space that includes mini-parks, neighborhood parks and playgrounds, and community parks. In addition, the NRPA recommends there be another 15 to 20 acres per 1,000 population in regional space which includes regional/metropolitan parks and regional park reserves.

....for the year 2020 and Northampton County needs only another 42 acres. The Lehigh Valley had 7.4 acres of local, close-to-home recreation space per 1,000 persons in 2003. If the 10.5 acres per 1,000 persons NRPA guideline is used, another 2,637 acres of local, close-to-home recreation space will be needed in the Lehigh Valley by the year 2020. In 2003 the Lehigh Valley had 4,747 acres in regional parks. ... both counties were below the NRPA minimum suggested guideline of 15 acres of regional space per 1,000 persons. The two counties will need another 5,203 acres of regional parks by the year 2020 to meet the

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minimum NRPA suggested guideline.

.... The LVPC staff will be preparing a regional greenways plan for the two counties starting in late 2004.

SCENIC RESOURCES

The Lehigh Valley has an abundance of scenic resources. These resources include scenic waterways, scenic roads, scenic views, and scenic features or areas. The Valley's identity is formed and reinforced through these features. Scenic features are viewed as a regional asset that contribute to our quality of life. Examples of scenic waterways include the Delaware River, the Lehigh River and many of our streams. Scenic roads can still be found throughout the two counties. The best known is the Delaware River Scenic Drive (scenic Route 611) in Northampton County. This road was designated a scenic drive by the State of Pennsylvania on December 5, 1988... Scenic views exist at many locations throughout the Lehigh Valley... The two most prominent scenic features of the Lehigh Valley are the Blue Mountain and South Mountain. These two features form the backdrop for much of the region. Our farmlands are an important resource that Valley residents appreciate for their open space value and their scenic beauty...

Some other scenic features of importance include covered bridges, the Bethlehem star, downtown Bethlehem, the square in Nazareth and the Little Lehigh Parkway in Allentown.

GOAL

To provide and maintain adequate space and facilities to meet the recreation needs of Lehigh Valley residents.

POLICIES

- The counties and municipalities should meet minimum National Recreation and Park Association suggested guidelines for park space and recreation facilities.
- Current recreation activity trends and local demographics should be used when planning for new recreation facilities and programs.
- The counties should acquire the following types of parks: large community parks, regional parks,

District and perhaps provide conveniently located service offices and or retail business space. A new building could even be a mixed use building that could accommodate some residential apartment use on the upper floors of a new building.

- ◆ To locate the Borough Garage function into a larger building that could provide for expansion and storage of additional items including the new banners that the Borough installs on poles on the main streets of town.
- ◆ To consider joining together with one or more neighboring municipalities in the construction and or development of a municipal garage and public works building. It may also be possible to integrate the municipal authority and park needs into this new facility.

From a policy and procedural standpoint, the Borough of East Bangor could take the initiative on its own to work with the various municipalities in the region or the Borough and its neighbors could use the Slate Belt Council of Governments as a vehicle to pursue this concept. The concept could involve partial cooperation, that is storage of some materials and or servicing of certain vehicles in-house. Under this approach, each municipality would have its own public works facility that would provide for its special advantages while sharing one or more opportunities for facility, equipment, parts or skilled public works staff people.

The concept of recycling could be

regional park reserves, linear parks and conservancy areas.

- Parkland acquisitions that are inaccessible, limited in use potential, or are tied up with legal restrictions or informal understandings with former or neighboring property owners on use of the land should be avoided.
- Once land is acquired for parks or open space, it should not be converted to other uses.
- Municipalities should be responsible for providing mini-parks, neighborhood parks and playgrounds, and community parks.
- High priority should be given to acquiring parkland and open space along rivers and major streams.
- The needs of the handicapped should be considered in any recreation and open space planning.
- Recreation facilities at schools should be available to the public.
- Quasi-public organizations and the private sector should provide special use recreation facilities such as golf courses, camp grounds and ski areas.

IMPLEMENTATION ...

GOAL

To preserve open space and important natural areas.

POLICIES...

IMPLEMENTATION...

integrated into the East Bangor public works site in that leaf and yard waste could either be composted on site or stored temporarily on site in a transfer station. The Slate Belt COG is considering the best ways and means of providing leaf and yard waste recycling. One of the options that the COG is looking into is to establish a relationship and agreement with the East Allen five municipalities that are initiating such a program in the western part of Northampton County. Leaf and yard waste material could be gathered and consolidated at transfer stations in the Slate Belt Region and then trucked to the Allen five facilities.

RECREATION FACILITY AND RECREATION PROGRAMS

One of the latest ideas to be considered by the Slate Belt COG community managers is a "Circuit Riding Recreation Manager." The municipalities have not even officially considered this type of cooperation; however it has merit for consideration. The preliminary proposal is to apply for a State Grant to hire a recreation program and facility manager who would spend approximately one day a week in each municipality to plan recreation activities and to evaluate and propose improvements for the recreation facilities. The spirit of cooperation is growing in the Slate Belt Region. This latest proposal for inter-municipal cooperation may be the right approach for this time.

STATEMENT OF PLAN INTER-RELATIONSHIPS

This Comprehensive Plan was prepared with the requirements of Section 301(4.1) of the Pennsylvania Municipalities Planning Code requirements in mind. As a guide, many sections of this Plan relied upon the Lehigh Valley Planning Commission's (LVPC) 2030 comprehensive planning study format and findings. By modeling the Central Slate Belt Regional Planning study after the LVPC, the Bangor, Roseto, East Bangor, and Washington Township region (BREW) regional plan by design included many recommendations from the LVPC draft plan. In addition, the study sought to integrate elements of the comprehensive plan as well as relate this plan to that of the plans of adjacent municipalities. Early in the process, neighboring municipalities were invited to attend one or more of the Central Slate Belt Regional planning meetings.

The Central Slate Belt Regional planning process started with a natural features inventory background study and analysis as one of the earliest background plan reports in a series of background surveys and studies. The Natural Features study conclusions were influential in the formulating the land use plan. The land use plan then drove the transportation and the community facilities and utilities plans. Therefore, each of the major study and plan elements are interrelated. Perfect correlation however, is a goal that is always affected by the real world compromises of individual opinions and interests.

There was a strong attempt to have the land use plan "public interests" influence where both development and infrastructure will take place rather than having developer's "private interests" decide the direction and pace of development. However, again, the real world is not always perfect, but every attempt was made to have municipal plans and policies drive the land development process

STATEMENT REGARDING PLAN RELATIONSHIP TO PLANS FOR ADJACENT COUNTIES AND LOCAL MUNICIPALITIES

Consistent with the requirements of the Pennsylvania Municipalities Planning Code (MPC), this planning process sought to make this Central Slate Belt Regional Plan compatible with the plans and existing land uses in neighboring community lands adjacent to the Central Slate Belt

Municipalities as well as compatible within the Central Slate Belt Regional municipal area.

During the last several months of this Central Slate Belt Regional Planning Program, the draft Regional and local comprehensive plans will be shared with adjacent municipalities and with the Bangor Area School District and the municipal authorities some of which provide sewer, water, waste collection and recycling services. The review comments of these groups as well as comments from the LVPC will be considered before adoption of the Central Slate Belt Regional Plan.

- Many municipalities do not adequately relate land use planning and planning for sewer and water infrastructure. Municipalities need to recognize these connections in local plans and they need to keep their sewer plans mandated by Act 537 up-to-date.
- Planning and zoning in many municipalities is reactive. Municipal plans need to address the goals of the municipality not just react to proposals of developers. Municipalities also need to make fuller use of planning tools enabled by the planning codes.

ENVIRONMENTAL CONSTRAINTS, OPEN SPACE & RECREATION PLANS

Although the original scope of planning program services included a small element with the heading "Environmental Constraints, Open Space & Recreation Plan" as a separate report element, this Central Slate Belt Regional Plan incorporated these elements into the Land Use Plan, and the Community Facilities & Utilities Plan sections and in the background analysis reports and files.

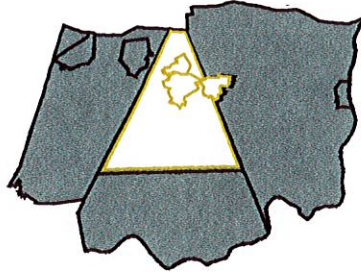
IMPLEMENTATION SHORT & LONG RANGE STRATEGIES

This Central Slate Belt Regional Plan included short and long term planning strategies where appropriate within each plan element.

This Regional and the local Plans include recommendations that in the short range, local Act 537 Official Sewerage Facilities Plans be updated in a coordinated manner with all or at least several of the Central Slate Belt Regional Municipalities to update their Act 537 Plans at the same time within five years of the adoption of this Comprehensive Plan. Then, those updated plans should seek to accommodate the longer range 2010 to 2030 land development policies of this Comprehensive Plan.

Local Comprehensive Plan Sections

Central Slate Belt Region



CHAPTER THREE BOROUGH OF EAST BANGOR COMPREHENSIVE PLAN

BACKGROUND SECTION - A - General Background Study
Including Population, Citizen Survey, Economy,
Community Facilities, Census and
Lehigh Valley Planning Commission Data and Projections

BACKGROUND SECTION - B - Natural Inventory Maps

BACKGROUND SECTION - C - Highway Maintenance, Highway Safety Plus

BACKGROUND SECTION - D - Transportation Impact Fees

Boroughs of Bangor, Roseto East Bangor, Township of Washington in County of Northampton, Pennsylvania

Preliminary Draft Report Sections prepared in 2004 & 2005.

This report was financed, in part, by a grant from the Pennsylvania Department of Community and Economic Development under the Land Use Technical Assistance Planning Program. This program is part of a Multi-municipal Planning Program including the Boroughs of Bangor, East Bangor, Roseto and the Township of Washington.

**Borough of East Bangor Planning Commission
Rodite & Pandl, LLC, Community Planners**

BACKGROUND SECTION – A

GENERAL BACKGROUND STUDY

INCLUDING

POPULATION, CITIZEN SURVEY, ECONOMY, COMMUNITY

FACILITIES, CENSUS AND LEHIGH VALLEY PLANNING

COMMISSION DATA AND PROJECTIONS

Introduction to Background Report

The East Bangor Comprehensive Plan will be based on background information assembled during the comprehensive planning program. This planning program is part of a Multi-municipal planning process. Therefore the background studies of population, housing, land use, community facilities, and transportation are both regional in nature and are locally focused on the Borough of East Bangor.

Purpose - The purpose of this draft report is to provide a comprehensive review of issues pertaining to the preparation of an East Bangor Comprehensive Plan. Background study findings, particularly those emanating from the East Bangor 2001 Citizen Survey conducted at the outset to this planning program will also be an important influence on a proposed East Bangor Zoning Ordinance. Zoning will be an important tool for implementing the East Bangor Comprehensive Plan.

Organization of Report – This section of the East Bangor Comprehensive Plan will become an appendix to the Comprehensive Plan. It includes sections on population trends and projections, housing characteristics and projected housing needs, existing land use and environmental issues, vacant land capability for land development, an inventory of public facilities and infrastructure including park, recreation and open space. Most important is the inclusion of a Citizen Attitude Survey conducted in May of 2001. The tabulation and analysis of that survey provide insight into the attitudes and values of East Bangor Borough residents regarding land development, community enhancement, environmental and open space preservation and the type and quality of services that Borough residents would like to have for the future.

Time frame – The background studies of population go back to 1960. Later the proposed comprehensive plan will include a future time horizon up to the year 2030 for East Bangor and the other Multi-municipal partner communities (the Boroughs of Bangor, Roseto and Washington Township).

Plan and Zoning Implications – This background report is presented for the reader to form ideas as to the extent and character of land use development policies that should be included in the Comprehensive Plan and Zoning Ordinance. The background study population and housing projections are greatly influenced by the Lehigh Valley Planning Commission's view of the greater regional potential and the role that East Bangor and its neighboring communities may share in that potential. The extent of historic preservation, environmental preservation, open space preservation, park and community facility, utility, street and parking levels of service, and economic development are more under the control of the Borough of East Bangor to adopt policies that will be aggressive, passive, and/or balanced in regard to these discretionary policy issues.

POPULATION AND HOUSING CHARACTERISTICS AND PROJECTIONS

East Bangor Population Trends and projections 1960 to 2030- The total Borough population has been relatively stable for the last 40 years. The year 2000 U. S. Census revealed that the Borough population was 979 persons or nine persons more than resided in the Borough at the time of the 1960 Census. The slight declines and increases are shown on the following table:

Borough of East Bangor Total Decennial Population 1960-2000		
Year	Population	% Change
1960	970	
		-6.7%
1970	905	
		+5.5%
1980	955	
		+5.3%
1990	1006	
		-2.7%
2000	979	

Source: U.S. Census of Population

Additional population information is presented in the tables at the end of this Background Analysis report section. Highlight from some of those tables include:

- During the 1990 to year 2000 decade the net population increase in Northampton County was 19,961 persons. Taking all Northampton County Boroughs together, their total share of that increase was only 1,314. Almost all of the increase in population was experienced in the Northampton County Townships. (See Table #1)
- East Bangor is part of a Multi-municipal Planning Group that includes the Boroughs of Bangor, East Bangor, Roseto, and the Township of Washington. The population of this Group experienced a net increase of 400 persons during the last decade. This was a percentage increase of 3.42% compared to 8.08% for Northampton County, 7.60% for the Lehigh Valley, 3.36% for the State of Pennsylvania, and 13.15% for the entire Country.
- East Bangor as a percent of the local Multi-municipal Planning Group dropped from 8.60% to 8.0% between 1990 and 2000.

The Lehigh Valley Planning Commission forecasts the Borough of East Bangor population to increase by 124 persons between the year 2000 and the year 2030. (See Table #2) This planning study presents a range in population to be between 870 and 1,500 persons. The high number is based on one or more new developments taking

place in the Borough. The low range forecast is based on little or no development and a continued aging and downsizing of the Borough population and household size.

Findings and Observations From Housing Stock Inventory - The year 2000 U.S. Census inventory of East Bangor's Housing revealed the following:

- **Of the 387 housing units occupied, 279 or 72% were owner occupied and 108 or 28% were renter occupied**
- **Of the 30 vacant units, 11 were for rent, seven (7) for sale, four (4) were rented or sold but not occupied, and eight (8) were other – that is, they may have been abandoned**
- **The vast majority of householders were white, but there was one (1) African American, three (3) householders with two or more racial heritages, three (3) Hispanic or Latino, and one (1) of some other race**
- **“Overcrowded housing units” was a very minor problem affecting only two (2) owner occupied housing units and three (3) renter occupied housing units**
- **Renter occupied housing units tended to be slightly larger than the average for the entire country (4.6 rooms per apartment in East Bangor compared to 4.0 rooms in the United States as a whole)**
- **Most of the existing housing units in the Borough were in single family detached housing units, however there were 56 units in single family attached units, 62 units in structures with from two to 19 housing units, and 55 units in mobile homes**
- **Rental units were primarily in single family detached (28) units, single family attached (16) units, two family and multi-family (50) units, and mobile home (14) rental units**
- **The majority (57.31%) of homes were built prior to 1939 compared to only 15% of the United States housing stock that was built prior to 1939**
- **There were actually a higher percentage of owner units built (57.35%) prior to 1939 than rental units built (48.15%) prior to 1939**
- **Vehicle ownership is substantial – over 70% of home owners have one or two vehicles and almost 25% have between three and five vehicles; 53.7% of the renters have one vehicle, 29.63% have two vehicles, 5.56% had three vehicles**

See the Housing Inventory Tables at the end of this section for additional housing information

Population and Housing Characteristics Relationship to Long Range Community Plan-

East Bangor included 417 housing units at the time of the year 2000 Census. With 30 of those units vacant, there were 387 households in the Borough. The average household size was 2.53 persons. Of the 387 occupied housing units, 279 or 72.1% were owner occupied units and 108 or 27.9% were renter units. During the 10 years between 1990 and 2000, 16 housing units were constructed in the Borough of East Bangor. (See Table #3)

Table #4 presents the Natural Increase in East Bangor population during the last decade. During this period, there were a total of 93 births and 86 deaths in East Bangor households. That should have resulted in an East Bangor net population increase of

seven (7) people. Why then did the Borough population actually decline by 27 people (1,006 to 979 in the year 2000)? There are two possible answers. One is that the Census made a mistake. The other is that people are moving out of the Borough. Our conclusion is that the people moving out have primarily been children going to college, the service and work elsewhere. This has further reduced the East Bangor household size. This trend is likely to continue unless there is successful regional economic development that will attract younger people to stay in the Borough and perhaps live in an apartment or form a family in the Borough in an existing home or a new home. The high-end forecast of 1,500 persons in the year 2030 assumes that East Bangor will benefit from such a regional economic development policy.

Affordable housing is plentiful in the Borough of East Bangor. The year 2000 median value of owner occupied homes in East Bangor was \$90,600 or only 75.5% of the Northampton County median. On the other hand, median monthly contract rents in East Bangor were \$592 per month or 2.8% above that of Northampton County. A possible conclusion could be that the owner occupied housing is generally affordable, but that the rental housing supply could be increased slightly with units in the more affordable rent category.

In order to estimate the need for new housing in East Bangor between now and the year 2030 we assume that the Borough household size will continue to drop below the current 2.73 persons per household to 2.53, as in the County for the year 2000, and even lower to 2.4 in the year 2030. A second assumption is that half (or 15) of the currently vacant units (30) will be become available as affordable rental units.

Estimated Housing Units Required for East Bangor Mid-range Population Forecast					
Starting # of Housing Units		Year	Forecasted Population	Additional Units Needed	
Owner Units	Renter Units		Mid-range	Owner Units	Renter Units
297	108	2010	1041	11	4
308	112	2020	1081	18	6
326	118	2030	1103	14	5
340	123	Total		43	15

Source: Rodite & Pandl, LLC & Lehigh Valley Planning Commission - Population Forecasts

Population & Housing Relationship to Land Use, Public Facilities, & Infrastructure

The population and housing forecasts to the year 2030 may be used to estimate the amount of land required for several key land uses such as residential land use, transportation (streets), and Parks & Recreation to serve the nearly 125 new people who moved into the Borough or were born into existing households. The estimated space needs for the housing mid-range projection is 14.3 acres for new homes and apartments, 2.7 acres for streets, sidewalks and other walks, .2 acre for apartment off-street parking, and 1.24 acres for park and recreation.

EXISTING LAND USE, ENVIRONMENTAL ANALYSIS, AND PROJECTIONS

land Use Data Base – The Lehigh Valley Planning Commission recorded and published existing land use for the Borough of East Bangor in 1972, 1992 and in the year 2000 as presented below:

Land Use Trends 1972 to 2000 In East Bangor Borough			
Land Use Category	1972 Acres	2000 Acres	% Change
Residential	71.2	103.4	+45.22%
Commercial	2.3	2.6	+13.04%
Industrial	90.6	83.8	-7.51%
Wholesale & Warehousing	0.0	0.0	0.00%
Transp., Comm. & Utilities	79.5	79.8	+0.38%
Public & Quasi-Public	2.9	2.9	0.00%
Parks & Recreation	25.0	25.0	0.00%
Agriculture & Vacant	182.5	156.5	-14.25%
Total Acres	454.0	454.0	0.00%
Source: Lehigh Valley Planning Commission for land use statistics			

Vacant Land Opportunity - There are 156.5 acres of vacant land in the Borough of East Bangor. Nearly 90 of those vacant acres are owned by the Commonwealth of Pennsylvania. The State land is located to the East of North Broad Street and to the North of the railroad line. It includes a lake and significant wetland & flood plain areas. Even if the State would turn this land over to the Borough, it would have very limited potential for more active land uses. The remaining 66 acres of vacant land is spread out in the four quadrants of the Borough.

1. **Northeast Quadrant of the Borough**– There is nearly five (5) acres of vacant land in the Northeast quadrant of the Borough East of Broad Street and North of Central Avenue. All of this vacant land has been subdivided into parcels of less than an acre. Almost half of the land has environmental limitations such as steep slope greater than 12% and or soils with one or more limiting factor that would result in more expensive land development and property maintenance over the years. Therefore, only about 80,000 to 100,000 square feet of land is conducive to development. Fortunately, this land fronts existing streets with most of the infrastructure in place.
2. **Southeast Quadrant of the Borough** – There are nearly five (5) acres of vacant land contained in 14 separate parcels of land South of Central Avenue and East of Broad Street. Most of these parcels are nearly one third of an acre or about 14,000 square feet in size. Three parcels are in the one half to one acre size. The remaining four parcels are smaller; one is only 3,600 square feet in size. Steep slope is not a limiting factor to development of these parcels, however, about one half an acre involving three small lots are not conducive to development because of soil conditions. This leaves nearly 200,000 square feet of build-able land on 11 parcels that are near existing infrastructure.
3. **Southeast Quadrant of the Borough** – The Northampton County Geographical Information System data base lists 33 parcels in this quadrant in the vacant category. However, several of those parcels are in East Bangor

Municipal Authority ownership and include land around their sewage treatment plant and land around their reservoir. Of the remaining nearly 53 acres of vacant land to the South of Central Avenue and West of Broad Street, only about 25 acres should be considered for possible development. The other lands have steep sloping surfaces, seasonally wet soils and/or other soil limitations that will be a challenge for normal development. There are several large parcels that have a combination of usable and undesirable land. They include parcels of 23.3 acres, 7.0 acres, 3.0 acres, 2.7 acres.

4. **Northeast Quadrant of the Borough** – There are seven vacant parcels in the section of the Borough North of Central Avenue and West of Broad Street. Total vacant land in this quadrant is less than 3.5 acres with the East Bangor Methodist Church owning 1.92 of those acres for their church related use. This leaves a scant 62,500 square feet of vacant land in six parcels of land. All of these remaining six lots have soil limitations that would make land development challenging.

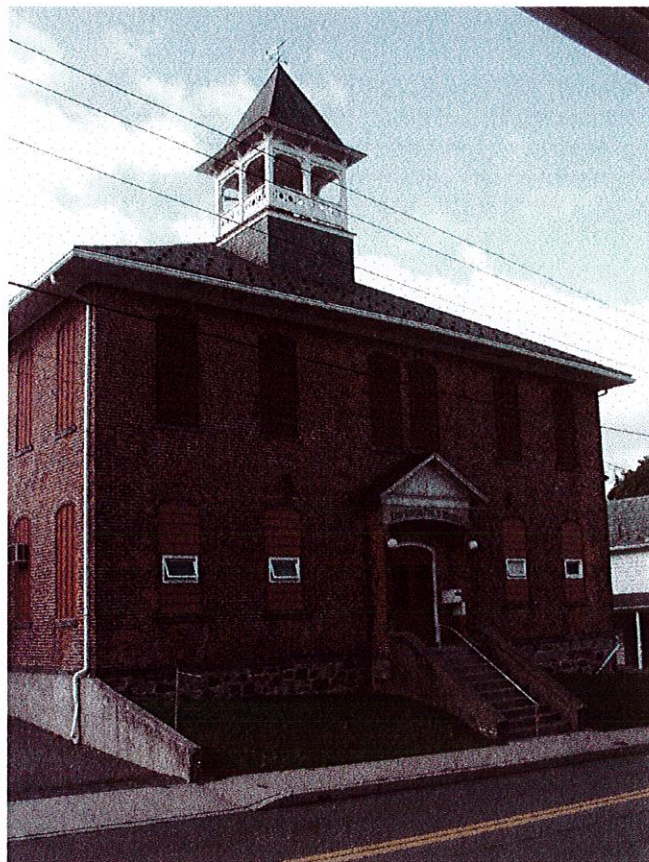
Renewal and Redevelopment – There is a realistic possibility that existing buildings and land that is partly developed could be renewed or redeveloped with new land uses. For instance the nearly 73 acres of land that are devoted, in part, to a mobile home park, could be reused for more development in the future. Similarly, the nearly 82 acre parcel on which Capital Auto Parts business is located could be redeveloped and re-used for other land uses by the year 2030 time horizon of this East Bangor Comprehensive Plan. Both of these major properties and the old, nearly 16 acre, hazardous land-fill site along North Broad Street may be reusable or may continue to be used for permanent open space for the long range future.

Future Land Use Projections – Applying the population forecast to land use, we derive the following table:

Land Use Present (2000) & Future (2030) In East Bangor Borough			
Land Use Category	2000 Acres	2030Acres	Build-out
Residential	103.4	128.0	142.0
Commercial	2.6	5.0	5.5
Industrial	83.8	85.0	85.0
Wholesale & Warehousing	0.0	2.0	2.0
Transp., Comm. & Utilities	79.8	82.5	85.0
Public & Quasi-Public	2.9	5.0	5.0
Parks & Recreation	25.0	30.0	35.0
Open Space & Vacant	156.5	116.5	94.5
Total Acres	454.0	454	454.0
Source: Rodite & Pandl, LLC, Community Planners			

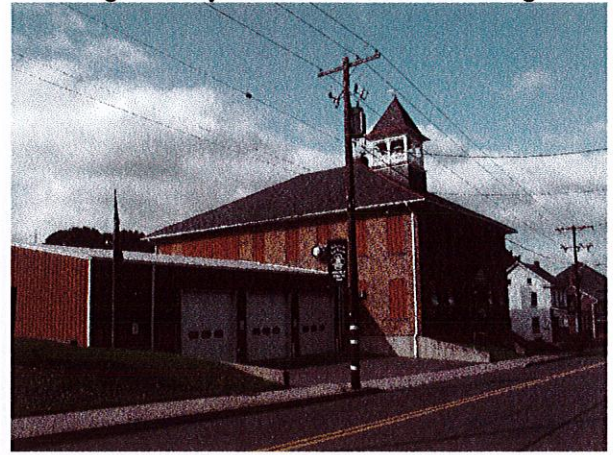
EXISTING EAST BANGOR PUBLIC FACILITIES

Inventory of Public Facilities – The Borough of East Bangor acquired a retired elementary school building pictured below and located on Central Avenue near the center of the Borough. **This is a multi-purpose Borough Municipal building.**



The volunteer fire department is responsible for this building. Borough Council and other government meetings are held in a large first floor “Banquet Room”. There is ample off-street parking to the rear.

On the easterly side of this building, the fire company constructed an addition to house their fire fighting equipment. A building survey revealed the following



facility assets, liabilities and opportunities:

- This building is a structurally sound, old brick structure that is about 100 years old. It has a slate roof that is failing and leaking water from time to time into the second floor rooms. Fortunately, the second floor rooms are mostly devoted to fire facility storage of materials that are not damaged by occasional leaks. Three of the four second floor rooms were open to inspection. The electric system appears to need upgrading. Emergency egress and handicapped access also need attention.
- A large banquet room occupies most of the first floor. That room has a movable partition that divides the room into two sections. First floor banquet room/meeting room floor space includes about 3,700 square feet of floor space with two large multi-facility restrooms available. A medium size kitchen is located behind the Banquet Room. The kitchen needs to be updated. A modest size meeting/game room and storage room are also located behind the Banquet Room. In the basement, the firemen have a meeting/entertainment room and lounge. Outside the parking lot is very generous for average use. However, during banquets, bingos, and major meetings when the 27 to 30 tables are surrounded by 150 to 200 people, the parking facilities are more fully utilized. The firemen decorate the easterly side-yard of this building during Christmas. That yard may have potential for development of a small park area for adults and/or children.

East Bangor Police Department Building



The East Bangor Police Station Building is located on Central Avenue about one block to the West of the Municipal Building Fire Hall Building. The Police station is a small brick building that was, until recently, attached to a very old, dilapidated building. The Borough demolished the substandard building leaving a larger side yard and better access to the rear yard. This parcel of land is sloping to the West, fronts on busy State Traffic Route 512, and has little off-street parking. There is however, a

small, municipal off-street parking lot across the street for police department visitors to park. The lot is not paved, nor lighted, but it is convenient except for the heavy 512 traffic. Since the building is old, it requires special care and attention. On the exterior, there is an opportunity to landscape the police station building and the off-street parking lot across the street. In addition, coordinated, quality designed and installed identification signs would facilitate finding this important public service. The quality of the landscaping and sign would also compliment the town image as a small town with pride in itself.

East Bangor Public Works and Garage Building



The East Bangor Public Works and Garage Building is located on Central Avenue nearly one block to the West of the Police Station. This property is larger than the police station property, but it is somewhat small for its current use. It contains a four bay garage with another partially covered truck port in the rear where salt is stored. The inside of the garage building is tightly packed with trucks and other

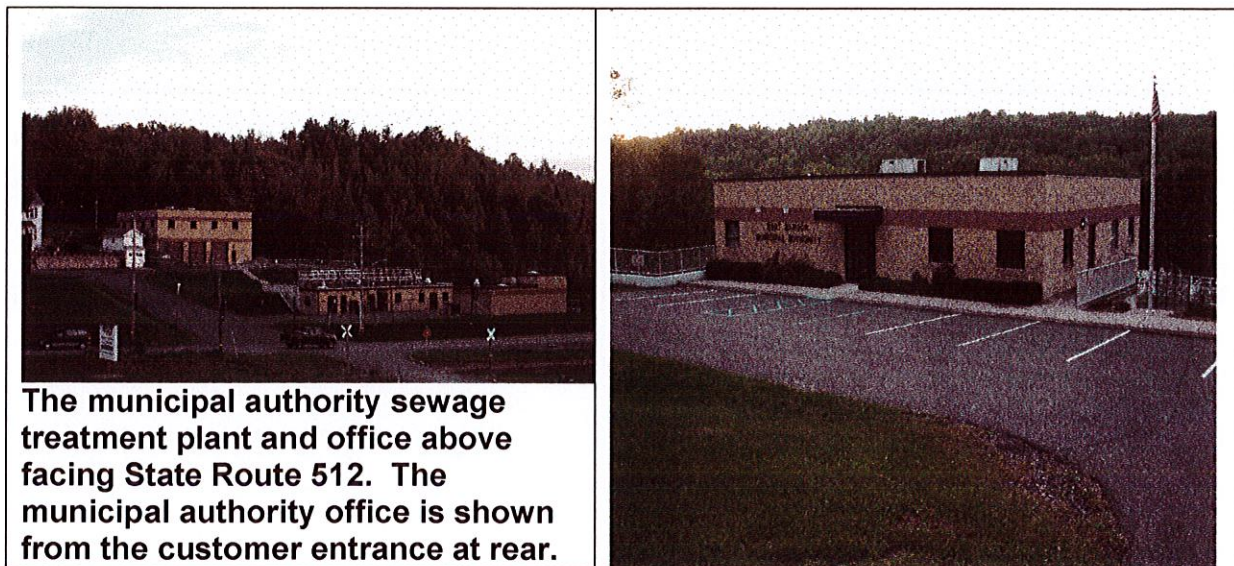
Borough equipment. Little room is available to repair equipment. There have been problems with storm water runoff particularly in the rear of the building and encroaching into the building on occasion. A better road salt storage facility is needed. Although the Borough equipment meets current needs, a five to seven year replacement plan needs to be considered. The current major equipment on hand includes the list on the next page.

East Bangor Major Public Works Department Equipment Inventory –

- 1991 Ford F-700, ten ton dump truck. It is four wheel drive, has about 16,000 miles on the odometer and it has a good repair record. It engine, transmission and brakes are currently good.
- 1993 Ford F350 Van. This vehicle has nearly 115,000 miles on its odometer. It appears to be in good running order.
- 1993 Ford F-800 Single Axel Dump Truck. This vehicle has 19,000 on its odometer and is in fairly good condition.
- 1996 Dodge Ram 2500 vs. This vehicle has nearly 45,000 on its odometer and appears to be in good condition.
- 1999 Ford F-350 Super Duty Diesel. This is a four wheel drive one ton dump truck. It has nearly 14, 000 miles on its odometer and appears to be in good condition.
- 1999 John Deer 310E Back-hoe. This vehicle is in good condition and has nearly 1,400 hours on its clock.
- 1999 John Deer 770 Lawn Mower. This mower is in good condition and has about 450 hours on its clock.
- 1996 Ford Crown Victoria Police Car. This still runs and is a back up vehicle.
- 2000 Chevy Impala Police Car. This is the main police car. It currently runs well.

Within two to five years, the Borough needs to deal with the salt storage and fuel storage conditions. The Public works garage bathroom/shower –cleanup facilities needs should also be considered. The location for the public works facility along the main street in the Borough should also be reconsidered. A more spacious, more remote location for the garage and outdoor storage facilities could be considered.

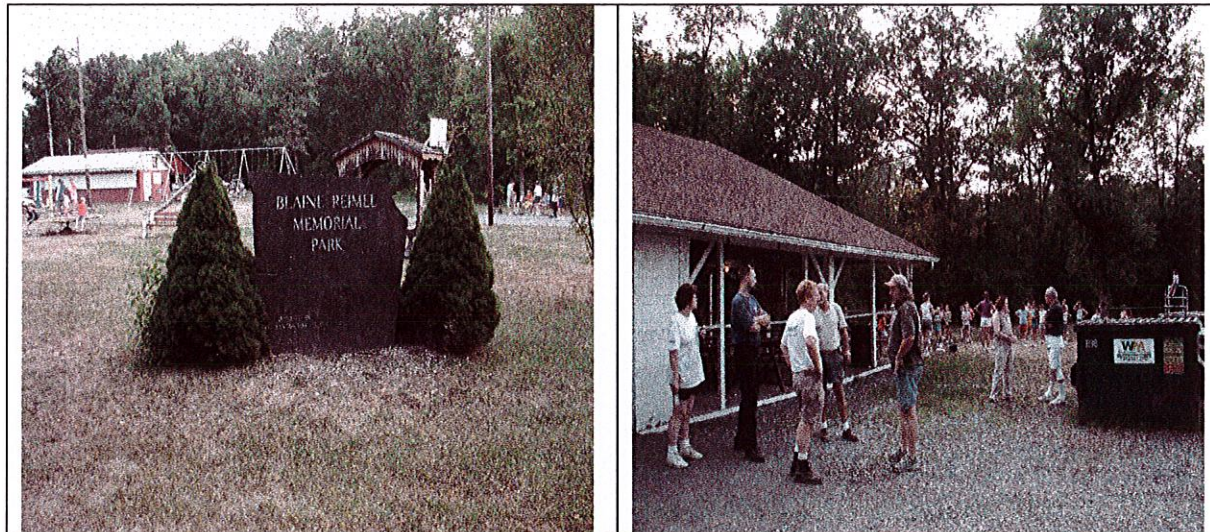
East Bangor Municipal Authority Sewage Treatment Plant and Office



The municipal authority sewage treatment plant and office above facing State Route 512. The municipal authority office is shown from the customer entrance at rear.

The municipal authority is a separate entity from the East Bangor Borough Council. However, both are part of the same family providing municipal services to the Borough residents, facilities, and businesses. The municipal authority provides both water and sewerage service to the Borough. Both systems appear to be in good shape and are well within their capacity for delivering services. However, a significant percentage of the citizens who responded to the Citizen Survey did indicate a need for improving some aspect of the water and sewer service.

Blaine Reimel Memorial Park



This is a Borough-wide park located in the Northwestern part of the Borough. It encompasses nearly 25 acres of land including forest natural areas and active recreation area. The active areas include three fields for baseball, football, and soccer. It also includes two pavilions that serve as an important facility for family gatherings. There is a play apparatus area for younger children and a basketball court for older children. Off-street parking appears to be adequate but is not paved. Handicapped access is somewhat accommodated. Restroom facilities and water service are available at the park as is night lighting for security purposes.

Citizens Attitude Survey, Borough of East Bangor, PA

In May of 2001 the Borough of East Bangor Planning Commission conducted a survey of the citizens of East Bangor, Pa. 453 surveys were sent to residents asking opinions of the towns public facilities, regulation of land use in residential areas and public areas, the importance of land uses to the community, the importance of uses of buildings in residential areas, what to do with older buildings, how to ensure the overall quality of life in the community, and the citizens concerns regarding the future of East Bangor. 28 surveys were returned undelivered, 425 surveys were delivered, and 91 surveys were completed and returned. 21% of the Citizens of East Bangor responded.

Citizens were asked to **rate the public facilities and services** in the borough of East Bangor on a scale of 1 – 4. (1 being excellent and 4 being non-existent) The

following items received a satisfactory to excellent rating- snow plowing, garbage disposal, sewer, recycling opportunities, parking, and street lighting. Also receiving a satisfactory to excellent rating were fire protection, phone service, cable service, park conditions, storm drains and water supply and quality. Citizens were most concerned about leaf pick-up with 74% rating this service as poor and environmental preservation with 62% rating this service poor. Services for senior citizens were also a great concern with 68% of citizens rating this service as poor. 22% of citizens also felt traffic control was poor, 23% thought recreational facilities were poor, and flood control of both roads and properties was a concern with 24% and 41% respectively rating this service as poor. It seems as though the citizens of East Bangor feel secure with the services that make their life safe but are concerned with the environmental aspects of living in East Bangor.

When the citizens of East Bangor were asked, "**Is it necessary to take steps to regulate types of land uses permitted in the community?**" there was a resounding **YES!** Of the 91 completed and returned surveys 86 of those residents felt strongly that land use should be regulated. This represents 92% of the total responses.

The following are the **top ten areas of land use regulations** the citizens of East Bangor felt most important. The most important land use regulation according to the responders is creating standards for maximum noise levels. Creating standards for the location and operation of mobile home parks, restricting ADULT type businesses and restricting hours of operation for certain businesses and construction activities were also important. Responders wanted to see standards for quarry operation and reclamation for industrial and open space and to define certain portions of the community as residential only and/or commercial only. Defining separate industrial and quarry areas, creating standard for lighting intensity, separation between Businesses and Residences, and the type and size of signs were also among the important land use regulations to responders.

The citizens were also asked, "**Which land uses should be allowed in residential areas?**" The following are the top ten areas of land use which the citizens of East Bangor would allow in residential areas; Single Family Homes, Churches, Small Offices in Homes, Beauty Salons and Barbers, Grocery or Convenience Markets, Home Based Businesses, Schools, Real Estate or Insurance Offices, Medical and Dental Offices, Apartments. It is apparent from these two lists that the people of East Bangor would like to see a divide between busy, noisy industrial/business areas and quiet residential areas.

The planning commission also asked, "**What should not be permitted during the conversion of homes**" in East Bangor? 34% of responders do not think those homes should be converted into Rooming or Boarding Houses and 24% do not think the homes should be converted into Convalescent or Nursing Homes. 22% of responders feel converting homes into apartments is not a good land use and 12% feel those homes should not be converted into offices.

Residents were also asked, "**Which should not be permitted as business use buildings in residential areas?**" Manufacturing/Industrial plants received 22% of the responses, automotive repair and mobile homes received 20% and restaurants received 10%.

Given the historic background of East Bangor, residents were asked, "**If the borough should take measures to protect buildings of historical value and in which way those buildings should be protected?**" 83% of responders agreed historic buildings should be protected. In which way should these buildings be protected was divided. 56% of the responders thought regulations that restrict the type and extent of renovation and/or alteration on the building would be appropriate. 25% thought a special

"zone" or district with regulations that specifically protect these buildings would be a good land use and 19% thought identification of the historic structures would be suitable but place no restrictions on additions or alterations.

Quality of life is important to all. East Bangor residents were asked, "**Which measures should the borough enact to ensure preservation of the overall quality of life in their community?**" 16% of the responses received felt land use regulations such as "ZONING" to restrict unwanted uses was most important. Assistance to homeowners in paying for property improvements such as low interest loans was important to 13% of the responders. Plans for regulation and reuse of quarry sites was important to 13% of the responders, and policy documents, such as a community plan that identifies community needs and implementation measures to achieve community goals was important to 13% of the responders.

Finally the residents were asked to "**rank their greatest concerns regarding the future of East Bangor**". Below are the top 15 concerns;

1. Better maintenance of properties by landowners, stop allowing junk
2. More Police coverage and more support for the Fire Co.
3. Better water quality/pressure
4. Control taxes to accommodate fixed incomes
5. Better controlled traffic, especially on route 512
6. We need zoning to control issues
7. Lack of interest in township by citizens
8. Keep small town atmosphere
9. Parking issues (lack of space, commercial vehicle parked on streets)
10. No recreation area for kids - upgrade park
11. No more apartments
12. Better street/road maintenance
13. Try to attract new businesses into town
14. Noise control
15. We need to plan for the future

The responders of this survey were very exact in what land use regulations they wanted or felt were necessary. They are residents of a small town who would like to see the small town atmosphere stay the same. They would like to preserve their history by protecting old buildings and keeping the residence areas zoned strictly residential and the industrial or business area zoned business. The noise level of business and in residential areas was also a concern. More opportunities could be made available for the aging community as well as the younger community. Senior Services and parks should be part of a revitalization plan. Responders seem secure and safe trusting in the fire department and police department but see improvements are necessary with environmental concerns i.e. flood control and leaf pick up. The responders also feel more residents should become involved in their community. The responses to this survey support that sentiment.

INFRASTRUCTURE SURVEY AND ANALYSIS

Street and Sidewalk assessment of East Bangor Borough Streets took place on October 12, 2002 at 9 a.m. with Wendy Gilbert, Chairperson of Street Committee for the Borough and Victor Rodite, Borough Planning Advisor.

Items taken into consideration were Road, Sidewalk, and Street Sign conditions.

Street - Cleveland Avenue (width 27'7")

- Street Condition – Good, just repaved during 2001. Bushes that were behind the fence along Park road are now blocking the view of traffic coming from the right since the fence has been moved back.
- Sidewalks – None
- Street Signs – A No Parking and Watch Children sign down by the Borough Park need to be put straight. Also the streetlight near these signs is out. Cannot see the street sign at corner of Park Avenue and Cleveland. It is the same height as the Stop sign and positioned behind it so that it cannot be seen easily from Cleveland.

Street – Werner

- Street condition – Fair
- Sidewalks – None
- Street Signs – No problems sighted

Street – Maple

- Street Condition – Fair
- Sidewalks – None
- Street Signs – No problems sighted

Street – South Broad (width 27'7")

- Street Condition – Fair to Poor from Borough line to Dewey Ave. Good from Dewey to Central Avenue
- Sidewalks – Space on west side of street from Borough line to just above Dewey Avenue. Walks on east side of street good. Walks from Dewey Avenue to Central Avenue are uneven and unsafe especially in front of 28 South Broad Street.
- Street Signs – No problems sighted

Street – South High (width 27'9")

- Street Condition – Fair
- Sidewalks – uneven from Central to Cleveland on west side. Fair from Central to Cleveland on east side. Sidewalks only at property on southwest corner of Cleveland and South High are fair. No sidewalks on east side from Cleveland to Pattison.
- Street Signs – No problem sighted.

Street – Dewey (width 16'6")

- Street Condition – Narrow but fair. Good west of Sampson check drainage at Sampson
- Sidewalks – None
- Street Signs – No problem sighted

Street – Shafter

- Street Condition – Fair
- Sidewalks – None
- Street Signs – No problem sighted

Street – **Sampson** (width 27'9" between Blaine and Central, rest of road is narrow)

- Street Conditions – Poor, parking could be issue from Dewey to Blaine
- Sidewalks – None
- Street Signs – No problems sighted

Street – **Blaine** (width 27'10")

- Street Condition – Fair
- Sidewalks – Need repairs in many areas
- Street Signs – No street sign at Blaine and Messinger

Street- **Maiden** (width 17'7")

- Street Condition – Fair
- Sidewalks – Need repairs in many areas
- Street Signs – No problems sighted

Street – **Gum**

- Street Condition – Good, check storm drain at Gum and Blaine
- Sidewalks – Need repairs
- Street Signs – No problems sighted

Street – **Messinger** (width 27'6")

- Street Condition – Fair
- Sidewalks – Need Repairs
- Street Signs – No street sign at Blaine and Messinger

Street – **West Central** (width 15'6")

- Street Condition – Fair
- Sidewalks – No problems sighted
- Street signs – No problems sighted

Street – **Stewart** (width 27'9")

- Street Condition – Fair to Poor
- Sidewalks – Need repairs
- Street Signs – A No Parking sign rusted and needs to be straightened

Street – **Weidman** (width 16'6")

- Street Condition – Good. Water running across street bend from a white PVC pipe buried in ground on right (if coming from central)
- Sidewalks – None
- Street signs – No problems sighted

Street – **Railroad** (width 16')

- Street Condition – Fair, standing water behind Swain Residence almost on corner of Railroad and Gladstone
- Sidewalks – No problem sighted

- Street signs – No problems sighted

Street – North Broad

- Street Condition – Fair
- Sidewalks - No problems sighted
- Street signs – No problems sighted

Street – Gladstone (width 18')

- Street Condition – Fair
- Sidewalks – No problems sighted
- Street Signs – No problems sighted

Street – Hazen (width 28')

- Street Condition – Fair
- Sidewalks – No problems sighted
- Street Signs – No problems sighted

Street – Chestnut (width 20')

- Street Condition – Fair
- Sidewalks – None
- Street Signs – No problems sighted

Street – Harvard

- Street Condition – Unimproved, stones and other debris running onto Hazen
- Sidewalks – None
- Street Signs – No problems sighted

Street – Bray (width 27'3")

- Street Condition - Fair
- Sidewalks – Low curbing and in need of repairs
- Street Signs – No problems sighted

Street – North High (width 27'9")

- Street Condition – Fair
- Sidewalks – Low curbing
- Street Signs – No problems sighted

Street – New (width 19')

- Street Condition – Fair to Poor
- Sidewalks – None
- Street Signs – No problems sighted

Street – Long (width 21')

- Street Condition – Good to Fair
- Sidewalks – Poor on west side
- Street Signs – No problems sighted

Summary: 70 –75% of Borough streets are in Fair to Poor condition mainly due to the settling of the road repairs after the sewer lines were installed. Should look at repaving most of these streets within the next 3-7 years. Possible funding for repaving can be

sought through a state grant (but this does not cover dead end streets unless they have an approved turnabout, liquid fuel tax monies, Community Development Block Grant from the County or a Capital improvement fund, if we have one.)

Table #1

Total Population Trends 1990 to 2000			
Municipalities in Northampton County, PA			
Municipality	1990	2000	% Change
United States	248,709,873	281,421,906	13.15%
State of Pennsylvania	11,881,643	12,281,064	3.36%
Lehigh Valley, PA	538,235	579,156	7.60%
Borough of East Bangor	1,006	979	-2.68%
Bethlehem City(part)*	71,427	71,329	-0.14%
Easton City	26,276	26,263	-0.05%
Bangor	5,383	5,319	-1.19%
Bath Borough	2,358	2,678	13.57%
Chapman Borough	254	234	-7.87%
East Bangor Borough	1,006	979	-2.68%
Freemansburg Borough	1,946	1,897	-2.52%
Glendon Borough	391	367	-6.14%
Hellertown Borough	5,662	5,606	-0.99%
Nazareth Borough	5,713	6,023	5.43%
North Catasauqua Borough	2,867	2,814	-1.85%
Northampton Borough	8,717	9,405	7.89%
Pen Argyl Borough	3,492	3,615	3.52%
Portland Borough	516	579	12.21%
Roseto Borough	1,555	1,653	6.30%
Stockertown Borough	641	687	7.18%
Tatamy Borough	873	930	6.53%
Walnutport Borough	2,055	2,043	-0.58%
West Easton Borough	1,161	1,152	-0.78%
Wilson Borough	7,830	7,682	-1.89%
Wind Gap Borough	2,741	2,812	2.59%
Subtotal all Boroughs	55,161	56,475	2.38%
Allen Township	2,626	2,630	0.15%
Bethlehem Township	16,425	21,171	28.89%
Bushkill Township	5,512	6,982	26.67%
East Allen Township	4,572	4,903	7.24%
Forks Township	5,923	8,419	42.14%
Hanover Township	7,176	9,563	33.26%
Lehigh Township	9,296	9,728	4.65%
Lower Mount Bethel Twsp.	3,187	3,228	1.29%
Lower Nazareth Township	4,483	5,259	17.31%
Lower Saucon Township	8,448	9,884	17.00%
Moore Township	8,418	8,673	3.03%
Palmer Township	14,965	16,809	12.32%
Upper Mount Bethel Twsp.	5,476	6,063	10.72%
Upper Nazareth Township	3,413	4,426	29.68%
Washington Township	3,759	4,152	10.45%
Williams Township	3,982	4,470	12.26%
Subtotal all Townships	107,661	126,360	17.37%
Northampton County Total	247,105	267,066	8.08%

Source & note: U.S. Census Bureau; * Bethlehem City is in two counties.

Potential Planning Issues:

1. The above subtotal increase for all Boroughs in Northampton County is a net of only 1,314 person increase during the last decade as compared to a of 18, 699 person increase during the decade for the County's Townships.

Source: U.S. Census Bureau, projections by Lehigh Valley

Planning Commission, calculations

by Victor M. J. Rodite, AICP, Community Planner

Table #2

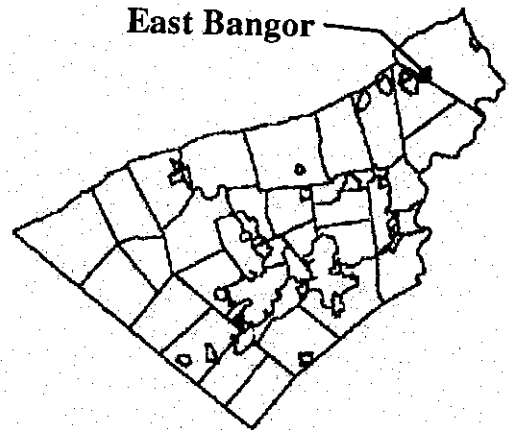
Population Trends and Forecasts			
Borough of East Bangor & County of Northampton			
	East Bangor Borough	Northampton County	Borough as % of County
1960	970	201,412	0.48%
1970	905	214,368	0.42%
1980	955	225,418	0.42%
1990	1,006	247,105	0.41%
2000	979	267,066	0.37%
<i>Note: Preliminary forecast range prepared for Borough only. Forecast will be refined as we progress through the planning process</i>			
2010 low	960	290,919	0.33%
medium	1041	290,919	0.35%
2010 high	1010		
2020 low	916	316,052	0.29%
medium	1,081	316,052	0.33%
2020 high	1,045		
2025 low	893		
medium	1,092		
2025 high	1,276		
2030 low	870	341,518	0.25%
medium	1,103	341,518	0.44%
2030 high	1,500		

Source: U.S. Census Bureau, projections by Lehigh Valley Planning Commission, calculations and preliminary forecast by Victor M. J. Rodite, AICP, Community Planner

Table #3 - East Bangor

County: Northampton
 Type of Municipality: Borough
 School District: Bangor Area

Municipal Address:
 204 Bray Street
 East Bangor, Pennsylvania 18013
 Telephone: (610) 588-4656



Land Use 2000 (in acres)		
Residential	103.4	(22.7%)
Commercial	2.6	(0.6%)
Industrial	83.8	(18.5%)
Wholesale & Warehousing	—	—
Transp., Comm. & Utilities	79.8	(17.6%)
Public & Quasi-Public	2.9	(0.6%)
Parks & Recreation	25.0	(5.5%)
Agriculture & Vacant	156.5	(34.5%)
Total Acres	454.0	(100.0%)

Area: 0.71 sq. mi.

Population Density 2000: 1,379 /sq. mi.

Assessed Value of Taxable Real Estate		
1991	\$14,395,600	
2002	\$14,465,000	
Change	\$69,400	(0.5%)

Real Estate Tax Millage Rates 2002		
Municipal	8.50	
School District	35.60	
County	6.30	
Total	50.40	

Population		
1960 census	970	
1970 census	905	
1980 census	955	
1990 census	1,006	
2000 census	979	

Housing Characteristics 2000		
Total households	387	
Persons per household	2.53	
Total housing units	417	
Occupied housing units	387	(100.0%)
Owner occupied	279	(72.1%)
Renter occupied	108	(27.9%)
Vacant housing units	30	
Median value-owner occupied (2000)	\$90,600	
Median monthly contract rent (2000)	\$592	

New Housing Construction (No. of units)		
1991 - 3	1996 - 3	
1992 - 3	1997 - 0	
1993 - 0	1998 - 1	
1994 - 0	1999 - 3	
1995 - 1	2000 - 0	

Sex Data 2000		
Male	484	(49.4%)
Female	495	(50.6%)

Age Data 2000		
Median age	36.1	
Under 18 years	243	(24.8%)
65 years and over	128	(13.1%)

Income & Poverty Status 1999		
Median household income	\$36,429	
Median family income	\$42,386	
Per capita income	\$20,056	
Persons below poverty level	103	(10.6%)

Selected Race & Hispanic Origin Characteristics 2000		
White	969	(99.0%)
Black or African American	2	(0.2%)
American Indian, Alaska Native	1	(0.1%)
Asian	0	(0.0%)
All Others	7	(0.7%)
Hispanic or Latino (origin any race)	5	(0.5%)

Educational Attainment 2000 (persons 25 years and over)		
No high school degree	166	(25.5%)
High school graduate only	309	(47.5%)
Some college/associate degree	129	(19.8%)
Bachelor's or graduate degree	47	(7.2%)
High school degree or higher	74.5%	

Ancestry 2000 (top 5 listed)		
Total reported	1,161	(100.0%)
German	248	(21.4%)
English	153	(13.2%)
Italian	146	(12.6%)
Irish	134	(11.5%)
US/American	75	(6.5%)

Place of Work 2000 (workers 16 years & over)		
Worked in East Bangor		(6.0%)
Worked outside East Bangor		(94.0%)

Occupation 2000 (employed persons 16 years & over)		
Management, professional	81	(16.6%)
Service occupations	70	(14.4%)
Sales & office	116	(23.8%)
Farming, fishing & forestry	5	(1.0%)
Construction, extraction, maint.	68	(13.9%)
Production, trans., mat. moving	148	(30.3%)
Total employed	488	(100.0%)

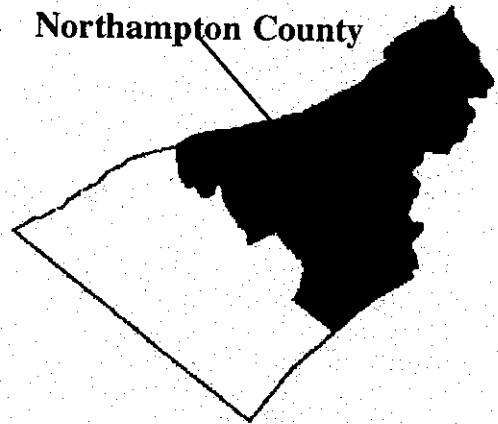
Table #4

Natural Population Increase (1990 - 2000) Borough of East Bangor, PA

Year	Births	Deaths	Increase
1990	9	9	0
1991	15	8	7
1992	5	4	1
1993	7	8	-1
1994	5	11	-6
1995	17	9	8
1996	11	7	4
1997	7	13	-6
1998	5	5	0
1999	12	12	0
Subtotal	93	86	7
2000	10	8	2
2001*	9	13	-4

Source: Pennsylvania Department of Health Note: *Preliminary information

Table #5 Northampton County



Land Use 2000 (in acres)

Residential	58,672.4	(24.1%)
Commercial	3,432.0	(1.4%)
Industrial	6,933.5	(2.9%)
Wholesale & Warehousing	3,165.3	(1.3%)
Transp., Comm. & Utilities	17,078.8	(7.0%)
Public & Quasi-Public	3,608.8	(1.5%)
Parks & Recreation	16,534.2	(6.8%)
Agriculture & Vacant	133,618.8	(55.0%)
Total Acres	243,043.8	(100.0%)

Area: 379.8 sq. mi.

Population Density 2000: 703 / sq. mi.

Assessed Value of Taxable Real Estate

1991	\$5,499,151,200	
2002	\$6,286,839,100	
Change	\$787,687,900	(14.3%)

Population

1960 census	201,142
1970 census	214,545
1980 census	225,418
1990 census	247,105
2000 census	267,066
2010 forecast	290,919
2020 forecast	316,052
2030 forecast	341,518

Housing Characteristics 2000

Total households	101,541
Persons per household	2.53
Total housing units	106,710
Occupied housing units	101,541 (100.0%)
Owner occupied	74,464 (73.3%)
Renter occupied	27,077 (26.7%)
Vacant housing units	5,169
Median value-owner occupied (2000)	\$120,000
Median monthly contract rent (2000)	\$576

New Housing Construction (No. of units)

1991 - 1,332	1996 - 1,128
1992 - 1,064	1997 - 1,018
1993 - 983	1998 - 1,339
1994 - 1,115	1999 - 1,165
1995 - 1,181	2000 - 1,353

Sex Data 2000

Male	129,961	(48.7%)
Female	137,105	(51.3%)

Age Data 2000

Median age	38.5
Under 18 years	62,267 (23.3%)
65 years and over	42,030 (15.7%)

Income & Poverty Status 1999

Median household income	\$45,234
Median family income	\$53,955
Per capita income	\$21,399
Persons below poverty level	20,404 (7.9%)

Selected Race & Hispanic Origin Characteristics 2000

White	243,639	(91.1%)
Black or African American	7,400	(2.8%)
American Indian, Alaska Native	408	(0.2%)
Asian	3,657	(1.4%)
Other	11,962	(4.5%)
Hispanic or Latino (origin any race)	17,868	(6.7%)

Educational Attainment 2000 (persons 25 years and over)

No high school degree	34,730	(19.3%)
High school graduate only	65,750	(36.5%)
Some college/associate degree	41,440	(23.0%)
Bachelor's or graduate degree	38,098	(21.2%)
High school degree or higher		80.7%

Ancestry 2000 (top 5 listed)

Total reported	311,509	(100.0%)
German	74,315	(23.9%)
Italian	37,954	(12.2%)
Irish	33,957	(10.9%)
English	18,777	(6.0%)
Polish	14,429	(4.6%)

Place of Work 2000 (workers 16 years & over)

Worked in Northampton County	(54.5%)
Worked outside Northampton County	(45.5%)

Occupation 2000 (employed persons 16 years & over)

Management, professional	40,191	(31.4%)
Service occupations	17,939	(14.0%)
Sales & office	34,571	(27.1%)
Farming, fishing & forestry	297	(0.2%)
Construction, extraction, maint.	11,723	(9.2%)
Production, trans., mat. moving	23,089	(18.1%)
Total employed	127,810	(100.0%)

Table #6 - HOUSING UNIT OCCUPANCY STATUS East Bangor Borough Northampton County, Pennsylvania	
Total:	417
Occupied	387
Vacant	30

Source: U.S. Census Bureau Census 2000; Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

#7 - TENURE OF OCCUPIED HOUSING UNITS East Bangor Borough Northampton County, Pennsylvania	
Total:	387
Owner occupied	279
Renter occupied	108

Source: U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

#8 - VACANT HOUSING UNITS East Bangor Borough Northampton County, Pennsylvania	
Total:	30
For rent	11
For sale only	7
Rented or sold, not occupied	4
For seasonal, recreational, or occasional use	0
For migrant workers	0
Other vacant	8

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

#9 - RACE OF HOUSEHOLDER IN OCCUPIED HOUSING UNITS
East Bangor Borough
Northampton County, Pennsylvania

Total:	387
Householder who is White alone	382
Householder who is Black or African American alone	1
Householder who is American Indian and Alaska Native alone	0
Householder who is Asian alone	0
Householder who is Native Hawaiian and Other Pacific Islander alone	0
Householder who is Some other race alone	1
Householder who is Two or more races	3

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

#10 - HISPANIC OR LATINO HOUSEHOLDERS BY RACE OF HOUSEHOLDER OF OCCUPIED HOUSING UNITS
East Bangor Borough
Northampton County, Pennsylvania

Total:	387
Not Hispanic or Latino householder:	384
Householder who is White alone	380
Householder who is Black or African American alone	1
Householder who is American Indian and Alaska Native alone	0
Householder who is Asian alone	0
Householder who is Native Hawaiian and Other Pacific Islander alone	0
Householder who is Some other race alone	0
Householder who is Two or more races	3
Hispanic or Latino householder:	3
Householder who is White alone	2
Householder who is Black or African American alone	0
Householder who is American Indian and Alaska Native alone	0
Householder who is Asian alone	0
Householder who is Native Hawaiian and Other Pacific Islander alone	0
Householder who is Some other race alone	1
Householder who is Two or more races	0

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

**#11 - TOTAL RACES TALLIED FOR HOUSEHOLDERS
East Bangor Borough
Northampton County, Pennsylvania**

Total races tallied for householders:	390
White alone or in combination with one or more other races	385
Black or African American alone or in combination with one or more other races	1
American Indian and Alaska Native alone or in combination with one or more other races	1
Asian alone or in combination with one or more other races	0
Native Hawaiian and Other Pacific Islander alone or in combination with one or more other races	0
Some other race alone or in combination with one or more other races	3

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

**#12 - HISPANIC OR LATINO BY TOTAL RACES TALLIED FOR
HOUSEHOLDERS
East Bangor Borough
Northampton County, Pennsylvania**

Total races tallied for householders:	390
Total races tallied for Not Hispanic or Latino householders:	387
White alone or in combination with one or more other races	383
Black or African American alone or in combination with one or more other races	1
American Indian and Alaska Native alone or in combination with one or more other races	1
Asian alone or in combination with one or more other races	0
Native Hawaiian and Other Pacific Islander alone or in combination with one or more other races	0
Some other race alone or in combination with one or more other races	2
Total races tallied for Hispanic or Latino householders:	3
White alone or in combination with one or more other races	2
Black or African American alone or in combination with one or more other races	0
American Indian and Alaska Native alone or in combination with one or more other races	0
Asian alone or in combination with one or more other races	0
Native Hawaiian and Other Pacific Islander alone or in combination with one or more other races	0
Some other race alone or in combination with one or more other races	1

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

**#13 - TOTAL POPULATION IN OCCUPIED HOUSING UNITS
East Bangor Borough
Northampton County, Pennsylvania**

Total	979
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U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

**#14 - TOTAL POPULATION IN OCCUPIED HOUSING UNITS BY
TENURE
East Bangor Borough
Northampton County, Pennsylvania**

Total population in occupied housing units:	979
Owner occupied	714
Renter occupied	265

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 1 (SF 1) 100-Percent Data

**#15 - TENURE BY PLUMBING FACILITIES BY OCCUPANTS PER ROOM
East Bangor Borough, Pennsylvania**

	United States	East Bangor Borough, Pennsylvania
Total:	105,480,101	387
Owner occupied:	69,816,513	279
Complete plumbing facilities:	69,487,653	279
1.00 or less occupants per room	67,390,247	277
1.01 to 1.50 occupants per room	1,310,263	2
1.51 or more occupants per room	787,143	0
Lacking complete plumbing facilities:	328,860	0
1.00 or less occupants per room	282,531	0
1.01 to 1.50 occupants per room	18,240	0
1.51 or more occupants per room	28,089	0
Renter occupied:	35,663,588	108
Complete plumbing facilities:	35,321,462	108
1.00 or less occupants per room	31,493,423	105
1.01 to 1.50 occupants per room	1,828,685	3
1.51 or more occupants per room	1,999,354	0
Lacking complete plumbing facilities:	342,126	0
1.00 or less occupants per room	256,010	0
1.01 to 1.50 occupants per room	27,580	0
1.51 or more occupants per room	58,536	0

U.S. Census Bureau Census 2000 Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data Table H22

**#16 - MEDIAN NUMBER OF ROOMS BY TENURE
East Bangor Borough, Pennsylvania**

	United States	East Bangor Borough, Pennsylvania
Median number of rooms --		
Total	5.4	5.7
Owner occupied	6.1	6.0
Renter occupied	4.0	4.6

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H27

**#17 - UNITS IN STRUCTURE
East Bangor Borough, Pennsylvania**

	United States	East Bangor Borough, Pennsylvania
Total:	115,904,641	417
1, detached	69,865,957	244
1, attached	6,447,453	56
2	4,995,350	22
3 or 4	5,494,280	6
5 to 9	5,414,988	31
10 to 19	4,636,717	3
20 to 49	3,873,383	0
50 or more	6,134,675	0
Mobile home	8,779,228	55
Boat, RV, van, etc.	262,610	0

U.S. Census Bureau, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H30

**#18 - UNITS IN STRUCTURE FOR VACANT HOUSING UNITS
East Bangor Borough, Pennsylvania**

	United States	East Bangor Borough, Pennsylvania
Total:	10,424,540	30
1, detached	5,078,447	9
1, attached	539,649	12
2	528,821	3
3 or 4	588,926	1
5 to 9	594,446	5
10 to 19	519,792	0
20 to 49	416,364	0
50 or more	610,972	0
Mobile home	1,394,952	0
Boat, RV, van, etc.	152,171	0

U.S. Census Bureau Census 2000 Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H31

**#19 - TENURE BY UNITS IN STRUCTURE
East Bangor Borough, Pennsylvania**

	United States	East Bangor Borough, Pennsylvania
Total:	105,480,101	387
Owner occupied:	69,816,513	279
1, detached	56,255,657	207
1, attached	3,819,810	28
2	1,164,675	3
3 or 4	651,003	0
5 to 9	488,081	0
10 to 19	368,197	0
20 to 49	407,561	0
50 or more	725,672	0
Mobile home	5,850,241	41
Boat, RV, van, etc.	85,616	0
Renter occupied:	35,663,588	108
1, detached	8,531,853	28
1, attached	2,087,994	16
2	3,301,854	16
3 or 4	4,254,351	5
5 to 9	4,332,461	26
10 to 19	3,748,728	3
20 to 49	3,049,458	0
50 or more	4,798,031	0
Mobile home	1,534,035	14
Boat, RV, van, etc.	24,823	0

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H32

#20 - TOTAL POPULATION IN OCCUPIED HOUSING UNITS BY TENURE

East Bangor Borough, Pennsylvania

	United States		East Bangor Borough, Pennsylvania	
Total population in occupied housing units:	273,637,396		979	
Owner occupied:	189,306,341		758	
1, detached	156,950,920		561	
1, attached	9,222,006		68	
2	3,112,728		11	
3 or 4	1,502,794		0	
5 to 9	901,732		0	
10 to 19	642,602		0	
20 to 49	695,167		0	
50 or more	1,227,995		0	
Mobile home	14,897,231		118	
Boat, RV, van, etc.	153,166		0	
Renter occupied:	84,331,055		221	
1, detached	24,953,541		50	
1, attached	5,975,686		52	
2	7,874,688		27	
3 or 4	9,710,398		15	
5 to 9	9,306,033		37	
10 to 19	7,614,930		6	
20 to 49	6,042,604		0	
50 or more	8,827,691		0	
Mobile home	3,979,033		34	
Boat, RV, van, etc.	46,451		0	

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H33

#21 - YEAR STRUCTURE BUILT

East Bangor Borough, Pennsylvania

	United States		East Bangor Borough, Pennsylvania	
Total:	115,904,641	100.00%	417	100.00%
Built 1999 to March 2000	2,755,075	2.37%	4	.97%
Built 1995 to 1998	8,478,975	7.32%	13	3.12%
Built 1990 to 1994	8,467,008	7.31%	10	2.40%
Built 1980 to 1989	18,326,847	15.81%	31	7.43%
Built 1970 to 1979	21,438,863	18.50%	40	9.59%
Built 1960 to 1969	15,911,903	13.73%	30	7.19%
Built 1950 to 1959	14,710,149	12.69%	9	2.16%
Built 1940 to 1949	8,435,768	7.28%	41	9.83%
Built 1939 or earlier	17,380,053	15.00%	239	57.31%

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H34

**#22 - TENURE BY YEAR STRUCTURE BUILT
East Bangor Borough, Pennsylvania**

Total:	387	Percent of total
Owner occupied:	279	100.00%
Built 1999 to March 2000	4	1.43
Built 1995 to 1998	10	3.58
Built 1990 to 1994	0	0.00
Built 1980 to 1989	22	7.89
Built 1970 to 1979	34	12.19
Built 1960 to 1969	18	6.45
Built 1950 to 1959	2	.72
Built 1940 to 1949	29	10.39
Built 1939 or earlier	160	57.35
Renter occupied:	108	100.00%
Built 1999 to March 2000	0	0.00
Built 1995 to 1998	3	2.78
Built 1990 to 1994	10	9.26
Built 1980 to 1989	6	5.56
Built 1970 to 1979	6	5.56
Built 1960 to 1969	12	11.11
Built 1950 to 1959	7	6.48
Built 1940 to 1949	12	11.11
Built 1939 or earlier	52	48.15

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H36

**#23 - TENURE BY YEAR HOUSEHOLDER
MOVED INTO HOUSING UNIT
East Bangor Borough Pennsylvania**

Total:	387	Percent
Owner occupied:	279	100.00%
Moved in 1999 to March 2000	18	6.45
Moved in 1995 to 1998	49	17.56
Moved in 1990 to 1994	29	10.39
Moved in 1980 to 1989	85	30.47
Moved in 1970 to 1979	36	12.90
Moved in 1969 or earlier	62	22.22
Renter occupied:	108	100.00%
Moved in 1999 to March 2000	32	29.63
Moved in 1995 to 1998	46	42.59
Moved in 1990 to 1994	11	10.19
Moved in 1980 to 1989	6	5.56
Moved in 1970 to 1979	5	4.63
Moved in 1969 or earlier	8	7.41

U.S. Census Bureau Census 2000, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H38

#24 - TENURE BY VEHICLES AVAILABLE – OCCUPIED HOUSING UNITS

East Bangor Borough, Pennsylvania

Total:	387	PERCENT
Owner occupied:	279	100.00%
No vehicle available	13	4.66
1 vehicle available	79	28.32
2 vehicles available	117	41.94
3 vehicles available	52	18.64
4 vehicles available	10	3.58
5 or more vehicles available	8	2.87
Renter occupied:	108	100.00
No vehicle available	12	11.11
1 vehicle available	58	53.7
2 vehicles available	32	29.63
3 vehicles available	6	5.56
4 vehicles available	0	0
5 or more vehicles available	0	0

U.S. Census Bureau, Census 2000, Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H44

#25 - UNITS IN STRUCTURE BY GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999

East Bangor Borough, Pennsylvania

Total:	108
1, detached or attached:	44
Less than 20 percent	9
20 to 24 percent	7
25 to 29 percent	3
30 to 34 percent	2
35 percent or more	15
Not computed	8
2 to 4:	21
Less than 20 percent	11
20 to 24 percent	1
25 to 29 percent	2
30 to 34 percent	0
35 percent or more	7
Not computed	0
5 to 19:	29
Less than 20 percent	4
20 to 24 percent	6
25 to 29 percent	0
30 to 34 percent	5
35 percent or more	12
Not computed	2

20 to 49:	0
Less than 20 percent	0
20 to 24 percent	0
25 to 29 percent	0
30 to 34 percent	0
35 percent or more	0
Not computed	0
50 or more:	0
Less than 20 percent	0
20 to 24 percent	0
25 to 29 percent	0
30 to 34 percent	0
35 percent or more	0
Not computed	0
Mobile home:	14
Less than 20 percent	5
20 to 24 percent	2
25 to 29 percent	1
30 to 34 percent	0
35 percent or more	4
Not computed	2
Boat, RV, van, etc.:	0
Less than 20 percent	0
20 to 24 percent	0
25 to 29 percent	0
30 to 34 percent	0
35 percent or more	0
Not computed	0

U.S. Census Bureau Census 2000 , Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data H72

QUESTION 1:

PLEASE RATE THE ADEQUACY OF THE FOLLOWING PUBLIC FACILITIES AND SERVICES IN THE BOROUGH
(USE 1 FOR EXCELLENT, 2 FOR SATISFACTORY, 3 FOR POOR, 4 FOR NON-EXISTENT)

Selection	Number of answers for each value					Total Cumulative Score	Total Times Answered	AVG	Results (Based on Cumulative Score/ total times Answered)
	(1)	(2)	(3)	(4)	(0)				
Sewer	34	51	2	0	4	142	87	2	Satisfactory
Snow Plowing	41	37	10	0	3	145	88	2	Satisfactory
Garbage Disposal	30	53	2	1	5	146	86	2	Satisfactory
Recycling Opportunities	25	56	3	1	6	150	85	2	Satisfactory
Park Loc/Size	21	64	2	0	4	155	87	2	Satisfactory
Fire protection	31	43	10	2	5	155	86	2	Satisfactory
Phone Service	23	59	4	1	4	157	87	2	Satisfactory
Street Lighting	17	63	5	0	6	158	85	2	Satisfactory
Cable TV Service	16	62	7	0	6	121	85	2	Satisfactory
Park Conditions	20	49	16	1	5	170	86	2	Satisfactory
Strom Drains	12	60	11	0	8	165	82	2	Satisfactory
Water Supply	17	46	24	1	3	185	88	2	Satisfactory
Police Protection	7	58	19	3	4	192	87	2	Satisfactory
Sidewalks	9	51	25	1	5	190	86	2	Satisfactory
Water Quality	16	35	34	1	5	192	86	2	Satisfactory
Parking	7	47	25	3	9	188	82	2	Satisfactory
Traffic Control	8	47	17	12	7	201	84	2	Satisfactory
Rec. Facilities	9	41	22	10	9	197	82	2	Satisfactory
Flood Control (Properties)	6	46	8	15	16	182	75	2	Satisfactory
Street Pav/Repair	3	48	33	4	3	214	88	2	Satisfactory
Flood Control (Road)	5	50	8	12	16	177	75	2	Satisfactory
Environmental Presv	2	31	13	27	18	211	73	3	Poor
Leaf Pick Up	9	19	2	52	9	261	82	3	Poor
Service for Senior Citizens	2	15	23	35	16	241	75	3	Poor

QUESTION 2:

SHOULD THE BOROUGH OF EAST BANGOR TAKE STEPS NECESSARY TO REGULATE THE TYPES OF LAND USES THAT ARE PERMITTED IN THE COMMUNITY?

Selection	Total	Percentage
YES	76	92%
No	10	8%

Answered question	86
Did not answer question	5

QUESTION 3:

CHECK (X) THOSE AREAS OF LAND USE REGULATIONS WHICH YOU FEEL ARE IMPORTANT IN YOUR COMMUNITY:

Rank	Selection	Percent
1	Maximum noise level standards	9%
2	Standard for location and operation of mobile home parks	9%
3	Restriction of Adult type businesses	8%
4	Restricted hours of operation for certain businesses and construction activities	8%
5	Standards for quarry operation and reclamation for industrial and open space	7%
6	Defining certain portions of the community as residential only and/or commercial only	7%
7	Defining separate industrial and quarry areas	6%
8	Standard for lighting intensity	6%
9	Separation between Business and Residences	6%
10	Type and size of signs	6%
11	Minimum distance standards for businesses	6%
12	Minimum parking standards for businesses	5%
13	Minimum parking standards for homes	5%
14	Location of parking spaces located on private property	4%
15	Maximum building height	4%
16	Percentage of lot area covered by building	4%

QUESTION 4:

WHICH TYPE OF LAND USES DO YOU FEEL SHOULD BE ALLOWED IN RESIDENTIAL AREAS?
(CHECK (X) THOSE WHICH SHOULD BE PERMITTED)

Rank	Selection	Percent
1	Single Family Homes	11%
2	Churches	10%
3	Small Offices in Homes	9%
4	Beauty Salons and Barbers	8%
5	Grocery or Convenience markets	8%
6	Home Based Businesses	7%
7	Schools	7%
8	Real Estate or insurance Offices	7%
9	Medical and Dental Offices	7%
10	Apartments	6%
11	Restaurants	5%
12	Convalescent or Nursing Homes	4%
13	Automotive Repair	4%
14	Mobile Homes	3%
15	Rooming or Boarding Homes	3%
16	Other	0%

QUESTION 5A:

WHICH TYPE OF LAND USES SHOULD NOT BE PERMITTED IN RESIDENTIAL AREAS?
(CHECK (X) THOSE WHICH SHOULD NOT BE PERMITTED)
SHOULD NOT PERMIT COMVERSION OF HOMES TO:

Rank	Selection	Percent
1	Rooming or Boarding Houses	34%
2	Convalescent or Nursing Homes	24%
3	Apartments	22%
4	Offices	12%
5	Home Based Businesses	6%
6	Other	3%

QUESTION 5B:

**WHICH TYPE OF LAND USES SHOULD NOT BE PERMITTED IN RESIDENTIAL AREAS?
(CHECK (X) THOSE USES WHICH SHOULD NOT BE PERMITTED)
SHOULD NOT PERMIT BUSINESS USE BUILDINGS IN RESIDENTIAL AREAS FOR ONE OR MORE OF THE
FOLLOWING:**

Rank	Selection	Percent
1	Manufacturing / Industrial Plant	22%
2	Automotive Repair	20%
3	Mobile Homes	20%
4	Restaurants	10%
5	Grocery or Convenience markets	8%
6	Real Estate or Insurance offices	6%
7	Medical and Dental Offices	5%
8	Small Store like	5%
9	Beauty Salons and Barbers	4%
10	Other uses	0%

QUESTION 6:

EAST BANGOR CONTAINS SEVERAL OLDER BUILDINGS WHICH MAY BE OF HISTORICAL VALUE. SHOULD THE BOROUGH TAKE MEASURES TO PROTECT THESE BUILDINGS? (CHECK ONE) IF YES, WHICH METHOD OF PROTECTION WOULD YOU PREFER (CHECK (X) ONE)

NO	17%
YES	83%

If YES	Identification of the Historic Structures, but no Restrictions on additions or alterations	19%
	Regulations that restrict the type and extent of renovation and/ or alterations	56%
	A special "zone" or district with regulations that specifically protect these buildings	25%

QUESTION 7:

WHICH MEASURES SHOULD THE BOROUGH ENACT TO ENSURE PRESERVATION OF THE OVERALL QUALITY OF LIFE IN THE COMMUNITY? (CHECK (X) ALL THAT YOU FAVOR)

Rank	Selection	Percent
1	Land use regulations, such as "Zoning" to restrict unwanted uses	16%
2	Assistance to home owners in paying for property improvements such as Low interest Loans	13%
3	Plan for regulation and reuse of quarry sites	13%
4	Policy Documents, such as a community plan that identifies community needs and implementation measures to achieve community goals	13%
5	Assistance to business owners to retain and attract business such as Low interest loans	9%
6	Actively attempt to recruit businesses that create employment opportunities	9%
7	Assistance to home owners in paying for property improvements such as Matching Grants	9%
8	Identify additional Recreational lands	7%
9	Open space acquisition (in some cases permit recreation and tourism)	5%
10	Assistance to business owners to retain and attract business such as Matching Grants	5%
11	Other	1%

QUESTION 8:

LIST YOUR GREATEST CONCERNS REGARDING THE FUTURE OF EAST BANGOR:

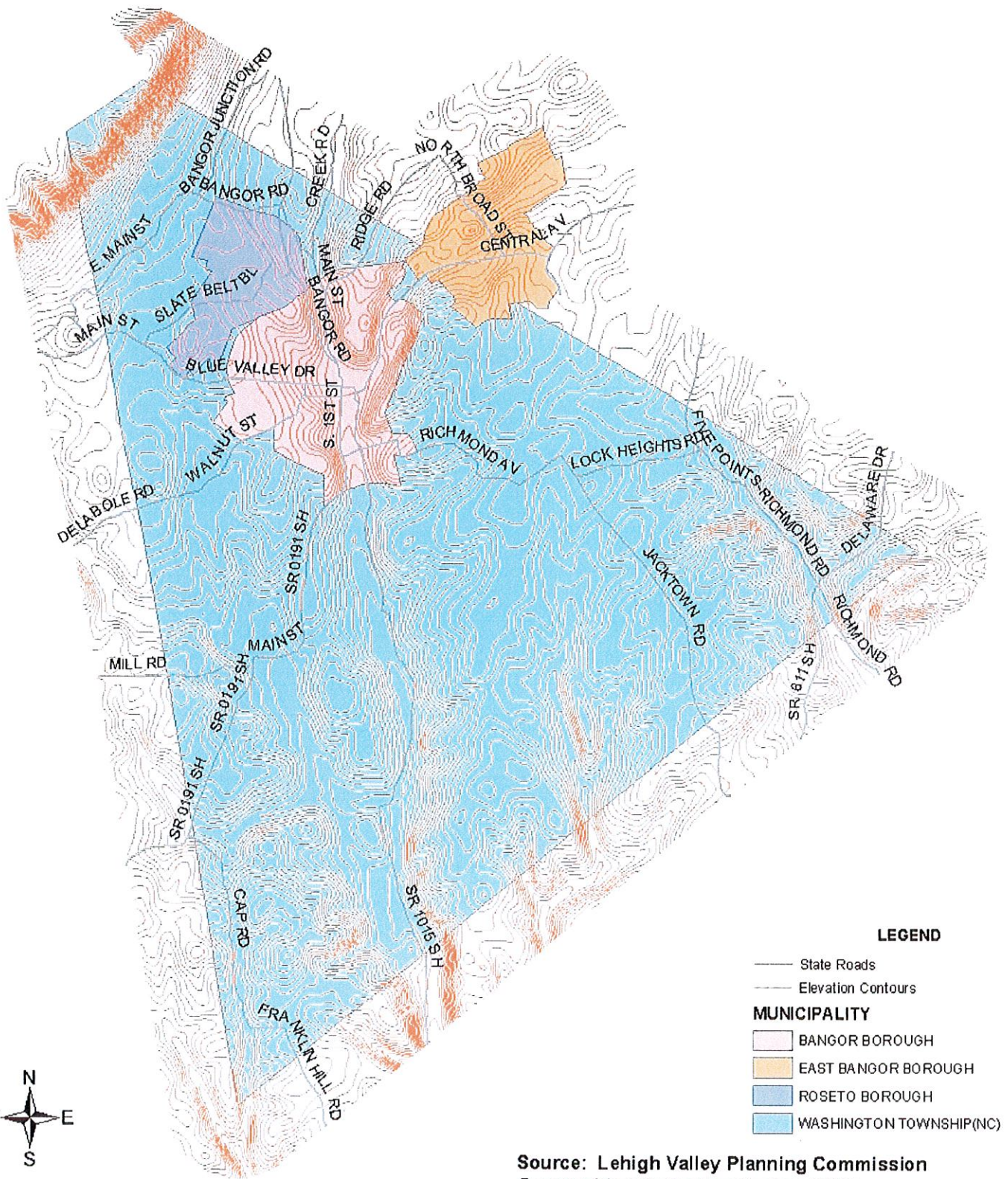
Rank	Concern	Percent
1	Better maintenance of propertied by Landowners, stop allowing JUNK	23%
2	More Police coverage and more support for the Fire Co.	14%
3	Better water quality / pressure	9%
4	Control Taxes to accommodate fixed incomes	5%
5	Better controlled traffic especially on route 512	5%
6	We need zoning to control issues	4%
7	Lack of interest in township by citizens	4%
8	Keep small town atmosphere	4%
9	parking issues (lack of space /Commercial vehicle parked on streets)	3%
10	No recreation area for kids / upgrade park	2%
11	No more apartments	2%
12	Better street / road maintenance	2%
13	Try to attract new businesses into town	2%
14	Noise Control	2%
15	No more mobile homes	2%
16	We need to plan for the future	2%
17	Monitor Land use regulations	2%
18	Improve municipal communications	2%
19	Zoning limits my rights	1%
20	Control leaf burning	1%
21	Control tax expenditures	1%
22	Control land sales to developers	1%
23	We are considered a suburb of Bangor, lets do something	1%
24	We must have better controlled businesses	1%
25	Wildlife preservation	1%
26	To many Auto businesses near homes	1%
27	Increase Senior Citizen Services	1%
28	Put a Trail around the old reservoir	1%
29	Guard against over population	1%
30	Lack of employment	1%
31	High taxes / low property values	1%
32	Work to make EB Dam a tourist attraction	1%
33	Council works for special interests	1%
34	We should conserve Wetlands	1%

BACKGROUND SECTION – B

NATURAL INVENTORY MAPS

Central Slate Belt Planning Region Natural Features

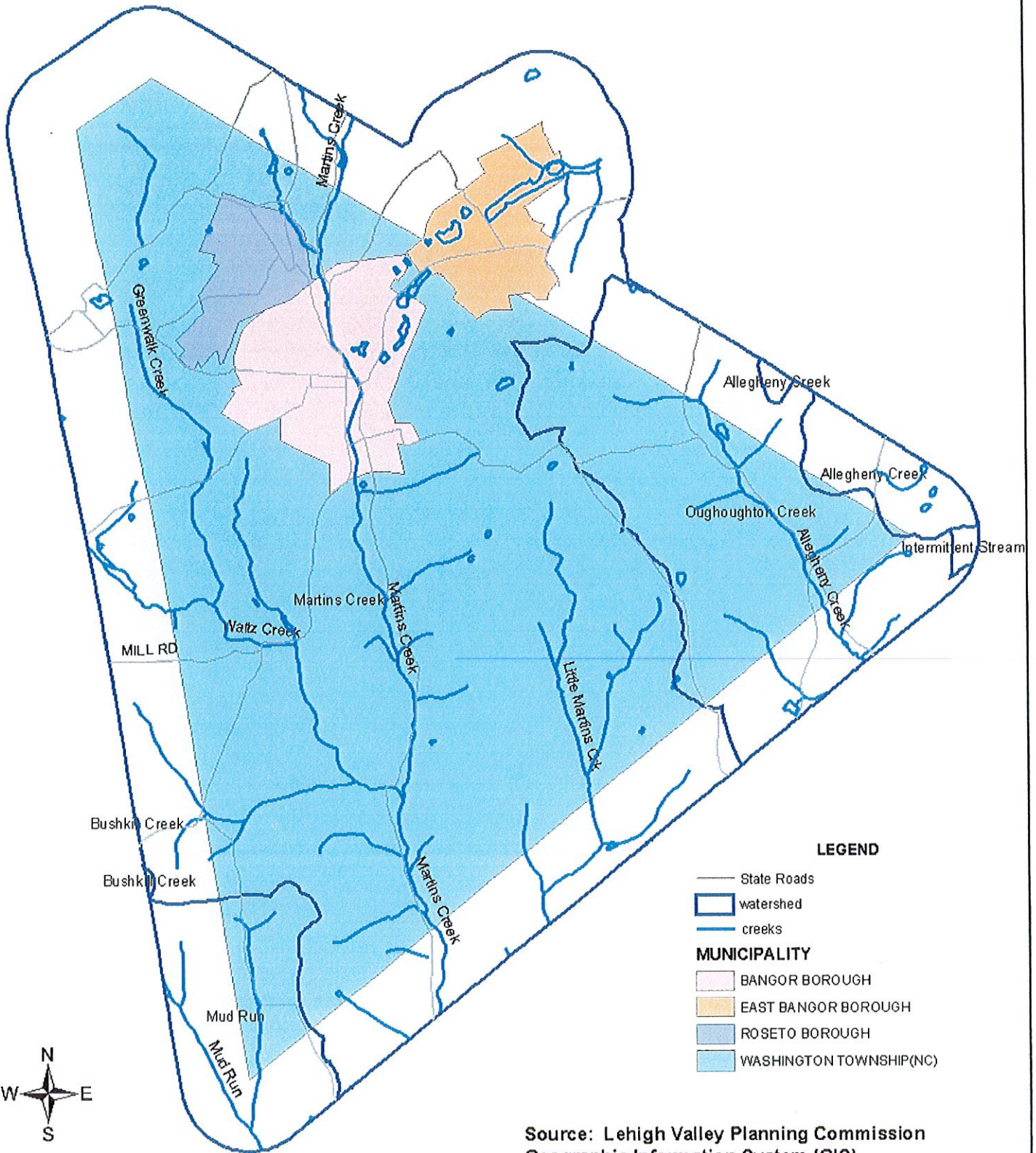
Elevation Contours



Source: Lehigh Valley Planning Commission
 Geographic Information System (GIS)
 Cartography by Sara Pandl, AICP
 Rodite & Pandl, LLC, Community Planners
 September, 2003

Central Slate Belt Planning Region Natural Features

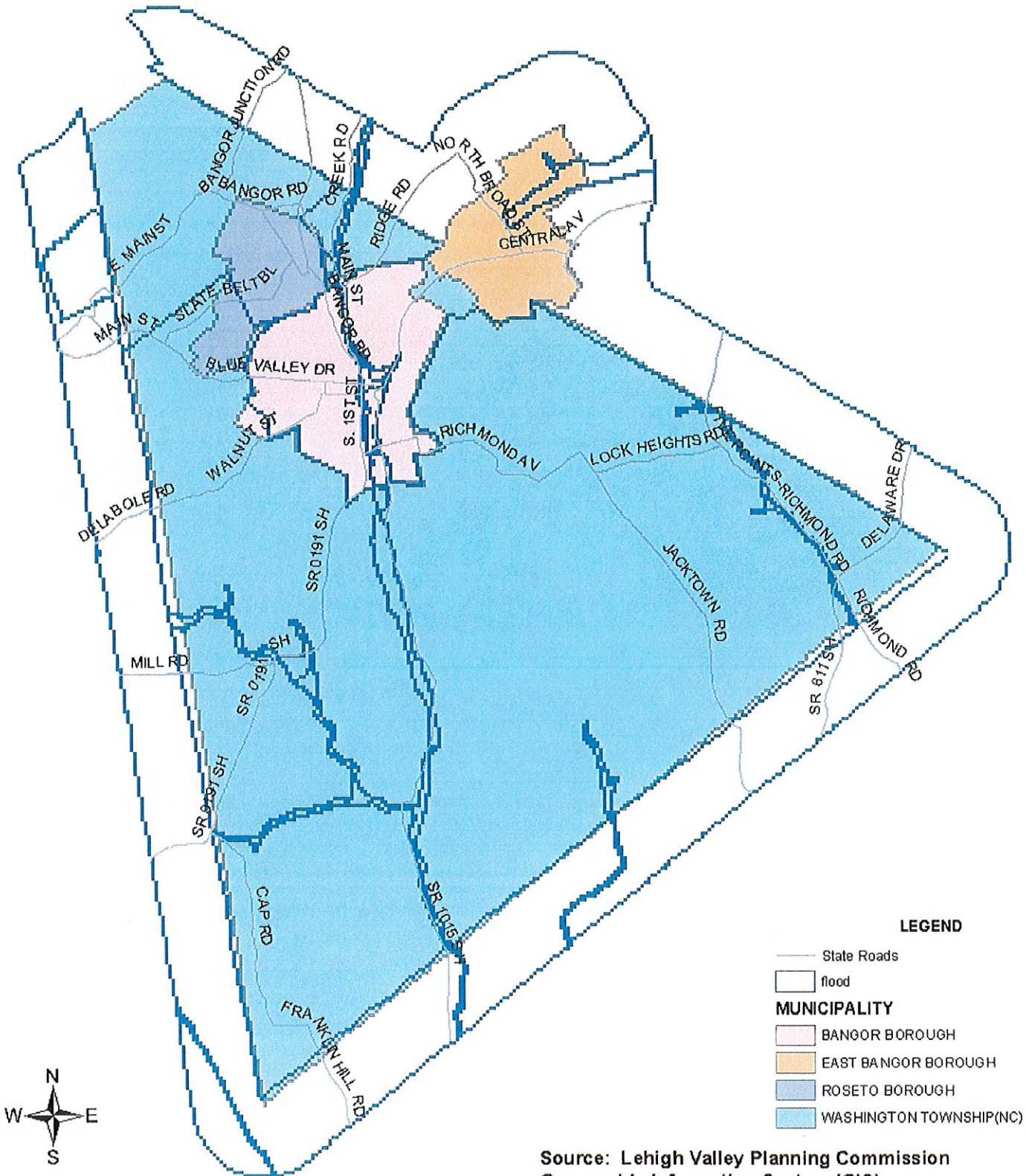
Creeks and Watershed Areas



Source: Lehigh Valley Planning Commission
Geographic Information System (GIS)
Cartography by Sara Pandl, AICP
Rodite & Pandl, LLC, Community Planners
September, 2003

Central Slate Belt Planning Region Natural Features

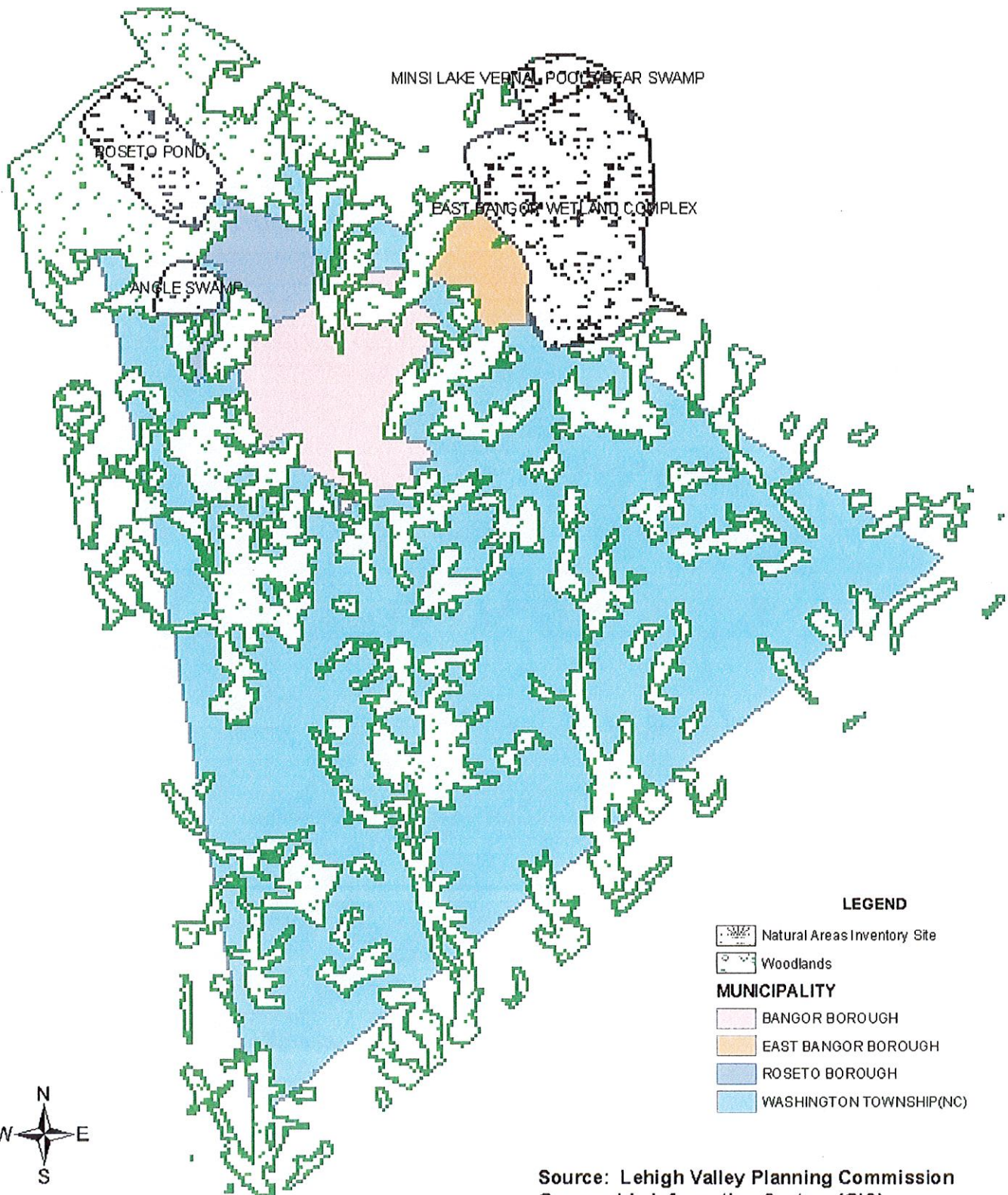
Flood Plains









Source: Lehigh Valley Planning Commission
Geographic Information System (GIS)
Cartography by Sara Pandl, AICP
Rodite & Pandl, LLC, Community Planners
September, 2003

Central Slate Belt Planning Region Natural Features

Wooded Areas and Natural Inventory Sites



LEGEND

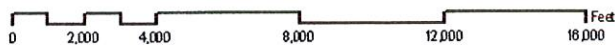
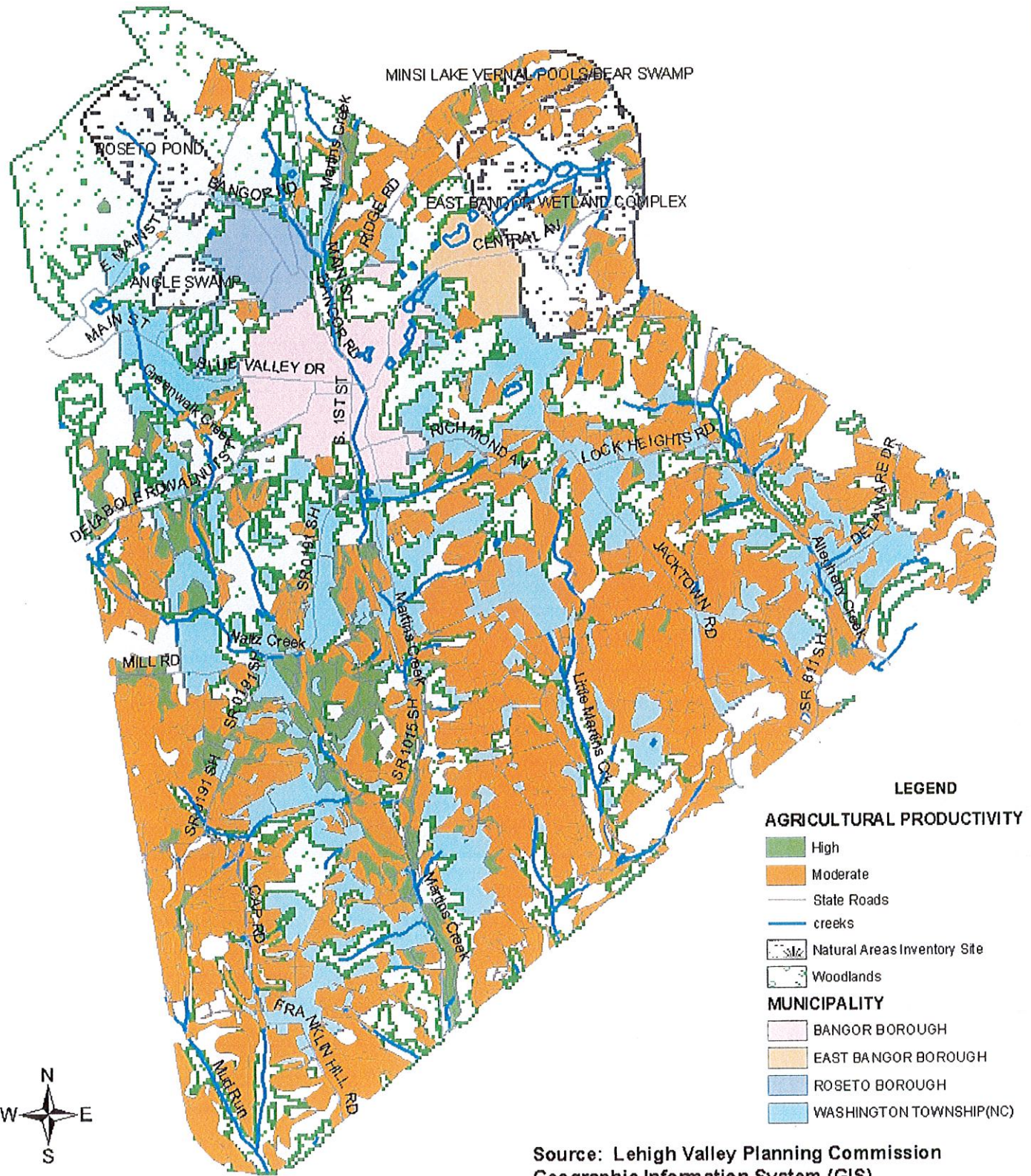
-  Natural Areas Inventory Site
-  Woodlands
- MUNICIPALITY**
-  BANGOR BOROUGH
-  EAST BANGOR BOROUGH
-  ROSETO BOROUGH
-  WASHINGTON TOWNSHIP (NC)



Source: Lehigh Valley Planning Commission
 Geographic Information System (GIS)
 Cartography by Sara Pandl, AICP
 Rodite & Pandl, LLC, Community Planners
 September, 2003

Central Slate Belt Planning Region Natural Features

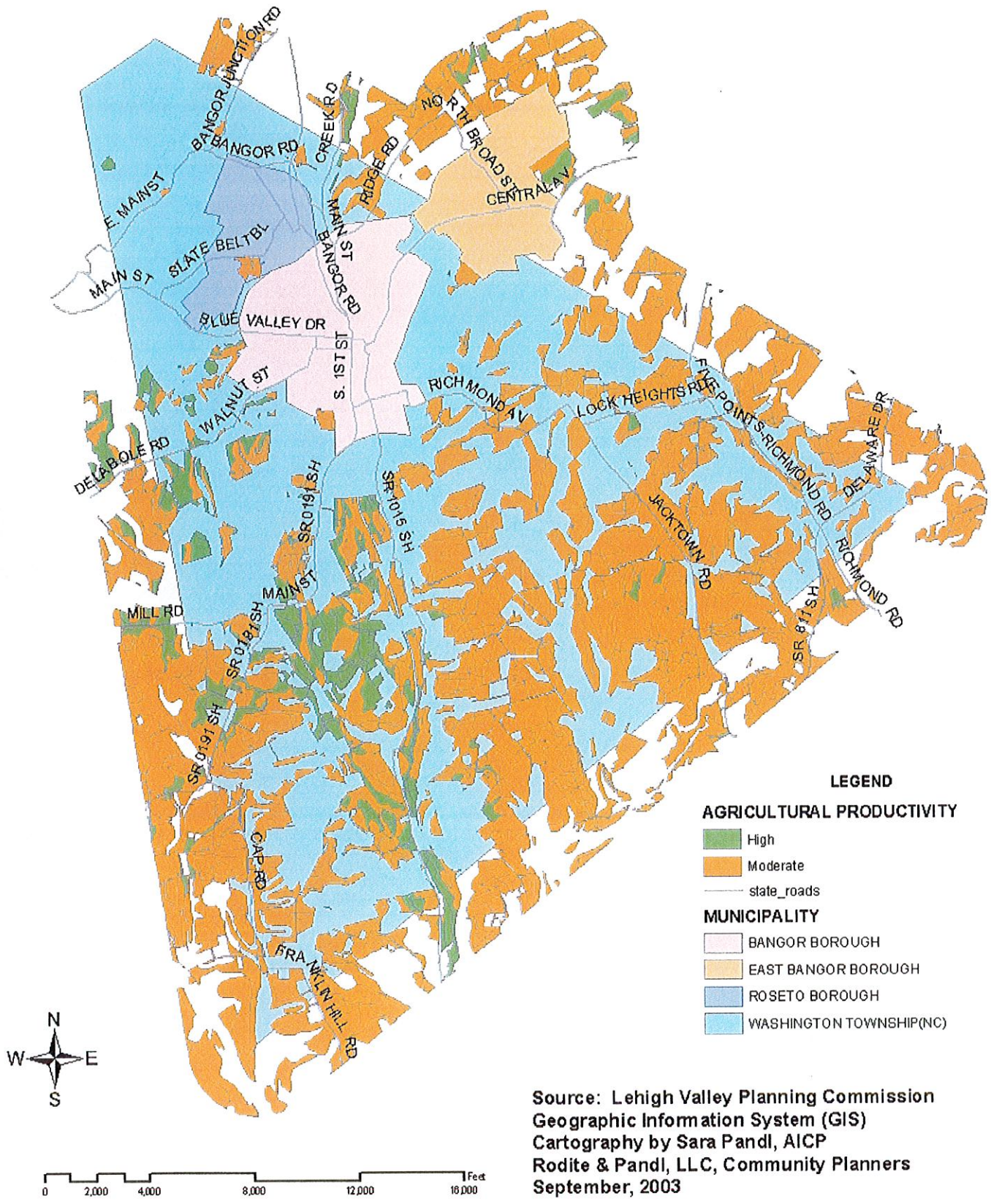
Resource Composite



Source: Lehigh Valley Planning Commission
 Geographic Information System (GIS)
 Cartography by Sara Pandl, AICP
 Rodite & Pandl, LLC, Community Planners
 September, 2003

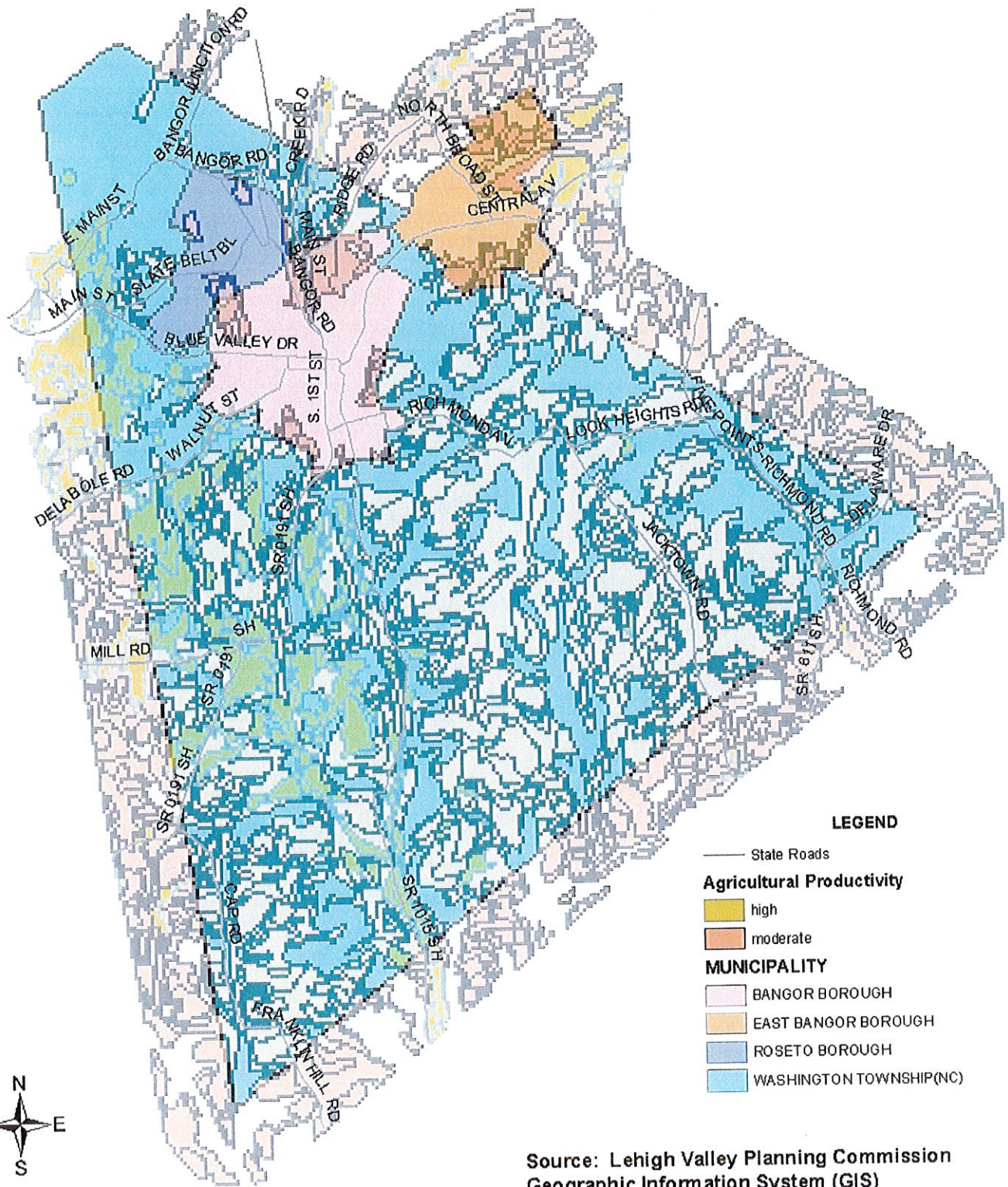
Central Slate Belt Planning Region Natural Features

Agricultural Parcels (Act 319 or 515) located on Agriculturally Productive Soils



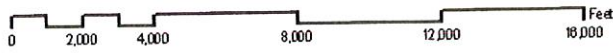
Central Slate Belt Planning Region Natural Features

Agriculturally Productive Soils



LEGEND

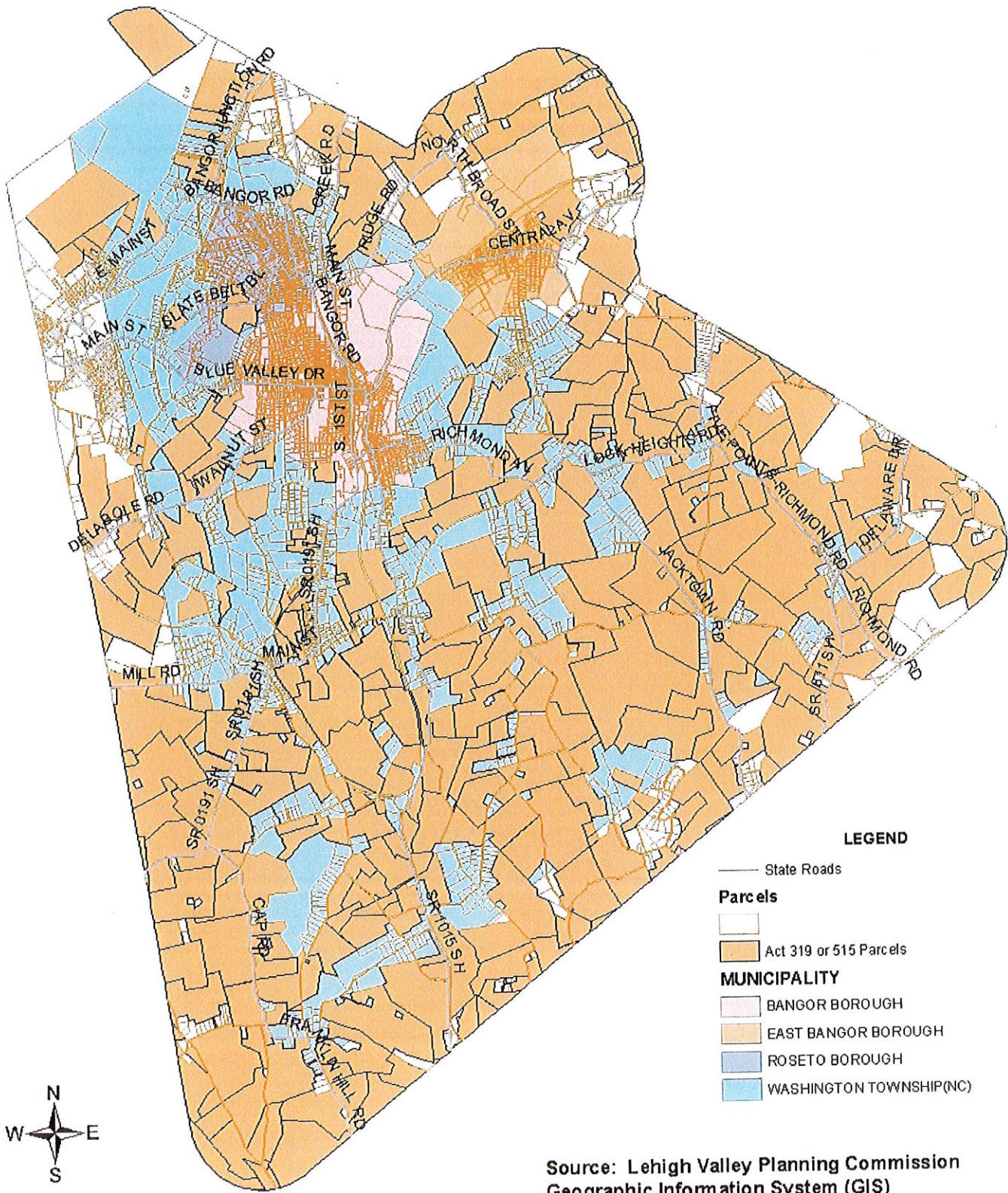
- State Roads
- Agricultural Productivity**
 - high
 - moderate
- MUNICIPALITY**
 - BANGOR BOROUGH
 - EAST BANGOR BOROUGH
 - ROSETO BOROUGH
 - WASHINGTON TOWNSHIP(NC)



Source: Lehigh Valley Planning Commission
 Geographic Information System (GIS)
 Cartography by Sara Pandl, AICP
 Rodite & Pandl, LLC, Community Planners
 September, 2003

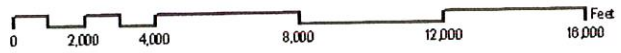
Central Slate Belt Planning Region Natural Features

Parcels with Act 319 or 515 Status



LEGEND

- State Roads
- Parcels**
- Act 319 or 515 Parcels
- MUNICIPALITY**
- BANGOR BOROUGH
- EAST BANGOR BOROUGH
- ROSETO BOROUGH
- WASHINGTON TOWNSHIP (NC)



Source: Lehigh Valley Planning Commission
 Geographic Information System (GIS)
 Cartography by Sara Pandl, AICP
 Rodite & Pandl, LLC, Community Planners
 September, 2003

BACKGROUND SECTION – C

HIGHWAY MAINTENANCE

HIGHWAY MAINTENANCE

Maintenance of the existing highway network is a top priority item. PENNDOT's goal is that 80% of transportation dollars should be spent on preservation of the system. With the passage of TEA-21 at the national level and the gas tax increase at the state level, Pennsylvania is spending record amounts of highway dollars on roadway restoration projects. The Lehigh Valley has seen the benefit of these extra dollars in the form of many resurfacing/restoration projects. For example, the entirety of Route 33 was resurfaced in 1998 and 1999. A portion of Route 22 in Lehigh County was resurfaced prior to the major reconstruction project on that road.

The life cycle of maintenance improvements varies according to the improvement. However, a typical resurfacing has a projected life of ten years and is traditionally the responsibility of the state or local municipality. Over the past year the LVPC developed a capability for assessing maintenance problems by using the GIS with data supplied by PENNDOT. Using the International Roughness Index (IRI) and life expectancy of maintenance improvements, PENNDOT has developed a program of priority projects for maintaining the highway. The IRI is used to identify the condition of a roadway by quantifying general roughness. The measure incorporates the characteristics of the roadway deformation and surface deterioration such as surface cracking, pavement separation, potholing, and patching. Lower IRI values translate to better roads. The higher the value, the more need for improvement. Appendix B contains information on roadway segments that qualify for improvement based on the IRI.

According to the PENNDOT District 5-0 Business Plan for 2002-2003, the IRI values in both Lehigh and Northampton counties have declined (meaning smoother roads) by approximately 7 percent since 1997. The Business Plan reflects increased spending recommended by PENNDOT to continue this trend.

HIGHWAY SAFETY

In correspondence dated March 1999, PENNDOT Secretary Mallory requested that transportation planners join PENNDOT in adopting a goal to reduce Pennsylvania highway fatalities by 10%. Each MPO was asked to tailor a program to meet its own needs, depending on accident characteristics within the area.

In 2000, there were 147,253 reported crashes in the state, up 2.1% from 1999. Total deaths decreased by 1.9% (1,520 compared to 1,549 in 1999). Injuries decreased by 0.2%. In the Lehigh Valley, crashes increased by 0.4% to 7,818. Deaths decreased by 13.2% to 59. Nationally, crashes decreased 0.9% in 1999 while fatalities increased 0.3% to 41,611. While the total number of crashes and deaths may fluctuate mildly from one year to the next, the crash rate (on a per million vehicle miles traveled basis) has dropped steadily for decades. This is because vehicle miles traveled have grown at a much faster pace than crashes or deaths on highways both locally and nationally.

At the state level, PENNDOT is developing a program to reduce fatalities by targeting high-accident driver groups. Target groups include drivers (e.g. 16 to 18 year olds, inattentive drivers), vehicles (e.g. vehicle defects, motorcycles), pedestrians, highways (e.g. head-on crashes, trains, signalized intersections), and "post-crash occurrences," i.e. steps that can be taken prior to emergency services arriving at the scene. PENNDOT has begun implementing a program of low-cost safety measures aimed at reducing these pattern crashes. For example, on roads, which have a high number of head on crashes, PENNDOT may install centerline rumble strips to alert drivers of crossing over into oncoming traffic. PENNDOT is also addressing crash patterns through education, such as the "Driving Under the Influence" (DUI) program made available to schools.

In this plan we have focused on identifying the locations that experience crashes more frequently than expected and are more severe in terms of deaths and injuries. Map 9 shows Lehigh Valley corridors that experience crashes at a rate higher than the statewide average for that type of road and corridors that experience serious crashes. In this case, serious crashes are those that result in a fatality or major injury. Corridors identified as serious experience more than four serious crashes per mile over the period 1995-2000. Accident data from 1995 to 1997 was used for Route 22 in the *22/Renew* reconstruction area due to differing traffic patterns during that time.

A review of Map 9 shows 21 corridors that are designated as high priority, meaning that these corridors are important both in terms of accident frequency and severity. The corridors are distributed fairly evenly between urban and rural locations. To make highway safety planning a more proactive process, safety projects should be selected from areas that show the greatest need. Table 14 lists the corridors and their limits based on PENNDOT data evaluated in this plan.

In addition to studying these high priority corridors, future planning work will analyze the primary causes for crashes in the Lehigh Valley and develop strategies to reduce these types of crashes.

HIGHWAY CONGESTION

Although congestion in the Lehigh Valley is becoming more widespread it is generally sporadic and short in duration. It occurs primarily during the morning (7:30 to 8:30 a.m.) and evening peaks (5:00 to 6:00 p.m.). Congestion and traffic delays on major highways such as Route 22 and I-78 are aggravated by incidents (i.e. crashes, police activity, motorists in need of assistance). Lehigh Valley congestion typically is associated with intersection delay, particularly in the rapidly growing suburban areas. Few corridors experience recurring congestion on a daily basis. Intersections in suburban areas are the primary areas of recurring congestion. Many intersections prove difficult to improve due to the presence of historical resources.

LVTS defines congestion as LOS "D" or worse. LOS is a value that reflects driver comfort. It ranges from "A" (best) to "F" (worst). Table 15 shows volume to capacity relationships and operating conditions for various levels of service. A volume/capacity ratio is a measure of the volume of traffic carried on a road segment divided by its capacity.

The analysis of congestion in the Lehigh Valley is done by the LVPC as part of the regional Congestion Management System (CMS).

**TABLE 14
HIGH PRIORITY CRASH CORRIDORS**

Map #	Corridor Name	From	To
1	Routes 100/29	Buckeye Rd.	Shamerville Rd.
2	Route 873	Main St.	Old Post Rd.
3	Mauch Chunk Rd.	Cedar Crest Blvd.	Mechanicsville Rd.
4	Tighman St.	Rt. 22	Cedar Crest Blvd.
5	Cedar Crest Blvd.	Rt. 22	Hamilton Blvd.
6	Route 246	Maple Dr.	Blue Mountain Cr.
7	Route 145	Blue Mountain Cr.	Neff's-Laury's Rd.
8	Route 145	Church St.	Emaus Ave.
9	Route 22	Jordan Pkwy.	Schoenersville Rd.
10	Fulton Ave.	Bridge St.	Rt. 22
11	Emaus Ave.	Rt. 145	Honeysuckle Rd.
12	Union Blvd.	Airport Rd.	Pennsylvania Ave.
13	Broadway	Seidersville Rd.	Flat St.
14	Route 378	Oakhurst Dr.	Saucon Valley Rd.
15	Route 309	Passer Rd.	Bucks Co. Line
16	Pembroke Rd.	Steffa Blvd.	Washington St.
17	Route 512	Park Ave.	Church St.
18	Wm. Penn Hwy.	Hope Rd.	Greenwood Ave.
19	S. 25 th St.	Park Ave.	Main St.
20	Northampton St.	25 th St.	Strin St.
21	Route 512	Five Forks-Richmond Rd.	Rt. 611

Fifteen corridors have been identified as eligible for inclusion in CMS. Each corridor was required to be at least a mile long and have an average LOS of "D" or worse. Future congestion conditions were modeled assuming that the projects in the 1999–2002 *Transportation Improvement Program* would be built. Corridors were prioritized using a rating system, approved by LVTS, that takes into account future LOS, future traffic volume, the current accident rate as compared to the statewide accident rate for that facility type, and corridor length. Table 16 lists the 15 corridors in priority order (see Map 10 for locations).

The congested corridors identified largely consist of roadways extending from the urban core to the employment areas located in the suburbs. Little congestion exists in the downtown areas. This is a major change from thirty and forty years ago. Movement of commercial and industrial land uses from the downtowns to the suburbs has resulted in a similar shift in congestion.

The CMS sets planning priorities for the congested corridors. The Route 22 long range planning study currently underway includes two of the top five priorities above. Future planning efforts, either regionally or locally, will center attention on the remaining corridors identified. For the purposes of the long-range plan, further studies must take place on these corridors to identify implementable solutions.

TABLE 15**The Concept of Level of Service (LOS)**

Level of Service	Volume / Capacity Ratio	Operating Condition
A	0.00 - 0.50	Free Flow
B	0.51 - 0.70	Free Flow
C	0.70 - 0.80	Stable Flow, Reduced Manoeuvrability
D	0.81 - 0.90	Unstable Flow, Reduced Speed, Reduced Manoeuvrability
E	0.91 - 1.00	At Capacity, Flow Disruption, Some Queuing
F	Greater than 1.00	Fully Congested, Flow Breakdown

Source: Garmen Associates, Lehigh Valley Traffic Model

TABLE 16
CONGESTION MANAGEMENT SYSTEM CORRIDORS

Map #	Corridor Name
1	Route 22 – Route 378 to 15 th Bl.
2	South 4 th Street/South Pike Avenue (Allentown – Hamilton Street to Vera Cruz Road)
3	Route 611/St. John Street (Easton) – Route 22 to I-78
4	I-78 – Route 33 to Route 412
5	Route 22 – Route 191 to Route 512
6	Race Street – First Avenue to Airport Road
7	Freemansburg Avenue – Washington Avenue to Farmersville Road
8	Susquehanna Street – South 4 th Street to Potomac Street
9	Cedar Crest Boulevard – Route 22 to Parkway Boulevard
10	Emmaus Avenue – I-78 to Harrison Street
11	Airport Road – Route 329 to Schoenersville Road
12	Route 329 – Seemsville Road to Second Street (Whitehall)
13	Hanover Avenue – Irving Street to Pennsylvania Avenue
14	Route 191 – Route 22 to Newburg Road
15	South Third Street (Bethlehem City) – Mohican Street to Minsi Trail Bridge

BACKGROUND SECTION - D

Transportation Impact Fees

Transportation Impact Fees

Article V-A of the MPC is the exclusive authority to enact and collect offsite transportation impact fees. Statutory provisions mandate very specific and complex procedures that a municipality must follow in order to enact an impact fee ordinance. Section 508-A permits municipalities that have adopted a joint comprehensive plan under Article XI to also enact a joint transportation fee ordinance.

The municipality must establish an impact fee advisory committee, designate transportation service areas and conduct a series of studies. These studies consisting of a land use assumption report, a roadway sufficiency analysis and a transportation capital improvements plan must be approved in order to enact an impact fee ordinance. Other prerequisites include a zoning ordinance, a subdivision and land development ordinance and an adopted comprehensive plan. However, it should be noted that counties are not permitted to enact an impact fee ordinance.

Don't be misled. Impact fees will only cover a percentage of total needs and costs. Impact fees cannot be used to pay for operation and maintenance expenses, repairs, pass through trips or trips attributable to existing development. Growth and the pace of growth are among the factors to be weighed when deliberating whether to enact an impact fee ordinance. Such an ordinance represents just one more tool available to a municipality to promote orderly development. However, each municipality will have to make a cost-benefit determination to see if enacting an impact fee ordinance will likely be a net revenue producer over a given period of years. See Appendix IV on Analysis of the Impact Fee Legislation.

Appendix IV

Analysis of Transportation Impact Fees

General Intent (Section 501-A)

Article V-A of the Municipalities Planning Code, titled "Municipal Capital Improvement," authorizes all municipalities, except counties, to charge transportation impact fees on new development. As a prerequisite, the municipality must have adopted either a municipal or county comprehensive plan, subdivision and land development ordinance, and zoning ordinance.

The effect of the act is to:

1. Expressly authorize the imposition of impact fees for capital improvements to the transportation system.
2. Closely define the procedures by which impact fees may be implemented.
3. Expressly exclude the use of impact fees for other purposes and to limit the extent of their use for transportation improvements.

Important Definitions (Section 502-A)

Impact fee – a charge or fee imposed by a municipality against new development to generate revenue for funding the costs of transportation capital improvements necessitated by and attributable to new development.

Offsite improvements – public capital improvements that are not onsite improvements and which serve the needs of more than one development.

Onsite improvements – all improvements constructed on the applicant's property, or the improvements constructed on the property abutting the applicant's property necessary for the ingress or egress to the applicant's property, and required to be constructed by the applicant under a municipal ordinance.

Road improvement – the construction, enlargement, expansion or improvements of public highways, roads or streets, not including bicycle lanes, bus lanes, bus ways, pedestrian ways, rail lines or toll ways.

Transportation capital improvements – offsite road improvements that have a life expectancy of three or more years, not including costs for maintenance, operation or repair.

Transportation service area – a geographically defined portion of the municipality not to exceed seven square miles of area which, according to the comprehensive plan and applicable district zoning regulations, has development potential, creating the need for transportation improvements to be funded by impact fees.

What impact fees may be used for (Section 503-A)

The law authorizes the use of impact fees for costs incurred for improvements designated in the municipality's transportation capital improvement program attributable to new development, including the acquisition of land and rights-of-way; engineering, legal and planning costs; and all other costs directly related to road improvements within the service area or areas, including debt service. Impact fees may also be used for a proportionate share of the cost of professional consultants hired to prepare a roadway sufficiency analysis. The proportionate share must be determined based on a formula specified in the act.

What impact fees may NOT be used for (Section 503-A)

Municipalities are expressly prohibited from using impact fees for:

1. Construction, acquisition or expansion of municipal facilities that have not been identified in the township's transportation capital improvement plan.
2. Repair, operation or maintenance of existing or new capital improvements
3. Upgrade, update, expansion or replacement of existing capital improvements to serve existing developments to meet stricter safety, efficiency, and environmental or regulatory standards that are not attributable to new development.
4. Preparation and development of land use assumptions and the capital improvements plan.
5. Road improvements due to pass-through traffic or to correct existing deficiencies.

Prohibitions (Section 503-A)

Impact fee ordinances must be established only as authorized in the act. The law expressly prohibits a municipality from requiring as a condition for approval of a land development or subdivision application the following, except as specifically authorized under the act:

1. Offsite improvements or capital expenditures of any nature whatsoever
2. Contributions in lieu of improvements
3. Exaction fees
4. Connection, tapping or similar fees (except as specifically authorized under Act 203 and Act 209)

The act does not specifically address the ability of municipalities and developers to negotiate and enter into voluntary agreements for offsite improvements other than those covered by impact fees.

Onsite improvements (Section 503-A)

The act does not affect a municipality's power to require onsite improvements. However, the municipality may not withhold approval of a development for the reason that an "approved capital improvement program" has not been completed.

Joint Municipal Impact Fees (Section 503-A)

Act 68 of 2000 granted the authority for 2 or more municipalities, other than counties, to adopt transportation impact fees as originally provided for by Article V-A. Municipalities participating and having adopted a joint municipal (multimunicipal) comprehensive plan consistent with Article XI can implement the requirements of Article V-A cooperatively through an intergovernmental cooperation agreement.

Procedures to adopt impact fee ordinance (Section 504-A)

Appointment of advisory committee

The township must first appoint, by resolution, an impact fee advisory committee consisting of 7 to 15 members. The township also has the option of appointing its planning commission to serve as the impact fee advisory committee. At least 40 percent of the members of the advisory committee must be representatives of the building and real estate industries. If the township appoints its planning commission as the advisory committee, it must appoint additional ad hoc voting members so that at least 40 percent of the committee represents the building and real estate industries whenever the planning commission is operating as the advisory committee. The composition of the advisory committee can be challenged for a period of 90 days from the first public meeting of the advisory committee. In the resolution, the township must also describe the geographical area or areas for which the advisory committee will develop the land use assumptions and conduct the road sufficiency analysis studies.

Development of land use assumptions

The advisory committee must first develop land use assumptions to predict future growth and development within the areas designated by the township in its resolution. The land use assumptions report must include a description of existing land uses and the roads within the designated area(s). The report must also reflect projected changes in land use, densities of residential and non-residential development, and population growth rates for the next 5 years. The report may be based on and refer to prior plans and studies prepared for the township. A copy of the report must be forwarded to the county planning agency, all contiguous municipalities and the local school district for comment at least 30 days before the committee holds a public hearing.

With passage of Act 68 of 2000, municipalities may jointly hire a professional to prepare a multiple-municipality roadway sufficiency analysis. By joining together, municipalities can take advantage of economies of scale, plus one roadway sufficiency analysis serves all the cooperating municipalities and the reports will be consistent. This offers advantages for those electing to participate in this approach.

The committee must conduct a public hearing for the consideration of the land use assumptions, and then present a written report to the township. The township must approve, disapprove or modify the land use assumptions by resolution.

Preparation of roadway sufficiency analysis

In the next step, the advisory committee must, in consultation with a traffic or transportation engineer or planner commissioned by the township, prepare or have prepared a roadway sufficiency analysis to establish the existing levels of service on roads and the preferred levels of service within the designated area(s). These levels of service must be in accordance with the categories defined by the Transportation Research Board of the National Academy of Sciences or the Institute of Transportation Engineers. The analysis must be done

for any road within the area for which there is a projected need for improvements due to future development. If a road is not included in the analysis, it will not be eligible for impact fees.

The road sufficiency analysis must also specify:

- The required road improvements needed to bring the existing level of service up to the preferred level of service.
- Projected traffic volumes for the next five years.
- Anticipated traffic due to persons traveling through the area, separate from the trips generated by residents, and the forecasted road deficiencies created by these trips.

The township must take action by resolution to approve, disapprove or modify the roadway sufficiency analysis provided by the advisory committee.

The Capital Improvements Plan.

Using the information from both the land use assumptions and the roadway sufficiency analysis, the advisory committee must then determine the need for road improvements to correct any existing deficiencies and to accommodate future development. The committee must first identify the transportation improvements that should be included in the plan and establish the boundaries of one or more transportation service areas. These areas may not exceed 7 square miles, or approximately 2.6 miles by 2.6 miles. The plan must also include an estimate of the cost of the road improvements, using standard traffic engineering standards. A maximum contingency fee of 10 percent may be added to the estimate. The plan must include the following:

- A description of existing roads within the transportation service area(s) and anticipated road improvements not attributable to new development.
- Road improvements due to pass-through traffic.
- Road improvements due to future development.
- The estimated cost of the road improvements, with separate calculations for costs to correct existing deficiencies; costs attributable to pass-through trips; and costs attributable to future development.
- A projected timetable and budget for the road improvements identified in the plan.
- Proposed sources of funding for each capital improvement, including federal, state and municipal funds, impact fees and any other source.

Public hearing

Once the capital improvements plan has been completed, the advisory committee must hold a public hearing. The plan must also be available for public inspection at least 10 working days prior to the public hearing date.

Presentation and adoption of plan

The plan must be presented to the municipality at a public meeting. The board of

supervisors may make changes to the plan prior to its adoption.

State and federal highways

Roads that qualify as a state highway or rural state highway may only be funded by impact fees to a maximum of 50 percent of the total cost of the improvements.

Update of capital improvements plan and impact fees

The township may periodically request the advisory committee to review and update the capital improvements plan and impact fee charges.

Development of impact fee ordinance (Section 505-A)

Once the capital improvements plan has been completed and adopted, the governing body must then prepare an impact fee ordinance, which must set the following procedures.

Calculation of fee

The impact fee is calculated based on the total cost of the identified road improvements within a given transportation service area attributable to new development within that service area. This figure is then divided by the number of anticipated peak hour trips generated by the new development. This calculation for peak hour traffic must be estimated in accordance with the Trip Generation Manual published by the Institute of Transportation Engineers. The resulting figure will be the per trip cost of transportation improvements within the service area.

When fee is determined and collected.

The impact fee must be determined as of the date of preliminary land development or subdivision approval. The per trip cost established for the service area is multiplied by the number of trips to be generated by the new development or subdivision using generally accepted traffic engineering standards. The builder or developer must pay the calculated impact fee at the time the building permit is issued for the development or subdivision. A guarantee of financial security in lieu of the payment of the full fee is not allowed, unless the applicant has agreed to construct the road improvement himself. Allowable exemptions (Section 503-A).

The township may include in its impact fee ordinance exemptions for de minimis applications, or small land development with a negligible impact, affordable housing as defined in the act or growth that the township determines to have an overriding public interest.

Additional traffic studies

The municipality may authorize a special transportation study to determine traffic generation for a new nonresidential development. The developer may also voluntarily prepare or commission and submit a traffic study at his own expense. The study must be submitted prior to the imposition of the impact fee and must be taken into consideration by the municipality in either reducing or increasing

the fee.

Adoption of impact fee ordinance

The township must adopt an impact fee ordinance that specifies the boundaries and fee schedule for each transportation service area. The ordinance must be available for public inspection at least 10 working days prior to the public meeting at which the ordinance is to be adopted.

Retroactivity

The impact fee ordinance may be made retroactive for a period of up to 18 months after the adoption of the resolution creating the impact fee advisory committee. The impact fee assessed during the 18-month period may not exceed \$1,000 per anticipated peak hour trip or the subsequently adopted impact fee, whichever is less.

Accounting of impact fees.

Fees collected by the township must be deposited in an interest bearing account designated solely for impact fees and clearly identifying the transportation service area from which the fees were received. Fees collected from a transportation service area can only be used within that transportation service area. The township must provide an annual accounting for this account.

Credits.

The builder or developer is entitled to receive credit against the impact fee for the following:

- The fair market value of any land dedicated to the municipality for future right-of-way, realignment or widening of existing roadways, determined as of the date the land development or subdivision application was submitted.
- The value of any road improvement constructed at the applicant's expense, at the same rate identified in the capital improvements plans.

Refund of impact fees.

Impact fees must be refunded to the applicant, along with any accrued interest, under the following circumstances:

- The municipality has terminated or completed the capital improvements program for the transportation service area and funds are left over.
- The municipality has failed to begin construction of any road improvement within three years of the scheduled construction date stated in the capital improvements plan.
- After completion of a road improvement, the actual expenditures were less than 95 percent of the costs for which the fee was paid.
- Construction on the new development has not started, and the building permits have expired or been altered so as to decrease the impact fee due. To refund the fees, the municipality must provide written notice by certified mail to the builder or developer who paid the fee. If the funds are

unclaimed after a one-year period, the municipality may use the fees for any other purpose.

Appeals (Section 506-A)

An individual required to pay an impact fee may appeal any matter relating to the fee with the court of common pleas. The court may appoint a master to hear testimony and make a report and recommendations. The parties would be responsible for their separate costs.

Tap-In fees (Section 507-A)

The law requires municipalities that assess tap-in or similar sewer and water fees to comply with the provisions of Act 203 of 1990, which amends the Municipalities Authorities Act.

Note: Fees for recreational facilities are addressed in Section 503(11) of the Municipalities Planning Code, Act 247 of 1968, as reenacted and amended. You may also wish to review this action in conjunction with the Pennsylvania Transportation Partnership Act, P.S. 53 Sect. 1621 et seq.

