## THE COMPREHENSIVE PLAN

#### THE JOINT COMPREHENSIVE PLAN

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The Joint Comprehensive Plan is the Planning Area's guideline for future growth, and is based on the information contained in the preceding chapters. This chapter is intended to show, in general categories, recommended types of future land use for the next 10-20 years, proposals for transportation facilities, community facilities and housing. This chapter represents the culmination of the community goals and objectives, and reflects existing land use, environmental constraints and potentials, transportation, population projections, housing (i.e. "fair share"), community facilities, utilities and other elements.

#### **FUTURE LAND USE PLAN**

Direction in planning for future land use is given primarily by the formulation of Development Goals which describe what is to be accomplished and policy statements (objectives) which outline the procedure to accomplish these goals. Future land use is heavily dependent on both the Planning Area's Community Goals and Objectives, as well as the pattern of existing land uses. It is not the intention to create substantial changes in existing land use, but rather to build upon appropriate existing forms of development.

The Future Land Use Plan recommends a desirable future pattern of growth by indicating what types of activities should be located within the Planning Area, as well as the intensity and spatial distribution of land uses. The Plan is structured based on several influence factors. These include (1) the existing pattern of land use; (2) the natural features of the Planning Area; (3) the existing and contemplated transportation and utility facilities; (4) the importance of agriculture to the Planning Area's economy; and (5) the capability of Planning Area land to support additional growth.

The Future Land Use Plan is presented in the form of a map showing land use categories similar to those in the Existing Land Use Map. This future land use map is intended to form the basis for future rezoning actions, including adjustments to the current zoning map. The underlying premise behind the Future Land Use Map for the Planning Area is to concentrate future development in (and around) the Boroughs of Leesport and Shoemakersville and along the PA Route 61 and U.S. Route 222 corridors, while preserving the majority of the Planning Area's land area in agricultural, conservation, and rural uses.

The following paragraphs describe the land use categories shown on the Future Land Use Map. (See Map 7). It must be remembered that the Plan is generalized and conceptual in nature, and thus the boundaries of the various land use categories are not meant to be exact. In addition, while a particular land use category may be shown in one or more of the Planning Area municipalities on the Future Land Use map, the specifics of implementation (through zoning) at the individual municipality level may vary.

#### **Conservation**

Certain areas of the Planning Area are identified for conservation. The purpose of this category is to protect those portions of the Planning Area which should be reserved in open space to protect environmentally sensitive areas - namely, the floodplains and stream valleys of the Schuylkill River, Maiden Creek, and other Planning Area streams; the steep slope areas, and the Lake Ontelaunee Watershed. It is recommended that these areas either be preserved in their undeveloped states or be permitted to be developed only at extremely low density and with appropriate conservation measures. Such measures could include zoning and subdivision/land development regulations to (1) require buffers from streams, (2) prohibit or greatly restrict development activities in areas of steep slope, (3) limit earth disturbance activities to minimize sedimentation/runoff into Lake Ontelaunee. and (4) encourage the "Conservation Subdivision" concept where limited development is permitted. (The Conservation Subdivision concept approaches the development of a particular tract of land from the perspective of identifying - and avoiding its unique/significant physical, natural and cultural features.)

#### **Agricultural**

One of the stated objectives of this Comprehensive Plan is "to preserve prime agricultural land by encouraging productive farming activities and farm-related businesses". This objective can best be achieved by maintaining the land base upon which farming depends. This land base needs to be large enough so that it generates a sufficient market for agricultural support services. In

addition, non-farm land uses must be limited so that conflicts with agricultural operations are minimized.

The Agricultural category is comprised of those portions of the Planning Area which are predominantly prime agricultural land and/or currently in agricultural production. It also includes wooded areas and other environmentally sensitive areas encompassed by farmland. These areas are not planned to be served by public water and sewerage facilities, unless such facilities are required to solve water and/or sewage disposal problems not able to be alleviated otherwise. New development in agricultural areas should be limited, through strong agricultural protection zoning regulations, to scattered, farm-related residential uses (such housing for farm agricultural workers) and other and agriculturally-related activities (including onfarm businesses, agri-business, etc.). The use of "sliding scale" regulations (as are currently employed by Perry Township), with some modifications, is recommended to accomplish this objective. Such zoning regulations should (1) prevent development on productive soils and (2) limit new non-farm development to minimize potential land use conflicts.

The delineation, through zoning, of large blocks of agricultural land will also support the continued expansion of Perry Township's Agricultural Security Area, and can serve as the basis for the creation of an Agricultural Security Area in Ontelaunee Township as well.

The proposed Agricultural area on the Future Land Use Map includes several areas which are currently zoned for development. The most significant of these areas is in the northwest portion of Perry Township (west of PA Route 61), where existing farmland is currently zoned R-3 (Multi-Family Garden Apartments). The western portion of is area is proposed instead to remain in agricultural use, and the eastern portion (adjacent to PA Route 61) proposed for low density residential development. The primary reasons for this proposed change are (1) the limited accessibility of the area from PA Route 61 and (2) the desire to concentrate higher density development closer to Shoemakersville Borough's urban core.

#### Low Density Residential

The areas in the Planning Area proposed for low density residential uses encompass the existing areas of such development along with areas of logical expansions of these existing areas. These areas include portions of Leesport Borough west of the Schuylkill River, as well as logical extensions along the PA Route 61 and U.S. 222 corridors, and are generally planned for the provision of public water and sewer service.

This category is comprised mainly of single family detached residential development at densities ranging from one (1) dwelling unit or less per acre (where public sewers are not available) to two (2) to three (3) dwelling units per acre (where public water and sewer service is available).

Most of the areas proposed for Low Density Residential use are already zoned accordingly. However, several areas currently zoned otherwise are proposed as low density, due to (1) lack of adequate transportation system access, (2) development constraints such as floodplains, steeper slopes, etc., and/or (3) a desire for consistency with the character and density of surrounding, existing development. The largest such area is located in the northwest portion of Perry Township (west of PA Route 61), where existing farmland currently zoned R-3 (Multi-Family Garden Apartments) is proposed instead to be developed in the future in low density residential use.

#### **Medium Density Residential**

This category is comprised of a greater variety of types of residential uses, ranging from single family detached dwellings on small lots to semi-detached and two-family dwellings. These areas would be served by public water and sewerage services. Anticipated residential densities in the medium density residential areas would be in the range of four (4) to six (6) dwelling units per acre.

This proposed land use generally would be located in those portions of the Planning Area currently zoned R-2 (Medium Density Residential) and occupied by small lot single family dwellings and duplexes. The medium density residential areas are located (1) in the older section of Leesport Borough west of the River; (2) in northeast portion of the Borough, extending into Ontelaunee Township to the north (beyond Indian Manor and Gernant's Church Roads) and to the east (to Loose Lane). The largest undeveloped location proposed for medium density residential use in the Planning Area is located adjacent to, and north of, Shoemakersville Borough, in the area generally bounded by the Borough Line, Hunter Legget Drive, Zweizig Road, and Main Street.

#### **High Density Residential**

This category is comprised of all types of residential uses, ranging from single family detached dwellings on small lots, to semidetached and two-family dwellings, to townhouses and garden apartments. These areas would be served by public water and sewerage services. Anticipated residential densities in the high density residential areas would be in the range of six (6) to fifteen (15) dwelling units per acre.

The one specific location shown on the Future Land Use Map for this proposed land use category is in Perry Township northeast of Shoemakersville, generally between Bellevue Avenue and Allendale Road. Under the Zoning Ordinances currently in effect in Leesport Borough and Ontelaunee Township, multi-family dwellings are also allowed by special exception in the two municipalities' Medium Density Residential districts. It is proposed that the existing zoning provisions be retained - but be strengthened to limit the amount (percentage of total proposed dwelling units) that can developed in multifamily units.

Another form of high density development, mobile home parks, is provided for in distinctly different types of zoning districts in the three municipalities. The Perry Township Zoning Ordinance permits mobile home parks in the R-3 (Multi-Family Garden Apartment) District by special exception, while the Ontelaunee Township Zoning ordinance permits them by right in the A-2 (Agricultural Residential) District.

#### **Non-Residential Development**

The following sections describe different forms of mixed residential/commercial, commercial, and industrial land use. General recommendations relating to all such land use categories (as well as certain high density residential and community facility uses), include the following:

- Access municipal ordinances should be updated to insure that access to major roadways (particularly Routes 61, 73 and 662) be properly controlled to minimize potential problems from new development.
- Landscaping and Screening adequate controls should be implemented to provide for adequate landscaping, screening and buffering of new development.
- Parking and Loading adequate off-street parking and off-street loading space must be provided to support new development (including landscaping in large parking areas).
- Planned Centers planned shopping and office/business should be encouraged by the municipal ordinances, and "strip" development discouraged. Instead of splitting off numerous individual lots with separate driveways entering onto the major roadway, larger tracts should be designed as unified sites with common entrances, parking areas, stormwater management facilities, signage, etc.

• Other Performance Standards - in addition to the above, municipal ordinances should also be updated to include requirements aimed at minimizing the potential for negative impacts from noise, lighting, dust, odors, etc., on neighboring uses.

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#### Mixed Use

This category represents a mixture of uses, including highway-oriented commercial uses, wholesaling businesses, retail and office uses, etc., as well as single and two family dwellings and residential conversions. This proposed land use is located in the center of Leesport (east of PA Route 61, and along Wall, Canal and Center Streets) and along Mohrsville Road in Perry and Ontelaunee Townships, and reflects the current character of that portion of the Planning Area. In Leesport, this area generally coincides with the currently-zoned CC (Community Commercial) Zoning District. While it is currently zoned agricultural in both townships, the proposed mixed use land use category more accurately identifies the existing character along Mohrsville Road.

#### **Commercial**

The general Commercial land use is intended to provide for a wide range of commercial services, including retail stores, personal service shops, offices and clinics, etc. Highway service-oriented and industrial-type uses are not included in this category. The locations for this proposed land use include (1) the western side of the PA Route 61 corridor north of Leesport Borough, (2) the Leesport Farmers Market, (3) the east side (for the most part) of the 61 corridor between PA Route 73 and Snyder Road, (4) the southwest corner of Ontelaunee Township between West Huller Lane and the railroad, and (5) U.S. 222 corridor east of the SR 3055 interchange.

#### Heavy/Highway Commercial

This land use category is designed for commercial uses which are generally dependent on highway traffic. The types of uses in this land use category include offices, financial institutions, personal and household service uses, offices of contractors/tradesmen, repair shops, motor vehicle sales, vehicle service stations, trucking and wholesaling businesses. This land use is the larger of the two proposed commercial land use areas. Heavy/Highway commercial areas depicted on the Future Land Use Map include (1) the PA Route 61 corridor north and east of Shoemakersville Borough in Perry Township, (2) the 61 corridor through Leesport, (3) the west side of PA Route 61 between PA Route 73 and the Maiden Creek in Ontelaunee Township, and (4) the Allentown Pike (U.S. 222) and Park Road area, also in Ontelaunee Township. For the most part, these areas reflect portions of the Planning Area than are already similarly zoned.

#### **Light Industrial**

This category is limited to light industrial uses, as well as warehousing, wholesale distribution centers, research and development laboratories, and related offices and uses. Such activities should be generally compatible with surrounding commercial, residential or agricultural areas. The Planning Area's topography, transportation network, and utility services limit the locations where such sites can be located. The proposed Light Industrial land uses in the Planning Area are (1) at the intersection of PA Routes 61 and 662 in Perry Township, (2) along PA Route 61 north of PA Route 73 in Leesport and Ontelaunee Townships, and (3) the Park Road corridor in southeastern Ontelaunee Township.

#### **General Industrial**

This category includes general manufacturing industrial uses, as well as light industrial uses, warehousing, wholesale distribution centers, research and development laboratories, and related offices and uses. Such activities should be located in close proximity to major transportation routes and rail lines, and should be separated from residential and other less intense uses. The areas proposed for such uses on the Future Land Use Map conform to these locational requirements, and generally coincide with the three municipalities' existing zoning. As was the case with the Heavy/Highway Commercial uses, the General Industrial uses are located along the PA Route 61 and SR 3055/U.S. 222 corridors.

#### **Community Facilities**

This category is comprised of public and private institutional uses, educational facilities, public utility facilities, religious and civic activities, active recreation facilities and municipal buildings and grounds. The locations of such uses on the Future Land Use Map reflect the locations of existing public and quasi-public uses in the Planning Area. While several new facilities are discussed in the Community Facilities Plan, no new locations of public/quasi-public facilities have been depicted on the Future Land Use Map. Such facilities will be located as a result of future studies, or in conjunction with new development, and as a result, are not able to be mapped at this time.

## <u>RELATIONSHIP OF THE PLAN TO ADJACENT</u> <u>MUNICIPALITIES' PLANNING ACTIVITIES</u>

Nine (9) municipalities border the planning area. Windsor Township comprises the entire northern boundary of Perry Township (and the planning area). To the east are Greenwich and Richmond Townships, both adjacent to Perry Township, and Maiden Creek Township, which comprises the southeastern boundary of Perry Township and the eastern boundary of Ontelaunee Township. The southern border of Ontelaunee Township (and the Planning area) is comprised of Muhlenberg Township. Ontelaunee

Township and Leesport Borough are bordered on the west by Bern and Centre Townships. Although the Schulykill River serves as the natural boundary for all of Ontelaunee Township and parts of Leesport Borough. West Leesport is the only portion of the planning area located west of the Schuylkill River. The western boundary of Perry Township consists of Centre Township (to the southwest) and Tilden Township (to the northwest). In addition, Perry Township surrounds the Borough of Shoemakersville on three sides.

Future land use plans and/or zoning ordinances of these adjacent municipalities were considered during the course of the development of this Joint Comprehensive Plan. For the most part the future land uses proposed for the Planning Area are compatible with the planning activities of adjacent municipalities. The following is a brief discussion by municipality of the proposed land uses bordering the Planning Area:

> <u>Windsor Township</u> - Windsor Township forms the northern boundary of Perry Township. Virtually all of Windsor Township adjacent to the planning area is zoned "A - Agriculture". This district permits agricultural uses and

single family dwellings (on minimum one-acre lots) by right. In addition, intensive agricultural operations, mobile home parks, and certain community facility uses are permitted by special exception. A small "C-2 General Commercial" district straddling Route abuts Perry Township. An "A-C 61 Agriculture-Conservation" district (with minimum five-acre lot size) lies between the commercial area and the Schulykill River. Virtually all of the land in Perry Township which borders Windsor Township is proposed for continued agricultural use. The only potential conflict between the two would occur if large numbers of single family dwellings were constructed in Windsor Township adjacent to the more strictly zoned agricultural areas in Perry Township.

**Greenwich Township** - The Maiden Creek forms Perry Township's eastern border with both Greenwich and Richmond Townships. The entire portion of Greenwich Township located adjacent to the planning area is zoned "Agricultural Rural Preservation," which permits agricultural and nursery operations (excluding mushroom farming) and single family dwellings (on minimum 1.5 acre lots). Industrial uses, mushroom farms, and selected community facility uses are permitted by special exception. All of the land in Perry Township located on the west bank of the Maiden Creek is proposed for continued agricultural and/or conservation uses.

**<u>Richmond</u> Township** - The Richmond Township Comprehensive Plan identifies the majority of the land east of the floodplain of the Maiden Creek adjacent to Perry Township for "Woodland-Conservation" or "Rural-Agricultural" use. Neither of these land use types are proposed for any kind of intensive development. The only concentrations of existing development in Richmond Township near the planing area are the villages of Virginville and Moselem. As was the case with Greenwich Township, all of the land in Perry Township located adjacent to Richmond Township is proposed for continued agricultural and/or conservation uses.

<u>Maiden Creek Township</u> - Maiden Creek Township forms part of the southern boundary of Perry Township, as well as the eastern boundary of Ontelaunee Township. The entire northern portion of Maiden Creek Township, bordering all of Perry Township and Ontelaunee Township south to railroad (near Bewley Lane), including the Lake Ontelaunee Watershed, is zoned "Agricultural". The Agricultural zone is a strong agricultural preservation zoning district, incorporating a "sliding scale" which greatly restricts the number of new lots which can be created. A small portion of Maiden Creek Township, located between the railroad and U.S. 222, is zoned for "R-2 Moderate Density Residential" and "CR - Commercial Residential" uses. The area from U.S. 222 south to the southernmost rail line is zoned "SIA - Special Intensified Agricultural", which provides for agricultural operations that are more industrial in nature such as mushroom farming, poultry/egg production, etc. Proposed land uses in Perry and Ontelaunee Townships are very compatible with adjacent zoned lands in Maiden Creek Township. Agricultural and conservation uses are proposed south to rail line north of Snyder Road in Ontelaunee Township. From that point south, low density residential, commercial and light industrial uses in Ontelaunee generally coincide with similar uses to the east in Maiden Creek Township.

Muhlenberg Township - Muhlenberg Township forms the southern boundary of Ontelaunee Township, and the planning area. Zoning along Muhlenberg's steeply-sloping southeastern boundary with Ontelaunee Township is "R-1 Residential", which designates areas of more rugged terrain in the Township where only low density residential development is anticipated. A "Specialized Agricultural" district is located between U.S. 222 and the R-1 district. This district provides an areas for the growing and processing of mushrooms, although other forms of agriculture, along with residential dwellings and some community facility uses are also permitted. The portion of Muhlenberg Township between Leesport Avenue and U.S. 222 is zoned for commercial uses, with a "C-3 Highway Commercial" district straddling U.S. 222, and a "C-2 Shopping Commercial" district to the west. All of the remainder of Muhlenberg Township which borders the planning area to the west is zoned "LI -Limited Industrial". Proposed land uses along Ontelaunee Township's southern boundary with Muhlenberg Township for the most part mirror zoning designations in Muhlenberg.

Bern Township - Bern Township forms the southwestern boundary (across the Schuylkill River) of Ontelaunee Township, and encompasses West Leesport. The extreme southeastern portion of Bern Township, south of Cross Keys Road, is currently zoned "IR -Institutional / Recreational". This zoning district has a minimum lot size of five acres, and is reserved for institutional and recreational uses. The area in Bern Township from Cross Keys Road north to Sillman Road is zoned "RR - Rural Residential". The intent of this district is to "... permit limited residential development at low densities in an area predominantly characterized by farmland and wood land." Only single family dwelling are permitted in this district. An "UR - Urban Residential" district surrounds all of Leesport Borough located west of the Schuylkill River. This zoning district provides for higher density residential development - ranging from single family detached dwellings to townhouse, apartment houses, and mobile home parks. The Schuylkill River serves as a natural buffer between Bern and Ontelaunee Townships. The portions of Leesport west of the River which are located adjacent to Bern Township are all identified for low density residential

uses - which is generally compatible with the "Urban Residential" zoning category in the Township.

Centre Township - Centre Township is located on the western side of the Schulykill River, bordering portions of all three planning area municipalities. Virtually all of Centre Township adjacent to the river is included in the "R-2 Suburban Residential" district, whose purpose is to "encourage residential development which will blend in with existing uses." Permitted uses in this district include farming/agriculture, single family detached dwellings, semi-detached dwellings, planned residential developments (PRDs) and mobile home parks (by special exception). The extreme northeastern corner of Centre Township is in the "R-1 Farm" district, which encourages conservation of the rural character. As is the case with Bern Township, the Schuylkill River serves as a natural buffer between it and the two Planning Area townships. The portion of Centre Township located adjacent to the proposed low density residential areas in Leesport Borough is zoned "Suburban Residential".

Tilden Township - A small portion of Tilden Township is located across the Schuvlkill River on the western boundary of Perry Township. The small portion of Tilden Township located between the Centre Township line and the Berne Bridge is zoned "R-2 Residential", which permits agricultural uses and single family dwellings by right, along with residential clusters and selected community facility uses by special exception. The remaining portion of Tilden Township adjacent to the planning area is zoned "OS -Open Space", which permits agriculture and low intensity parks and recreation areas, but prohibits any buildings. The Schuylkill River provides a natural buffer between the two townships.

<u>Shoemakersville Borough</u> - Perry Township surrounds Shoemakersville Borough on three sides. The portion of the Borough adjacent to Perry Township, along Route 61 is in commercial uses. The majority of the remaining portions of the Borough adjacent to the Township line are zoned for residential uses. The proposed Perry Township land use located adjacent to the Borough are generally consistent with the Borough's zoning.

Berks County - The Berks County Comprehensive Plan Revision (December 1991) included a proposed Berks County Land Use Plan for the Year 2010. The County Plan identifies the Schuylkill River and numerous stream valleys as Environmental Hazard Areas and portions of the Lake Ontelaunee Watershed as Environmentally Sensitive Areas. The vast majority of Perry Township and the northernmost portion of Ontelaunee Township are proposed for Agricultural Preservation in the County Plan. Future growth areas in the County's plan are proposed around the Boroughs of Leesport and Shoemakersville in Ontelaunee and Perry Townships, respectively, between the Schuylkill River and Route 61 south of Leesport, and throughout southern Ontelaunee Township south of the Lake Ontelaunee Watershed. Limited development areas identified on the County Land Use Plan Map include area surrounding the Lake Ontelaunee Watershed in Ontelaunee Township; the Birch Hill Road/Shoemakersville Road area in Ontelaunee and Perry Townships; and the Stone Hill Road and Virginville areas in Perry Township. The proposed distribution of future

land uses in the Planning Area, as depicted on the Future Land Use Map, is consistent with the land use proposals in the County Plan.

#### TRANSPORTATION PLAN

The following is a summary of the recommended improvements resulting from the Planning Area roadway inventory conducted in the summer of 1995. In some cases, specifically along PA 61, improvements have already been designed and are currently scheduled for implementation by the Pennsylvania Department of Transportation (PennDOT). PennDOT's proposed improvements includes limiting crossaccess at various locations along PA 61; construction of a Jersey Barrier; improvements including signalization at three intersections along PA 61; left turn lanes where warranted; and minor grade adjustments at several of the intersections. The recommended improvements are categorized by municipality within the planning area.

#### **PROPOSED ROADWAY IMPROVEMENTS**

#### **PERRY TOWNSHIP**

- 1. **PA 61 and Hughes Hill Road** (area designated as #22 on the inventory map). This intersection falls on or near the Perry/Windsor Township line. While this intersection is not included in PennDOT's plans for improvements to PA 61, the area directly serves residents of Perry Township. As the problem appears to be primarily related to left turns from Northbound PA 61 and left turns from Hughes Hill Road because of lack of sight distance and the skew of the intersection, it is recommended that Perry Township work with Windsor Township and PennDOT to (1) eliminate the left turns or (2) improve the sight distance by realigning Hughes Hill Road or working to improve the approach grade on PA 61.
- 2. PA 61/Zion's Church Road/Main Street/Hughes Hill Road - (area #23). This intersection has been of concern for a long time. Very few drivers try to enter PA 61 from this intersection because of the limited sight distance. In addition to the sight distance, the configuration of Main Street and Hughes Hill Road is a problem because of the alignment the roads have with each other and with PA 61. PennDOT is not intending to install a traffic

signal at this intersection as it does not currently meet warrants. However, the conduits and similar facilities for future signalization of the intersection will be installed as part of the proposed PA 61 improvements. The improvements currently proposed for the intersection include the addition of left turn lanes on PA 61 for both Northbound and Southbound traffic. The intersection with Main Street and Hughes Hill Road will be realigned. A spur intersection will be utilized to access these roads. The spur will be aligned directly opposite the intersection with Zion's Church Road In addition to the realignments, the grades will be lowered on both PA 61 and the local approaches to increase sight distance.

It should be noted that PennDOT intends to evaluate the traffic flow at the intersection again before making a final determination on whether or not a traffic signal will be installed as part of this maintenance project.

3. **PA 61 and Bellevue Avenue** - (area #24). This intersection is a problem because of left turns and cross traffic. Traffic must cross two or four lanes. The PA 61 approaches do not currently have protected turning lanes. PennDOT is planning to install left turn lanes for both northbound and

southbound traffic and to make some minor grade adjustments to the western approach.

4. **PA 61/Ridge Road/Church Avenue** - (area #25). This intersection has poor approach sight distance and unprotected left turns. PennDOT is planning to construct designated left turn lanes on both northbound and southbound PA 61. Some minor grade adjustments are also proposed for the Ridge Road approach. The adjustments should improve the sight distance.

The Church Avenue approach intersects PA 61 at a skew. Sight distance for vehicles turning left onto PA 61 northbound is limited because of the skew. While PennDOT has no plans for restricting this movement, Perry Township and Shoemakersville Borough may want to consider discussing this issue with PennDOT to possibly prohibit the left turns. The intersection is located in Perry Township; however, Church Avenue predominantly serves the residents of Shoemakersville.

5. **PA 61 and Shoemakersville Road** - (area #26). This intersection has very limited sight distance for northbound and southbound vehicles on PA 61. The recent installation of advance warning signs on PA 61 appears to have helped alert drivers to the hazard; however, the warning lights have not solved the

problem.

PennDOT is proposing to construct designated left turn lanes for northbound and southbound PA 61 traffic. This will greatly reduce or eliminate the rearend collision hazard for PA 61 traffic; however, the left turns and cross traffic from Shoemakersville Road will still have limited sight distance. Perry Township should work with PennDOT to develop a sight distance improvement strategy including grade adjustments to PA 61 and Shoemakersville Road along with any required earthwork to remove the embankments adjacent to the intersection.

6. The County Bridge at Five Locks Road - (area #21). This bridge is showing signs of deterioration and neglect. The bridge is currently posted with a 3-ton weight limit. Perry Township should work with the County in making the necessary repairs to this bridge. The bridge deck appears to be in need of repair and resurfacing. While the Township has little or no jurisdiction on this structure, it does serve the residents of the Township. Efforts to upgrade and maintain the structure should be implemented as soon as possible. A maintenance program should be developed for the structure and the repairs recommended as a result of regular inspections should be performed in a timely manner.

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7. Water Street Railroad Crossing (grade crossing) -(area #20). This location is very hazardous. While Water Street does not appear to be as heavily used as most of the other roads in Perry Township, it is a primary access for a large area of land that may be developed in the future. The severe right angle turns and approximate 20% to 30% grade on the western approach restrict the available sight distance. In addition to the restricted sight distance, the narrow section of road that crosses the tracks does not allow adequate space to avoid an oncoming vehicle.

> Perry Township should work with PennDOT (believed to have assumed responsibility for the Schuylkill Secondary Line) and Conrail to adjust the approach grades of the crossing and to realign the crossing to allow for easier maneuverability through the crossing. As the area served by Water Street develops in the future, consideration should be given to the installation of a crossing signal at this location if the rail lines are still in service. The installation of a signal prior to any grade or alignment adjustments would make the area safer for conflicts between rail and motor vehicles but would not address the conflict between vehicles on opposing approaches to the crossing.

8. Water Street Railroad Underpass - (area #19). This location has very limited sight distance caused by the right angle turns and the view obstruction created by the rail overpass structure. The width of the road is a maximum of 15' and has an under clearance of 11'-6". It would be difficult and costly to upgrade the structure to eliminate the traffic hazard.

The recommended improvements to this area include restricting the area to a one-lane underpass by installing stop signs and signs advising motorists to yield to traffic in the underpass. Other improvements, including storm drainage upgrades, should also be considered.

9. Kerns Road between Heather Road and Birch Hill Road - (area #10). This area is very narrow, 13' - 15', and is currently two-way. Because the section of road is limited in length and there is not much area available for widening, it is recommended that this section of the road be considered for a one-way restriction. The restriction is recommended in a northerly direction from Heather Road to Birch Hill Road The restriction does not appear to present a severe imposition for the few properties served by the section of road.

10. PA 662/Dreibelbis Mill Road/Skyline Drive - (area #38) This intersection is a heavily used area. Because this area will more densely develop in the future, improvements at this intersection are essential. The intersection of PA 662 and Skyline Drive's southern approach appears to be a problem area because of the limited sight distance and the approach grades from the south and west. (While sight distance has recently been improved at Skyline Drive by removing the bank, it could be further improved by grade alignment.) Unfamiliarity with the area could lead drivers headed east on PA 662 to enter Skyline Drive especially at night. The Dreibelbis Mill Road intersection on the north side of PA 662 provides a broad intersection opening. The lack of a visual barrier creates a hazard that allows motorists too much freedom in choosing a travel path. In addition, the sight distance from Dreibelbis Mill Road looking east on PA 662 is very limited.

> It is recommended that Perry Township work with PennDOT to realign the approaches to the intersection and to adjust the grades to provide better sight distance. There appears to be adequate area available for both major and minor adjustments of these roads. It appears that PA 662 and Skyline Drive are in need of the most adjustment.

- 11. Windsor Castle Road at Windsor Township Line -(area #37). This section of road is winding and narrow. In addition, the outside lane is 1' to 2' wider than the inside lane. The road should be widened. The widening should preferably occur along the inside edge of the road. This will aid in improving sight distance as well as providing a wider travel area for vehicles. Shoulder grading should also be performed to help provide improved drainage.
- 12. Windsor Castle Road south of Fairview Road (area #36). This section of road has a severe curve that limits sight distance and hides at least one driveway. The sight distance is reduced because of a high embankment. The embankment should be cut back as much as possible. In addition, the Township should consider widening the road on the inside of the curve to help improve maneuverability. Consideration should also be given to the installation of warning signs recommending a reduced speed and advising of the hidden driveway. The curve sign should recommend a reduced speed of 15 mph.
- 13. **PA 662 between West Shore Drive and Windsor Castle Road** - (area #28). The area in question is a severe curve that is currently posted with a 15 mph warning sign. It appears that traffic does not obey

the warning sign. This is a problem, especially for southbound vehicles, because it causes the vehicles to veer into the northbound lane. It should also be noted that some northbound traffic cuts the corner short by cutting through the southbound lane. Improvements recommended at this location include straightening and widening the curve. If enough travel area is provided for vehicles to maneuver through the curve at the posted speed limit, the problem will be greatly reduced. Another option would be to lower the speed limit on the road (if warranted). The Township should work with PennDOT to address this area.

14. **PA 662 and West Shore Drive** - (area #29). The main problem at this location appears to be the adverse grades traversed when making a left turn from eastbound PA 662 onto West Shore Drive The problem appears to be somewhat related to the alignment of PA 662 at this location. It appears that PA 662 should be straightened or the lines of the curve should be smoothed. In addition, the West Shore Drive approach should have some minor grade adjustments. While sight distance appears to be adequate, it could be improved. The Township should work with PennDOT to address this area.

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- 15. **PA 662 and Ontelaunee Trail** (area #31). This area's predominant problem is the limited sight distance experienced on all approaches. There is a severe vertical curve east of the intersection that appears to be the cause of the limited sight distance. It is recommended that the grades on the eastern approach be adjusted accordingly to raise the elevation of the approach. This change will increase the sight distance. The Township should work with PennDOT to address this area.
- 16. **PA 143 Bridge to Virginville** (area #32). The bridge at this location is currently a one lane bridge with a 3-ton weight limit. Plans for the replacement of the bridge are being implemented.
- 17. **PA 143 and Virginville Road** (area #33). Vehicles turning right from PA 143 on to Virginville Road must traverse steep right turns. Because of the grades and the topography of the surrounding areas, widening the road and making grade adjustments would be costly and difficult. The major concern in the area is the deterioration of the roadway that appears to be caused by the movements required to travel the road. It is recommended that the paving be repaired and maintained in order to minimize the effort required to negotiate the area. The Township should work with PennDOT to address this area.

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- Virginville Road and Witchcraft Road (area #34). 18. The road surface at this intersection is difficult to negotiate because of the adverse paving grade transitions, especially at the northwest corner of the intersection. The grades of the roads and the skewed angle of intersection appear to be the primary cause of the problem. Realignment of Witchcraft Road to reduce the angle of intersection with Virginville Road would be the best solution; however, the size and use of the adjacent properties would make this difficult and costly. It is recommended that the grade on Witchcraft Road be adjusted to reduce the severity of the transition and that minor adjustments in the northwest corner of the intersection, including widening, would reduce the problems at this intersection. Consideration should be given to obtaining the property to realign Witchcraft Road if the property becomes available.
- 19. **Grandview Road and Fairview Road** western intersection (area #35). The main problem in this area is the road grades. Fairview Road has a grade of approximately 15%. This in combination with the skewed angle of the intersection creates undesirable conditions, especially in winter months. The sight distance at this intersection appears to be adequate. It is recommended that consideration be given to adjust the grades at the intersection to make it safer

in poor weather conditions. Widening the eastern side of the intersection would also help reduce the skew.

- 20. Mohrsville Road - (areas #17 and #18). These areas are sections of roadway that appear to be prone to flooding because of their location with regard to the Schuylkill River. While these sections of roadway are approximately 15' above the mean elevation of the river, They are low in the drainage basins and appear to have inadequate culverts to convey the upstream flows to the river. The flooding of these locations has also caused the roadway to deteriorate. It is recommended that the culverts across the road be upgraded as necessary and that the road be reconstructed with an open graded subbase. The open graded subbase would allow the excessive flows to be conveyed through a layer of stone and would limit the amount of water that ponds on the upstream side of the road.
- 21. **PA 662 and Stitzel Lane** (area #30). This intersection's problem is not as much related to alignment as it is the degree of curvature on the through movement on PA 662. The curve located at this intersection is narrow and provides limited sight distance. Large trucks frequently use both lanes to maneuver the curve. It is recommended that the

curve be widened; however, there is limited area available for widening. The intersection may meet warrants for multiple stop controls. The multiple stop controls will help ease the sight distance problem but will have limited impact on the degree of curvature and the maneuverability of the curve. It is recommended that the Township works with PennDOT to make improvements including widening or possible realignment of PA 662.

#### **ONTELAUNEE TOWNSHIP**

- 1. **PA 61 and Mohrsville Road** (area #11). This intersection is heavily used on a daily basis, especially on Wednesdays when the Leesport Farmers' Market is open. Northbound PA 61 traffic desiring to make a left turn onto Mohrsville Road has no designated left turn lane. Rear end collisions are not uncommon. PennDOT has proposed to construct a designated left turn lane at this intersection. PennDOT is also proposing to install a traffic signal at this intersection.
- 2. **PA 61 and Bellman's Church Road** (area #12). PennDOT is proposing to signalize this intersection and to provide designated left turn lanes for both northbound and southbound PA 61 traffic. The southbound turn lane will be necessary, as left turns

at the northern intersection of PA 61 and Indian Manor Drive (area #12) will be prohibited. The traffic signal will also allow easier left turn movements from Bellman's Church Road onto PA 61 south, as left turns from the southern intersection of Indian Manor Drive onto PA 61 south will be prohibited.

- 3. **PA 61 south of Orchard Lane** (area #7). This area is of limited concern because of the potential for development. There is a vacant lot adjacent to the existing gas station/convenience store. The development of this lot could potentially create too many entrances to a major artery in a relatively small section of PA 61. The Township should work with PennDOT to try to develop a parallel access drive to enter this and other properties from the rear by using the existing protection of the traffic signal at Orchard Lane.
- 4. **PA 61 and PA 73** (area #6). This intersection is very heavily used. The main concern is that future development in this area, including Berks Products Quarry, the Schuylkill Valley School campus, and properties adjacent to the Ames warehouse facilities will greatly increase the use of this intersection. The Township should work with PennDOT to monitor this intersection and to maintain the road surfaces in

order to keep the intersection safe.

- 5. **PA 61 and Snyder Road** (area #2). This intersection is frequently the site of rear end collisions. There is no protected left turn lane for the heavy southbound PA 61 left turn movement. The southbound approach sight distance is also limited for the speeds typically experienced on this section of PA 61. Traffic making the right turn from Snyder Road onto northbound PA 61 sometimes creates a problem during peak traffic periods. The township should work with PennDOT to develop a plan to provide left turn lanes for both northbound and southbound PA 61 and possibly provide a traffic signal at this location.
- 6. **PA 61 and Berkley Road** (area #1). This intersection is frequently used by trucks. There is limited sight distance on both the northbound and southbound PA 61 approaches as a result of a railroad bridge near the southbound approach and the road grades on the northbound approach. The Township should consider working with PennDOT to eliminate the movements at this intersection and make improvements to parallel roads to allow the traffic to utilize a signal at the Snyder Road intersection (as noted in No. 5 above).
- 7. Willow Creek Road (area #3). This road is important because it is the main access to several large properties in the southeast portion of the Township. The road is narrow and surrounded by wet areas. The road is difficult for the Township to maintain, yet it has the potential for being very heavily used if any of the larger properties that it serves would be developed. It is recommended that the Township develop a plan, including an implementation schedule, for this road. The plan should address drainage, geometry and environmental issues.
- 8. **Heffner Lane and Slater Road** (area #4). This intersection is awkward because of the skew and the location in reference to the railroad crossing. The poor sight distance at this location is compounded by the larger trucks that serve the local intensive type agriculture located east of the intersection. The Township should consider widening the intersection to adjust the alignment of Slater Road. This will improve sight distance.

Slater Road had considerable maintenance performed on it in 1990, including base repairs, minor widening, levelling and overlay. The deterioration of this road appears to be related to the truck traffic, even though it is limited, and the fact that the trees along certain sections of the road shade the road and prevent it from drying after storm events. The Township should consider posting a weight limit on Slater Rd. and requiring trucks that use the road to bond against damage. the Township should also consider removing some of the trees along the road.

- 9. **Bower's Road Bridge** (area #5). This steel bridge is currently posted with a 3 ton weight limit. In addition to the weight limit, the approaches to the bridge are awkward and the road is narrow. The Township should consider replacing or upgrading the bridge to a allow for a minimum 10 ton weight limit. Replacement of the structure would allow the approaches to be better aligned and the road could be widened. The 10 ton weight limit would permit school buses to use the route to better serve the residents in the southeast portion of the Township.
- 10. Ontelaunee Drive and Kindt Corner Road (area #8). This intersection appears to be a heavily used area as a result of the Ames distribution center. The sight distance at this intersection could be improved. The road surface is severely weathered, creating a slippery surface in any wet weather conditions. This intersection and the surrounding roads were not designed to accommodate the amount of traffic they experience. The Township should consider

improving sight distance at this intersection. In addition to the sight distance improvements, the Township should consider posting weight limits on the roads and requiring bonding from the trucks that use the roads to repair any damage caused by the trucks.

- 11. Kerns Road and Ontelaunee Drive (area #9). The turning movements at this intersection have very limited sight distance. The limited sight distance appears to be a result of the adverse grades of the roads and the location of the intersection with regard to the curve on Ontelaunee Drive. Traffic turning left from the southern approach must blindly cross the southbound traffic lane. The Township should consider adjusting the grades of the roads, especially Kerns Road, and improving the sight distance by widening the inside of the curve adjacent to the gun club property. It may also be necessary to prohibit the left turn from Ontelaunee Drive on to Kerns Road.
- 12. Farm Market Access In order to ease some of the congestion created by the volume of traffic entering and leaving the market, an additional access may be constructed to connect the market to either Loose Lane or Kindt Corner Road. It appears that the market property has frontage or access to frontage on

both of these roads. This additional access to the market would help ease congestion for traffic whose destination is south on PA 61 or PA 73. The traffic would have a more direct access to Ontelaunee Drive. Ontelaunee Drive has easy access via a traffic signal controlled intersection to PA 73. PA 73 has easy access to both PA 61 and U.S. 222. This possible connection could reduce the amount of traffic entering PA 61 via Indian Manor Drive.

#### LEESPORT BOROUGH

- 1. PA 61 and Arlington Drive (area #13). This intersection is directly impacted by the Leesport Farmers' Market. There is inadequate sight distance for left turns on and off of PA 61. PennDOT is proposing to construct a Jersey barrier median across this intersection to prohibit left turns. Right turns from Arlington Drive onto PA 61 are also difficult. The alignment with Indian Manor Drive compounds the problem. The Borough should consider prohibiting all turns from Arlington Drive onto PA 61.
- 2. **PA 61 and Shackamaxon Street** (area #14). The major problem at this intersection appears to be left turns from Shackamaxon onto PA 61. The sight distance is limited to about 200'. In addition, the

approach grade of Shackamaxon is awkward because of the way it intersects PA 61. The Borough should work with PennDOT to evaluate whether or not the adjustment of the approach grade is necessary. The Borough should also consider prohibiting left turns onto PA 61. It does not appear that the sight distance could be improved at this intersection because of the buildings adjacent to the intersection and because of the grades on PA 61.

- 3. West Main Street (area #15). The street is very narrow from the railroad crossing west. There is also a reverse curve that larger vehicles have difficulty negotiating. The street is two-way. The limited space between buildings and the railroad crossing make it difficult to provide realignment and widening of the street. There does not appear to be a solution to this problem that does not impact many residents and businesses of the Borough. It is recommended that the Borough conduct a study that includes the restriction of commercial vehicles on Main Street; the purchase of properties along the area in question; and an analysis of alternate routes to the western portion of the Borough.
- 4. **Main Street Bridge across the Schuylkill River** The bridge is very narrow. It includes two (2) vehicle travel lanes, each approximately 10 feet in width,

## THE COMPREHENSIVE PLAN

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and a 3-foot wide sidewalk. The bridge is in need of some cosmetic repairs. The main concern is how the bridge accommodates traffic. The travel lanes do not appear wide enough to accommodate passing commercial vehicles. One solution the Borough should consider is to eliminate the sidewalk portion of the bridge and use the area to widen the travel lanes. A new sidewalk area may be able to be cantilevered on the side of the bridge. While this option will widen the travel lanes, the lanes will still be less than a desirable width of 14 feet.

The Borough should also consider the replacement of the bridge or the construction of a new bridge at a different location. The construction of a new bridge at a different location could also address the concerns raised in Item 3 above. A traffic study and feasibility study should be performed in order to determine the best solution for the maintenance of traffic on Main Street.

5. **Parking** - While parking is a necessity as a result of the use of automobiles, it is usually forgotten or is outdated. The Borough experiences parking problems because of the mix of uses in the "Main Street" type of layout that makes up the eastern portion of the Borough. As part of the previously recommended traffic study, The Borough should include a parking study. A central or community parking facility owned and maintained by either the Borough or a private entity appears to be the best solution for the area. However, economic impacts and the availability of land for such a facility is limited.

The Borough may also consider parking ordinances that restrict the times of day that parking is available on Borough streets. The ordinances could also make land owners responsible for adequate parking with regard to their respective properties. Enforcement becomes an issue with regard to these solutions and the fact that ordinances are not typically retroactive will only allow the ordinances to address future situations and not deal with the current problems.

6. **Canal Street** - While this area is not designated a problem area, there is a potential for industrial development along the rail lines in the southern portion of the Borough. It is recommended that this street be improved from the Borough south to Orchard Lane in Ontelaunee Township. The improvement of this road to Orchard Lane will allow truck traffic to use existing improved facilities to access possible industrial sites. This may also serve as and alternate route for some of the traffic currently using the Main Street Bridge.

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## FUTURE TRANSPORTATION PLANNING

The three municipalities in the study area should take continually active roles in making transportation improvements. The following recommendations should be considered in future transportation planning.

- 1. Develop a five-year road improvements program to be updated annually or biannually. The program should include prioritization of necessary improvements as well as normal maintenance issues.
- 2. Encourage developers' contribution to improvements of public facilities adjacent to development. Past improvements have failed to keep pace with the growth of the municipalities.
- 3. Expand efforts in both short and long range planning by identifying deficiencies and improvements required to correct these deficiencies.
- 4. Develop and enforce ordinances that protect the integrity of the municipalities with regard to the transportation network. Ordinances that require detailed study of traffic flows, both existing and projected, and parking needs will keep the potential problems under control of the municipality.

- 5. Work with PennDOT to promote continued maintenance and improvement of State- funded highways in the municipalities.
- 6. Develop and revise local regulations to limit the number of private intersections with municipal roads, especially arterials and major collectors.
- 7. Adopt and adhere to minimum roadway design criteria for both privately and publicly funded projects. PennDOT and AASHTO guidelines are recommended.
- 8. Use the options available under the Pennsylvania Municipal Planning code to identify, obtain and preserve rights-of-way that may be required for future road construction and improvements.
- 9. Re-evaluate the recommendations outlined in this plan on a 3-year to 5-year basis.
- 10. Coordinate projects involving State highways with Berks County, with the goal of having them included in PennDOT's 12-Year Transportation Capital Improvement Program.
- 11. Encourage local business and industry to utilize the railroad to ship goods and raw materials. This will

help reduce the amount of truck traffic and congestion associated with shipping materials by motor freight.

#### **OTHER TRANSPORTATION FACILITIES**

The limited amount of public transportation services currently made available to Planning Area residents should, at a minimum, be maintained. Any improvements and/or expansions in service would, however, provide better opportunities for Planning Area residents to avail themselves of such services.

The Planning Area's ordinances governing land development should be updated to provide for alternate transportation system management strategies, such as van/car pooling, park-and-ride, etc.

Both air and rail transportation facilities will continue to play a minimal role in serving the needs of Planning Area residents. They will have to travel outside of the Planning Area to avail themselves of these services. An identified system of pedestrian and bicycle ways should be developed to enable non-automotive traffic to flow freely and safely throughout the Planning Area. The ideal system for movement of pedestrians would be the provision of pedestrian ways, separated from vehicular traffic. Developing such a system, requires large areas of undeveloped land or the extensive acquisition of rights-ofway from existing landowners. It is recommended that the existing sidewalk network in the developed areas of the Planning Area be used for pedestrian movement. Improved signage and markings may be required at intersections of major vehicular routes. In the case of new development, it is recommended that, where topography and site designs allow, separate pedestrian ways be provided.

The provision of separate bicycle paths meets obstacles similar to those confronting the development of pedestrian ways. A reasonable solution is the identification of certain roadways as bicycle routes. This alternative does not separate automotive from bicycle traffic but, with careful route selection and adequate safety precautions, the system can be successful.

#### HOUSING PLAN

The population of the Planning Area is projected to continue to increase into the foreseeable future. In order to accommodate this increased population, additional housing units will need to be provided. There will be a need for a mix of types of housing units so that individuals of all age groups, family size and economic level have equal opportunities to reside in the Planning Area.

One of this Plan's overall goals, as stated in Chapter 3, is "To provide for the diverse housing needs of all planning area residents."

Specific housing objectives include the following:

- Encourage the development of a full range of housing types in order to meet the varying needs of all families, including a wide range of choices in housing types, costs and location.
- Encourage the rehabilitation, replacement or elimination of physically unsound or poorly located structures and facilities.

Encourage housing and development procedures (such as cluster and PRD) which in addition to protecting established values, permit experimentation in housing types, construction methods, new materials and

The existing Planning Area Zoning Ordinances generally provide the specific detailed regulations to support the accomplishment of this Joint Comprehensive Plan's stated housing goals. Numerous dwelling types are currently permitted in the three municipalities' various zoning districts.

arrangement of units.

In Leesport Borough, single family detached dwellings are permitted in both the R-1 and R-2 zoning districts. In the R-2 district the following dwelling types are also permitted (either by right or spacial exception): single-family semidetached dwellings, two family detached and semi-detached dwellings, attached dwellings (townhouses), multi-family dwellings, and mobile home parks. Multi-family dwellings, conversion apartments and combination dwellings/businesses are permitted in the CC (Community Commercial) district. Although the Future Land Use Map proposes some reduction in residential land use in the Borough, nevertheless, there remains numerous

THE COMPREHENSIVE PLAN

opportunities for new construction and/or conversion of existing structures for residential purposes.

The current Ontelaunee Township Zoning Ordinance provides for single family detached dwellings in the A-1, A-2, R-1 and R-2 zoning districts - on lots ranging from 10,000 SF (in the R-2 district with public water and sewer service) to one acre everywhere else. Single-family semi-detached dwellings, two family detached dwellings, and multi-family dwellings are also permitted in the R-2 district. Mobile home parks are permitted only in the A-2 zoning district. While the Township currently has a considerable amount of land area zoned R-1, there is only one area (adjacent to Leesport Borough) zoned R-2, and only two relatively small areas zoned A-2 (including one in the northwestern portion of the Township which is comprised in large part by Conservancy land). As the Future Land Use Map does not propose any increase in medium density residential (R-2) land use, and proposes the elimination of the A-2 type land use in the northwest, the Township should review its zoning ordinance after the adoption of this Plan to ensure that opportunities exist in the Township for development of the various types of residential uses.

The Perry Township Zoning Ordinance provides for single family dwellings in the RA, RA-1, R-1 and R-2 zoning districts, as well as part of Planned Residential Developments (which are permitted in the RA, R-2 and R-3 districts). Two-family dwellings are permitted in the R-2 district, while garden apartments and mobile home parks are permitted (by right and by special exception, respectively). The Township's Planned Residential Development Ordinance permits a mix of dwelling types to be constructed, including single family detached dwellings, single-family semi-detached dwellings, single-family attached dwellings (townhouses), two family attached dwellings, three-family dwellings and multi-family dwellings. In the RA and RA-1 districts, the minimum lot size for single family detached dwellings is two (2) acres. In the R-1 district, lot minimum lot sizes range from 20,000 SF (with public water and sewer) to one (1) acre (without). Minimum lots sizes for single family dwellings in the R-2 district range from 10,000 SF (with public water and sewer) to 30,000 SF (without). The Future Land Use Map proposes a reasonably large area for medium density (R-2) residential development north of Shoemakersville Borough (west of PA 61). High density residential uses are proposed east of PA 61 and north of PA 662.

In order to provide for their fair share of affordable and specialized housing opportunities within the county, the three Planning Area municipalities should consider building into their zoning and subdivision/land development ordinances a system that ensures that a fixed portion of all residential development will be set aside for the affordable housing needs of the moderate, low, and very low income households and the specialized housing needs of elderly and disabled individuals anticipated to reside within that municipality. This can be done most efficiently by incorporating inclusionary provisions within the municipal zoning regulations that provide realistic incentives for developers to set aside a certain percentage of units in their proposed development for affordable and specialized housing needs. These incentives can take the form of density bonuses, flexible development and building standards, fast tracking the review process, and waivers and reductions in development fees. These incentives could also include financial assistance from county, state and federal governments to help subsidize the costs of providing affordable and specialized housing. Inclusionary zoning would not only allow each municipality to meet its fair share obligations, but it would enable a municipality to do so in a way that results in diverse and integrated

#### THE COMPREHENSIVE PLAN

communities that provide housing opportunities for persons from all generations, cultures, and economic backgrounds.

It is anticipated that comprehensive updates of the three municipalities' zoning and subdivision/land development ordinances will be initiated after adoption of this Joint Comprehensive Plan, which will include an examination of additional techniques to promote the goals and objectives of both the Planning Area's and the County's housing goals.

#### **COMMUNITY FACILITIES AND UTILITIES PLAN**

Services and facilities must be provided according to the existing and projected needs of a community. It is important that these facilities be readily available. Therefore, suitable land which is conveniently located should be reserved for those purposes, and a capital budget should be established so that such facilities can be provided without incurring an excessive bonded indebtedness.

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#### **POLICE PROTECTION**

The population projections for the Planning Area indicate that additional full-time police officers may be required in the future in the Leesport and Maidencreek/Ontelaunee departments. In addition, there could possibly be a need for additional clerical help. Budgeting in future years will have to take into consideration the increased requirements for equipment, vehicles and manpower.

In Perry Township, the Board of Supervisors should periodically review the level of service provided by the Pennsylvania State Police. Future increases in the Township population and in non-residential development may dictate the examination of providing local police coverage - either through a Township force, a regional arrangement, or through purchase of service from one or more adjacent municipalities.

#### FIRE PROTECTION AND AMBULANCE SERVICES

Based on current standards, the fire protection and ambulance services provided by the companies serving the Planning Area municipalities, as well as the adjacent fire companies and ambulance services (working through cooperative agreements), appear adequate for existing as well as expected needs during the planning period. With continued development in the Planning Area, however, these services should be periodically reviewed by the local municipalities to ensure that there are continuing to meet the local needs.

#### **SCHOOL FACILITIES**

The educational needs of the Planning Area municipalities appear to be adequately addressed by the Schuylkill Valley and Hamburg Area School Districts. With the newly constructed Schuylkill Valley Elementary School and renovations at the High School, the school facilities serving the Leesport Borough / Ontelaunee Township portion of the Planning Area appear to have sufficient capacity to serve the anticipated needs area through the year 2000.

The construction of the new Hamburg Area Middle School will alleviate overcrowding and result in sufficient student capacity at all levels through at least the year 2000.

## THE COMPREHENSIVE PLAN

#### **MUNICIPAL FACILITIES**

Perry Township is fortunate to have a structure that was constructed specifically for use as a municipal building. As the population of the Township continues to grow, and as additional municipal services are made available to Township residents, additional space may be required for administration and equipment. Suitable land which is conveniently located should be reserved for those purposes, and a capital budget should be established so that such facilities can be provided without incurring an excessive bonded indebtedness.

The municipal buildings serving both Leesport Borough and Ontelaunee Township are limited in terms of administrative and public meeting spaces. In addition, when the proposed Route 61 improvements are constructed, access to the Ontelaunee Township building will be more difficult. Both the Borough and the Township should investigate ways to provide future administrative and meeting space, and to insure accessibility.

#### WATER SERVICE

The Community Facilities and Utilities Plan proposes the extension of public water service to serve areas within the Planning Area proposed for more intensive development. The Planning Area municipalities should encourage the provision of public water service to all new development locating in these areas, including areas proposed for residential, commercial and industrial development.

Those portions of the Planning Area not served by, or proposed for, public water service will continue to rely on on-site wells for water. Local ordinances should be reviewed and updated, if necessary, to insure that new development has access to safe and reliable supplies of water.

#### SANITARY SEWERAGE SERVICE

Both Ontelaunee and Perry Township's Sewage Facilities (Act 537) Plans propose the extension of public sewers developed and developing areas of the Planning Area, along with the continued use of on lot disposal where public sewers are not provided. The areas outside sewer service areas will be subject to additional regulatory scrutiny due to environmental limitations for on-lot sewage disposal. These areas must also be reviewed in terms of the Township's current zoning and subdivision/land development regulations to determine if revisions to said ordinances must be made to ensure the continued reliance on such sewage disposal facilities. Public sewerage facilities are not proposed for outside the areas planned for development unless necessary to alleviate a sewage disposal problem which can not be solved by other means.

#### **STORMWATER DRAINAGE**

As development occurs within the Planning Area and areas adjacent to it, problems resulting from stormwater runoff will increase. Act 167 Stormwater Management Plans are scheduled to be completed for both the Schuylkill River and Maiden Creek Basins in the foreseeable future. The Planning Area municipalities should adopt and/or modify zoning, subdivision and land development, building code, erosion and sedimentation and other ordinances as necessary to regulate development in a manner consistent with the recommendations of these Act 167 Plans, as well as other County, State and Federally-mandated regulations.

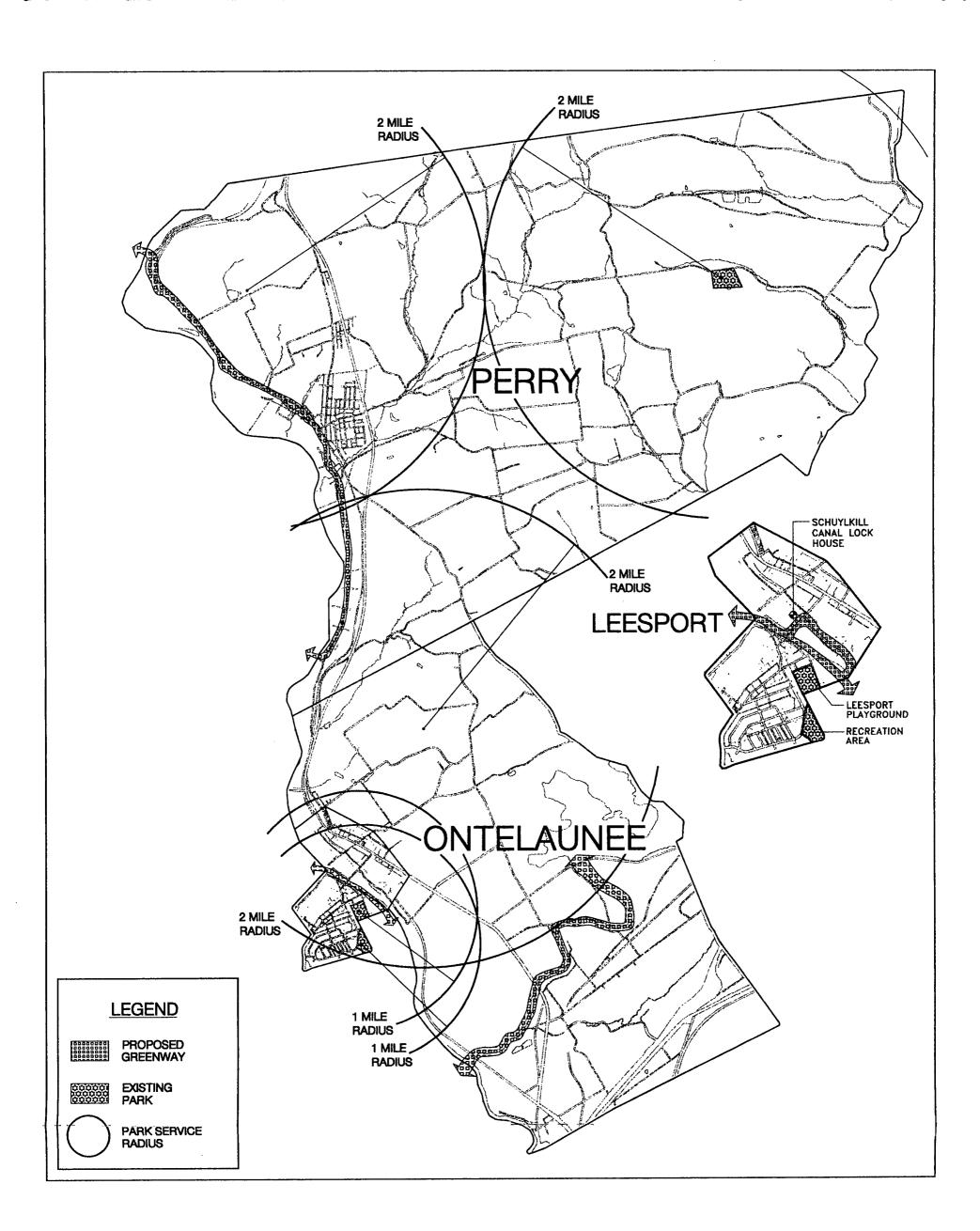
#### **RECREATION, PARKS AND OPEN SPACE PLAN**

As previously identified, a detailed Recreation, Parks and Open Space element has been prepared as part of the Joint Comprehensive Plan. The Recreation, Parks and Open Space Plan element includes a detailed analysis of the Planning Area's existing public and private recreation, parks and open space, identifies standards based on the existing and projected population, and provides detailed recommendations (including estimated costs) to meet the identified standards. A summary of the Plan's objectives and recommendations follows:

#### **OBJECTIVES**

#### **Objective 1**

Continue to assess community recreation needs and maximize the use of existing park facilities given the expanding needs and interests of the community.



## **RETTEW**

Associates, Inc.

ENGINEERS-PLANNERS-ENVIROMENTAL CONSULTANTS-LANDSCAPE ARCHITECTS-SURVEYORS

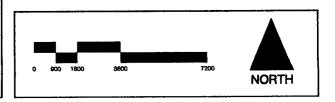
LANCASTER, PA - MECHANICSBURG, PA - ORWIGSBURG, PA

## Mapping Data Source:

Berks County Mapping Department and Consultant Surveys LEESPORT BOROUGH ONTELAUNEE TOWNSHIP PERRY TOWNSHIP

JOINT COMPREHENSIVE PLAN

PREPARED IN COOPERATION WITH THE BERKS COUNTY PLANNING COMMISSION 8 OPEN SPACE, PARK AND RECREATION MAP



#### **Recommendations**

- 1. Develop park master plans for existing parks which identify improvements and additional recreation facilities. The master plans will serve as a blue print to guide the future development of the parks. Phases should be determined as appropriate to align with available funding/financial resources and the management capabilities of the operating and maintenance departments.
  - Leesport Playground The park is well developed at this time but facilities should be added to expand the park use to all ages and meet accessibility and safety standards. A sand volleyball court should be added in the lawn area. A pathway/trail should be installed which encircles the park to provide accessibility and a surface for walking and in-line skating. The outdated playground equipment must be removed. An age segregated tot lot and playground should be established which complies with safety and accessibility standards. The restrooms and pool area should be renovated to meet accessibility standards.
  - Leesport/Bern Park This park parcel is undeveloped at this time. A master plan should be completed which establishes the direction for development of the park. The Borough has

expressed an interest in developing two basketball courts and a in-line hockey rink which would have winter ice skating use in the park.

- Perry Township Recreation Area This park is well developed offering numerous recreation opportunities to Perry Township residents. A trail should be developed to access each recreation facility and area and an accessible viewing areas should be added at athletic facilities. Develop a park master plan which incorporates a trail, second picnic pavilion and landscaping into the park.
- 2. Each municipality should have a Parks, Recreation, and Open Space Plan. Consideration should be given to a regional recreation plan or joint ventures for plan development. Pursuing a Keystone Community Grant should also be considered.
- 3. The Park and Recreation Boards should consider discussing the potential in indoor recreation programs in cooperation with the School District. Such programs should be fee based to avoid a tax burden. The cost of program personnel should be included in program fees.
- 4. The municipalities should incorporate recreation planning and good design into zoning and sub-division regulations to insure the adequate provision of recreation facilities and trail connections.

5. Stay in tune to trends such as in-line skating and street hockey and monitor the need for associated facilities or existing facility renovations to accommodate such trends.

#### **Objective 2**

Develop a comprehensive greenway network throughout The Planning Area.

#### **Recommendations**

Trail development should be the highest priority for facility development. Each municipality should develop and adopt a trail plan. Request assistance from the Schuylkill River Greenway for the plan. The Plan could be done as a cooperative effort among the three municipalities and others as identified such as Shoemakersville. The municipalities should support the Schuylkill River Greenway plans for trails in the greenway. Making people aware of the importance of trails should be considered and promoted through the newsletters, media, volunteers, and events organized to focus on trails. A trail loop through Leesport should be undertaken as a first priority. Methods of providing the trails through signage and road striping should be considered as the more arduous task of obtaining easements for rights-of way are negotiated. The two greenways are identified as follows:

- Schuylkill River Corridor The Schuylkill River Greenway Association is currently planning a Heritage Park along the entire length of the Schuylkill River. This includes the river in Perry and Ontelaunee Townships and Leesport Borough.
- Maiden Creek Corridor This creek corridor In Ontelaunee Township links the Schuylkill River to Lake Ontelaunee.

#### **Objective 3**

Seek additional park acreage to meet the recreation needs of the current and projected municipal populations. Although The Planning Area's existing park and recreation system provide recreation opportunities to the citizens of the area, analysis revealed that the facilities are not meeting the applied standards based on population.

#### **Recommendations**

1. Amend the mandatory dedication provisions to align with the fair market value of property in each municipality and to further define the criteria of land that the municipality

will accept as recreational land. The minimum size of land that is offered for dedication should contain not more than fifteen percent floodplain. Land offered for dedication should not contain stormwater facilities designed to detain or retain stormwater for another site.

Land calculations for dedication of recreation land should be based on the current average household size and fair market value of land. If the municipality chooses to utilize a per lot fee, the fair market value of an acre of land must be determined. The value of land is dynamic and the municipality should strive to amend a per lot fee on a regular basis by resolution.

- 2. Perry Township should acquire a ten acre minimum size community/municipal park north of Shoemakersville Borough.
- 3. Ontelaunee Township should acquire a ten acre minimum size community/municipal park east of Leesport in the northern portion of the municipality.
- 4. Consider the acquisition of park land if the acquisition meets one or more of the following criteria:
  - The proposed site is compatible with the proposed park facility development.
  - The land will help to preserve significant environmental resources, area that contributes to the community's character, or add acreage to an

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existing facility where acreage need has been established.

- The proposed site will facilitate the completion of a proposed greenway or trail link.
- The site is within an area requiring stream stabilization or stream buffer zone.

Develop additional outdoor recreation facilities within the existing and proposed parks to meet immediate needs of the citizens. The following needs have been identified:

#### Leesport Borough

- 1 Tennis Court
- 1 Soccer Field

#### **Ontelaunee Township**

- 1 Basketball Court
- 1 Tennis Court
- 1 Volleyball Court
- 1 Baseball Field
- 1 Soccer Field
- 1 Softball Field

#### Perry Township

- 2 Tennis Courts
- 1 Softball Field

These facilities were identified to meet current needs. Consideration must be given to trends in sport popularity

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and the possibility of expanding sports seasons. Both spring soccer and fall baseball are currently being played in many municipalities.

#### **Objective 4**

Provide facilities for public use that comply with all accessibility and safety regulations and guidelines.

#### **Recommendations**

- 1. Evaluate the existing park facilities to determine if the Americans with Disabilities Act (ADA) standards are currently being met. Playgrounds must offer play equipment which provides play options for the physically challenged. Pathways should be provided to access facilities within park sites. A playground must be accessible as well as the route to reach the playground. Trails cannot exceed specific slopes, including trails in natural areas.
- 2. Evaluate the playground area at Leesport Playground for compliance with the guidelines of the Consumer Product Safety Commission (CPSC) Guidelines for Public Playground Safety. Much of this equipment does not meet safety guidelines and should be removed. Leesport Borough Road Department should conduct ongoing safety inspections at the playground. Each play equipment piece

should have a use area designated that is surfaced with a safety material which meets the test requirements of the CPSC and the latest ASTM criteria.

- 3. Identify and prioritize improvements needed to bring existing facilities into compliance with the ADA and CPSC. A phased implementation schedule should be developed and improvements should be included in the capital improvement program budget.
- 4. Create policy statements that address the need to comply with all regulations and guidelines with regards to safety and accessibility. The policy statement should commit to the phased improvements implementation and capital expenditure within a set time table. The department should designate one person to lead the compliance efforts and interact with design consultants on master plans for existing facilities.

#### **Objective 5**

Develop a capital improvement program which will guide the planning area capital expenditures. Capital improvements identified in this Plan are outlined below, costs of improvements, as well as a timetable for implementation are provided. This list should be made a part of each municipality's capital improvement program.

## CHAPTER 4 \_

#### NATURAL AND CULTURAL FEATURES PLAN

The unique and irreplaceable beauty, character, and sense of community in the Planning Area municipalities has been recognized as a resource worth protecting. This Joint Comprehensive Plan represents a vision both for conservation and for development within the Planning Area. Before land is allocated for future growth, it is important to (1) identify natural and cultural characteristics which require conservation and (2) identify means to accomplish their conservation.

#### TOPOGRAPHY

Lands with slopes in excess of 15 percent begin to cause serious problems for proper development due to (1) their susceptibility for erosion (and flooding) and (2) the potential increased costs required to alleviate structural problems such as settling and sliding. Construction in steeper slopes also affects the cost of installation of underground utilities and the construction of roads and highways. Steep slopes should remain in their natural state in order to prevent soil erosion, provide for the enjoyment of open space, and serve as greatly needed recreation areas. As a result, development in areas with slopes 20% or greater should be discouraged through zoning ordinance provisions.

#### **SURFACE WATERS**

Of the various water features in the Planning Area, the Schuylkill River, Maiden Creek and Lake Ontelaunee are the three most prominent. The Schuylkill River is the major source of drainage in the Planning Area. The River is an important source of habitat for both aquatic and non-aquatic species, as well as a source of recreation.

The Maiden Creek drains the eastern portion of the Planning Area and serves as the source for Lake Ontelaunee, which functions as a reservoir for the City of Reading's water supply. Recreation such as picnicking and fishing are also available at the lake and surrounding lands. The lake also provides important areas of animal habitat and supports populations of various fresh water fish and aquatic organisms.

The 1991 watershed study of the Lake recommended the development of a watershed management plan to address

the water quality problems of the lake. Recommendations for the management plan included (1) Agricultural Best Management Practices (BMPs) - The Townships, working with the Soil Conservation Service, should encourage farming plans which employ BMPs; (2) Construction Erosion Control, Roadway Erosion Control, Stormwater Management and Streambank Stabilization - All three municipalities should upgrade their subdivision and land development ordinances to include regulations to accomplish the above-listed items; and (3) Improved Septic System Management - The municipalities need to implement the recommendations of their respective Act 537 Sewage Facilities Plans to minimize the potential for malfunctions, and the resultant groundwater degradation. While recommended specifically to address problems experienced at Lake Ontelaunee, these should be considered Planning Area wide.

In addition, to protect major drainage patterns, zoning provisions should be considered to provide for stream-side buffers, retained in their natural condition, to a width of not less than two hundred (200) feet on each side of the stream, or the width of the floodplain, whichever is greater. Streams with the classifications of high quality, exceptional value or trout stocking fisheries possess fragile ecological characteristics. These streams require protection from the adverse effects of encroachment, sedimentation, and the removal of trees along stream banks which help maintain lower water temperatures. Conservation measures should emphasize protection of the entire drainage basins which feed these streams.

#### **SCENIC RIVERS**

The Schuylkill River is one of the three designated scenic rivers in Berks County. Scenic River designation is meant to increase awareness of the value of the stream. The Scenic River Study for the Schuylkill identifies potential land use regulations and other methods which can be employed to enhance these values.

#### **FLOODPLAINS AND WETLANDS**

#### **Floodplains**

Floodplains act as natural barriers to prevent flooding of the

surrounding developed areas. Floodplains can often be extremely productive for vegetation, providing excellent areas for species habitat and diversity. Designating the allowable uses of a floodplain through zoning regulations is an important step in assuring its protection. A floodplain is best left as a natural area of open space. Constructing any type of structure on a floodplain is not a recommended practice.

#### <u>Wetlands</u>

The importance of wetlands lies both in their traditional values as areas of fish and wildlife protection, and stormwater management, as well as in the newly found value as areas for wastewater treatment. The Planning Area municipalities' subdivision and land development ordinances should be reviewed and updated, as necessary, to clearing define the requirements related to wetlands which must be adhered to in the subdivision/land development process.

#### **GEOLOGY AND GROUNDWATER**

Groundwater contamination is a critical factor to consider when developing land use plans for residential or

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agricultural uses. The limestone formations present in the southern portions of the planning area are susceptible to groundwater contamination. As a result, extreme caution should be exercised when applying nutrients (and pesticides or herbicides) during agricultural operations, and when issuing permits for on-lot septic systems in limestone formations.

The shale formations found in the northern portions of the Planning Area, are considered to be small to moderate suppliers of groundwater. However, the dolomite and limestone formations can produce large volumes of water if a channel or fracture in the rock is found. Consideration should be given to requiring that proposals for new development in areas not proposed for service by public water and sewer provide supporting documentation that a safe and reliable (in quantity) water supply can be provided.

#### **PRIME FARMLAND SOILS**

Prime farmland soils should be preserved for agricultural production. Most prime farmland soils found in Berks County are Class I or II soils. While only a small percentage of the Planning Area has Class I soils, a considerable portion of the two townships are Class II. The limestone bedrock areas in southern Ontelaunee Township represent the largest concentrations of Class I and II soils.

The existing zoning ordinance for Perry Township provides for relatively strict agricultural preservation in most of the identified prime farmland soils areas of the Township. Ontelaunee Township should enact similar zoning provisions to protect its prime farmland areas.

#### **ECOLOGICAL RESOURCES**

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In response to the growing perception of the negative impacts of certain land use forms and practices, the preservation of wildlife and wild habitats has become a priority conservation objective. The most environmentally important areas often support populations of extremely sensitive flora and fauna. Unfortunately, these sensitive areas, due to their natural beauty and unique features, attract development as well. To aid in the preservation of theses unique and sensitive areas, the municipalities should consider techniques such as "overlay" districts in their respective zoning ordinances to provide additional levels of protection. The Berks County Natural Areas Inventory can serve as the initial reference document to identify those areas requiring protection.

#### WOODLANDS AND FORESTED AREAS

One of a forest's greatest benefits is its aesthetic value. Allowing natural areas such as forests to exist undisturbed allows the environment to be fully appreciated, understood and as a result, protected. Woodlands and forested areas provide many important uses including providing erosion control on steep slopes, and protecting watersheds. Forests are also extremely important areas of animal habitat.

Through zoning and subdivision/land development ordinance provisions, wooded areas should be conserved and developed only in such a manner which minimizes impacts on their present condition.

# HISTORIC, ARCHAEOLOGICAL AND CULTURAL RESOURCES

The Berks County Conservancy and other organizations have expended considerable effort in the areas of research, public education and field location of historic sites or areas.

Most of the historic buildings/sites identified in the Planning Area are scattered throughout the area. However, at least one National Historic Register eligible site, the Berkley Historic District could be established as a rural historic zoning district. At a minimum, the municipalities should work with potential developers to attempt to retain the historic character of historic sites already identified (or to be identified) in the Planning Area. Private citizens, as well as municipal agencies, can support these activities through financial support and/or active participation.

As mentioned in Chapter 2, known archaeologically significant sites in the Planning Area have been mapped by the Pennsylvania Historical and Museum Commission (PHMC). Subdivision and land development proposals subject to PADEP Planning Module requirements will initiate PHMC review for the existence of any sites in the development area. The municipalities can consider additional ordinance provisions which would require PHMC comment for all development proposals.

The three Planning Area municipalities, either working collectively or individually, can provide financial and other forms of support to the many cultural activities and organizations located in and/or serving the area.

Certain uses and structures can have an adverse effect on the aesthetics/visual appearance of an area. The proper regulation of signs and other accessory structures, along with the restriction of certain land uses in various zoning districts, can do much to minimize potential adverse impacts to the Planning Area's visual landscape.

#### ECONOMIC DEVELOPMENT

The Planning Area is part of the larger Berks County, regional, national, and even international economy. All levels of government know that the fostering of economic growth and development is an important concern, because economic growth provides both employment for residents and revenue to support municipal operations. All three Planning Area municipalities are blessed with a diverse commercial/industrial base. The Future Land Use Plan identifies additional areas in each of the three municipalities that are proposed for future commercial and industrial activity. In almost all cases, these proposed sites (1) are (or are scheduled to be) served by public water and sewer service, and (2) are easily accessible to the principal transportation routes serving the Planning Area. However, they could be better served by public transit service - which would reduce vehicle(automobile) trips on the Planning Area's major thoroughfares and increase accessibility to the labor force.

The types of commercial and industrial activities proposed in the Future Land Use Plan (and provided for in the existing municipal zoning ordinances) range from smallscale, minimal-impact service commercial to heavy industrial uses. Labor-intensive industrial uses (i.e. "high-tech" manufacturing) are recommended, instead of warehousing operations, to provide local employment opportunities for Planning Area residents.

Efforts should continue to be made by local officials to attract new and to retain existing businesses in the Planning Area. Such steps could include, but not be limited to, the following: (1) less restrictive zoning requirements governing the <u>expansion</u> of <u>existing</u> commercial and industrial uses, (2) improvements in the availability of off-street parking and pedestrian access - particularly in Leesport Borough, (3) improvements to the local roadway network to improve customer/employee access, and (4) extension of public water and sewer service to existing and proposed commercial and industrial areas.

In addition, the Planning Area municipalities should cooperate among themselves, with their neighbors, and with the County to support the location of new industrial and commercial employment centers which meet the Planning Area and the greater regional needs.

The current zoning ordinance in Perry Township greatly restricts non-farm development in the Agricultural Districts, so that the viability of the agricultural industry in the Township can be maintained. However, the Township's Agricultural District regulations, as written, have the potential to allow more incompatible, non-farm residential development activity than is desired in the agricultural area. It is recommended that these ordinance provisions be reviewed and strengthened to minimize the potential for future land use conflicts with the agricultural base. The zoning ordinance options available to the farmers to engage in accessory, farm-based businesses should also be reviewed and strengthened, as necessary, to keep the farmer "on the farm".

## **ENERGY CONSERVATION**

The Future Land Use, Housing, Transportation, and Community Facilities and Utilities Plans are all in some way connected to the concern over the present and future use of energy in the Planning Area. The overall premise behind the Future Land Use Plan is the focusing of future development in and around the existing urban cores of Leesport and Shoemakersville Boroughs, and along the two principal highway corridors (PA 61 and US 222). The concentration of development activity in limited areas will result in the reduction of additional vehicle trips (and corresponding reduction of fuel consumption) from what would be experienced if random development would be permitted to occur throughout the Planning Area. The concentrated development - both residential and commercial/industrial along the major traffic route can also better support the extension of public transit service to better serve the Planning Area. The Plan also proposes several mixed-use districts, where employment opportunities may be located within walking distance from residential areas.

As part of the implementation of this Plan, the Planning Area municipalities should consider the adoption of a

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zoning and/or subdivision/land development ordinance provisions which will facilitate the use of passive solar energy and of landscaping techniques to reduce both residential and non-residential heating and cooling costs. The adoption of energy efficient standards in building codes and the elimination of excessive construction standards which might interfere with good energy conservation practices are also encouraged.

## INTERRELATIONSHIPS AMONG PLAN COMPONENTS

The four major components of the Comprehensive Plan -Land Use, Housing, Transportation and Community Facilities - are all closely interrelated. The basic premise on which this Joint Comprehensive Plan is based is that the Planning Area will continue to be an attractive location for future residential, commercial and industrial growth. The Plan elements have been written with the understanding that this future growth must be accommodated in a way which best benefits the current and future residents of the Planning Area.

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The population of the Planning Area is projected to continue to increase into the foreseeable future. In order to accommodate this increased population, additional housing units will need to be provided. There will be a need for a mix of types of housing units so that individuals of all age groups, family size and economic level have equal opportunities to reside in the Planning Area. The Future Land Use Plan provides for this by designating areas of the Planning Area for all different densities of residential development. The Zoning Ordinances - one of the techniques to implement the proposals of the Joint Comprehensive Plan - will need to be reviewed and updated as necessary to provide the specific detailed regulations to support the accomplishment of the Plan's stated housing goals.

The location of future development, particularly residential development, will have a major impact on the transportation facilities of the Planning Area. Concerns over the capacity of the existing thoroughfare system, and development pressures in the future, resulted in the proposed reduction in residential densities in certain portions of the Planning Area. Similarly, higher density residential and non-residential uses were proposed near the primary traffic routes to minimize impacts on the local road network. The availability of public facilities, primarily water and sewer service, also has a direct impact on the location of and intensity of areas proposed for future development in the Planning Area. Those portions of the Planning Area which are not proposed for the extension of such utilities, along with areas of environmental concern - such as wetlands, floodplains and stream valleys, steep slope areas and prime agricultural areas - were the areas generally proposed for agricultural and open space uses in the Future Land Use Plan.