

## LAND USE AND HOUSING PLAN

This section recommends policies for land development and redevelopment throughout the region, including policies for different types of housing.

### **Housing Needs and Forecasted Growth**

Data from the U.S. Census about housing in the six municipalities is provided in the Appendices of this report. From 1990 to 2000, there was a dramatic increase of 17 percent in the number of housing units in Southwestern Lehigh County. The bulk of the increase (1,193 units) was in Lower Macungie Township.

The housing market in this region is skewed by the movement of new residents from outside of Lehigh County. Much of this market comes from persons moving from New Jersey and the Philadelphia suburbs. Therefore, the current housing construction is not simply meeting needs of local residents, and this trend is expected to continue. Many of these new residents are attracted by the ability to be able to buy "more house for the money" than they can in other areas. Also, the reputations of the East Penn and Southern Lehigh School Districts have helped to drive the housing market. The housing market in the boroughs has been much more stable in recent years, with little new construction.

Different types of households need different types of housing. For example, persons with lower incomes often cannot afford the closing costs to buy their own home, and therefore seek affordable rental housing. Older persons are often seeking low maintenance living arrangements, such as apartments, condominiums, assisted living centers or other types of developments where most outdoor maintenance is handled by a homeowner association. Persons with children are often seeking homes with larger yards.

Macungie, Alburtis and Emmaus are much older and denser municipalities than the townships, and therefore has a higher percentage of attached housing. However, Lower Macungie Township still has a diverse housing stock. In 2000, 34 percent of Lower Macungie Township's housing units were twins, townhouses, apartments, or manufactured homes. The percentage of twins, townhouses and apartments was much lower in Lower Milford and Upper Milford Townships because of the limited availability of central sewage service.

There has been a major increase in the number of smaller households. This increase arises from the facts that many persons are living longer, that divorce rates have increased, and that many persons are delaying marriage. The average number of persons per household ranges from 2.2 in Emmaus and Macungie to 2.7 in Upper Milford, Lower Macungie and Alburtis. The average persons per household can be directly correlated to the percentage of apartments in each municipality and the percentage of persons age 65 and older. For example, a very high 19 percent of Emmaus residents were age 65 or older in 2000. Fourteen percent of Lower Macungie's residents in 2000 were 65 or older, but that is skewed by a number of nursing homes and personal care centers.

In 2000, the Census reported low vacancy rates (2 to 4 percent) in each municipality among the housing units.

In areas recommended by this Plan for higher densities, the private market should be allowed to determine the housing types that are built. As a general rule, newer homes are more expensive than older homes, and homes on larger lots are more expensive than homes on smaller lots. This Plan recommends an emphasis on encouraging Open Space Development. Open Space Development allows homes on modest sized lots with modest lot widths. This reduces the costs of improvements per home compared to larger lots.

The Lehigh Valley Planning Commission projects an increase in population of 4,777 persons for the Southwest Lehigh County Region from 2000 to 2010 and an further increase of 5,096 persons from 2010 to 2020. Using 2002 populations estimated by the U.S. Census, the population of the six municipalities is forecast to increase by 2,284 persons from 2002 to 2010. This 2,284 person increase is equal to approximately 914 housing units at an average of 2.5 persons per household. The acreages that are needed before 2010 can be easily accommodated by the land areas in this Comprehensive Plan, particularly considered the over 2,000 housing units that have been approved or submitted for approval, but which have not yet been built.

The following table converts the LVPC's projected population increase for 2020 into acreage needed for new housing development. At the forecasted average densities, a total of 1,321 acres of land would be needed for new residential development. That is equivalent to approximately three percent of the total land area of the six municipalities. The amount of land consumed by development would vary greatly with the allowed density. Much of the land consumption could occur in Lower Milford, because this Plan promotes Open Space Development in that Township with a low overall density of 0.5 dwellings per acre, but with 40 to 50 percent of a tract permanently preserved in open space.

This Comprehensive Plan is mainly intended to serve for a 10 to 12 year time frame. Therefore, this Comprehensive Plan should be re-examined in approximately 10 years to ensure that the acreages needed for 2020 can also be accommodated.

Municipality	2002 Census Estimate of Population	2020 LVPC Projected Population	Projected Population Increase 2002 to 2020	Estimated Average Density of New Development (Dwelling Units per Acre)	2000 Average Persons Per Household	Estimated Acreage Needed for New Development
Alburtis	2,098	2,202	104	4	2.7	9.6
Emmaus	11,250	11,313	63	4	2.3	6.9
L. Macungie	21,551	27,898	6,347	3	2.7	783.6
L. Milford	3,703	4,246	543	0.5	2.8	387.9
Macungie	3,076	3,039	- 37	4	2.2	0
U. Milford	7,010	7,370	360	1	2.7	133.3
Total	48,688	56,068	7,380			1,321.3

The following are the total land areas of each municipality in acres:

Alburtis	397
Emmaus	1,812
Macungie	660
Lower Macungie	14,657
Lower Milford	12,620
Upper Milford	11,537
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Total	41,683 acres

Several Pennsylvania court cases have looked at the following thresholds for the percentage of a municipality that allows various housing types:

- 1% of total land area = 416 acres
- 2% of total land area = 833 acres
- 3% of total land area = 1,250 acres

Several Pennsylvania court cases have upheld zoning where three percent or more of the municipality's total land area allowed attached housing. A reasonable argument could be made that unbuildable areas, such as steep areas of South Mountain and permanently preserved farmland, should be deleted from the total land area before calculating percentages allowing various housing types. This would result in increasing the percentage of the land area that allows attached housing. However, to be conservative and for the sake of simplicity, all of the acreages and percentages in this section are based upon total land area.

This Comprehensive Plan shows the following Medium High Density, High Density, Town Center and Village areas that are intended to allow mixed housing types, in acres:

Lower Milford	168
Lower Macungie	587 plus 85 acres in part of the Low Density Residential area of Lower Macungie where the Township is about to allow attached housing for age-restricted developments, plus another 25 acres in approved but nonconforming attached housing developments, plus 116 acres in existing but nonconforming manufactured home parks
Alburtis	141
Macungie	216
Emmaus	529
Upper Milford	189 plus 479 in Low Density Residential areas in Upper Milford that currently allow attached housing = 668

The above acreages total 2,535 acres, which is equivalent to 6 percent of the total land area of the region. That percentage is higher than the percentages that have typically been found to be exclusionary in previous court decisions.

To provide additional defense against exclusionary zoning challenges, this Plan recommends that the municipalities rezone existing non-conforming attached housing and manufactured home park

developments to make them conforming.

In addition, some additional commercial areas may allow apartments, and some additional lower density residential areas may allow attached housing/independent living units for seniors. Those areas are not included in the above acreages. For example, life care centers that include attached senior housing are currently allowed in many other low density residential areas in Lower Macungie.

The 2000 U.S. Census found the following breakdown of housing types in the region, as a percentage of total existing housing units:

Single family attached housing (twins and townhouses)	18%
Apartments with 2 to 4 units per building	3%
Apartments with 5 or more units per building	7%
Manufactured/mobile homes	3%
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Total	31%

This 31% of the housing stock in twins, townhouses, apartments and manufactured/mobile homes is high for a mostly suburban area.

It will be important for the municipalities to jointly re-examine the Comprehensive Plan periodically (such as every 5 or 10 years) to consider whether additional areas should be zoned for various housing types. The goal is to have buildable land available to provide opportunities for all types of housing. However, if a landowner decides to build one type of use (such as single family detached housing) instead of another allowed use on the same land (such as apartments), then at least one court decision found that the burden of providing an opportunity had been met at that time. This is because the private market decided to build one housing type vs. another.

A municipality that is in the "path of growth" has much more obligation to provide for various housing types than a municipality that is not in the path of growth. A reasonable argument could be made that Lower Milford Township is not in the path of growth. One issue in the 2003 State Supreme Court case of Dolington Land Group was how to treat a situation in which one municipality in a region is not "in the path of growth." Should the land area of that municipality be considered separately from land area of more suburban municipalities? That issue was unresolved in that case. In that case and in a recent Commonwealth Court case, there also was an issue of whether land that is actively farmed should be considered as developed or undeveloped.

In Pennsylvania, there is no direct requirement that housing must be provided in certain price ranges. Instead, the test is whether various housing types are allowed in sufficient areas and in sufficient numbers.

A good faith effort has been made by providing for the following developments of attached housing in recent years. This list includes developments that were recently completed, are underway, or have been actively proposed but not yet built:

#### Alburtis Borough:

- Greentree Townhouses: 96 townhouses are proposed on an 18.06 acre parcel on the north side of Church Street in the northeastern portion of the Borough.
- Also land on the eastern edge of the Borough is being considered for a townhouse development.

#### Lower Macungie Township

- Brookside Farms: Approximately 175 units, some detached and some attached, near the intersection of Willow and Sauerkraut Lanes.
- Village at Farmington: A new age-restricted condominium complex of 256 units, north of Sauerkraut Lane.
- Harris York: Condominium complex being completed on the east side of Macungie Road adjacent to Millbrook Chase subdivision.
- Heritage Heights: Approximately 350 townhouses are being completed north of Spring Creek Road west of Route 100.
- Penn's West: Townhouse and apartment development of approximately 300 units on Mill Creek Road.
- Spring Creek Estates (multiple): Off Lower Macungie Road, includes townhouse sections, over 200 apartments, and an adjacent subdivision of duplexes, named the Landings.
- Spring Ridge Crossing: Several hundred townhouse units on the west side of Wild Cherry Road.
- Townes at Krocks: A townhouse development on east side of Krocks Road south of Hamilton Boulevard.
- Traditions at Wild Cherry Knolls: Mix of over 150 singles and attached units that are age-restricted that is being completed on east side of Wild Cherry Road.
- Village at Caramoor: Area north of Route 100 between Mill Creek Road and Willow Lane. Includes Legacy Oaks retirement community of attached housing and Penn Meadows assisted living center.
- Waterford Place: South side of Lower Macungie Road between Mill Creek and Spring Creek Roads - 202-unit apartment complex.
- Hills at Loch Ridge - 258 twins were approved south of the railroad east of Alburtis.

In recent years, Indian Creek Village was also completed in Lower Macungie Township, which included almost 200 mobile homes. Millbrook includes approximately 180 recently built twin homes on Lower Macungie Road at Wild Cherry. 80 condominiums were also built several years ago in Spring Creek Village east of Route 100 south of Trexlertown.

In 2001, for example, there were approximately equal number of attached housing units versus single family detached homes built in the Southwest Lehigh Region: 227 single family detached houses built versus 222 attached units.

In 2003, in the Southwest Lehigh Region, new subdivisions were approved for 467 attached housing units. This data shows a clear ability of the market to provide for attached housing in the region.

#### **2002 Existing Land Uses Maps**

Maps on the following pages illustrate the existing uses of different areas of the region, as of 2003.

### **Summary of 2003 Existing Zoning Policies**

The 2003 Existing Zoning Map on a following page illustrates the existing development regulation policies of the six municipalities. Some residential zoning districts are blended into the same category because they allow similar densities of housing.

Environmental Protection - This includes the South Mountain Conservation District in eastern Upper Milford, which requires a 2 acre minimum lot size. The current zoning (as of 2003) allows the lot size to be reduced to 1.1 acre through clustering.

Agricultural Conservation - This includes the far western part of Lower Macungie, where residential development is generally restricted to a maximum of 10 percent of a tract of land.

Rural - This includes the majority of the land area of Upper Milford, Lower Milford and southern Lower Macungie. These areas of Lower Macungie (including many areas of steep slopes) require a 2 acre minimum. This district also includes an area along Grange Road around the planned Route 222 bypass. These areas of Upper Milford require a 1.1 acre lot, which can be reduced to about 0.9 acre through clustering.

- These areas of Lower Milford (which are within the AR district) require a 2 acre lot size. However, a larger lot size is typically required in Lower Milford if a tract includes large areas of steep slopes, floodprone land, wetlands or similar natural features.
- Care is needed to make sure that intensive non-residential uses are properly controlled in rural areas, such as quarries, airports and landfills. If these uses need to be located in a rural area, the rural district should be separated into two districts so that these uses can be prohibited in most of a municipality.
- Lower Milford and Lower Macungie do not have provisions for clustering of housing. The provisions that had been in effect in Lower Macungie were removed because the standards in place were not adequate to meet Township objectives.

Low Density Residential - These areas provide for development at approximately 2 to 3 homes per acre, if there are central water and sewage services. This includes the eastern part of Lower Milford, which requires 1.5 acre lots if on-lot well and septic are used. The Low Density Residential areas of Upper Milford also allow for mixes of housing types, and clustering of housing on smaller lots. The village of Vera Cruz (which is planned to be sewered) is in this category. These areas also include most lands east of Route 100 and south of Spring Creek Road in central Lower Macungie.

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Medium Density Residential - These areas provide for residential development at approximately 3 to 4 homes per acre. These areas include most of the existing single family subdivisions in Lower Macungie and some lands in Upper Milford west of Emmaus. Lower Milford Township recently added a new Village Residential zoning district along the east side of Limeport Pike in the far eastern part of the Township. That district allows a mix of housing types, and increased density if standards are met for a "Traditional Neighborhood" development.

High Density Residential - These areas provide for residential development at 5 or more homes

per acre. These areas also provide for a mix of housing types.

Retail Commercial - These areas mainly provide for commercial development.

- In Alburdis's commercial district, heavier commercial uses (such as gas stations) need conditional use approval from Borough Council. Macungie has divided their commercial districts into two types: the older downtown areas are "Town Center" which does not allow heavier commercial commercial uses such as gas stations, and the other areas (around the Weis) are "General Commercial" allowing a wide range of commercial uses.
- Outside of the downtowns, most commercially-zoned land in the region is concentrated along Route 222, along Route 100 north of Macungie and along Chestnut Street in Emmaus. Upper Milford has several relative small nodes of commercial zoning along Route 29.
- The townships have resisted establishing commercial zoning along a large number of other heavily traveled roads, such as most of Brookside Road, Cedar Crest Boulevard, Lower Macungie Road, Limeport Pike, Route 29 and Route 100.

Office/Business - This category includes land in Lower Macungie that is: 1) around the Lutron plant east of Spring Creek Road, and 2) along Schoeneck Road west of Route 100. This zoning district allows a mix of offices and very light industrial uses.

Light Industrial and Heavy Industrial - The largest industrially-zoned areas include: 1) the Mack plant and land along Alburdis Road to the northwest, 2) along the north side of the railroad tracks in Alburdis, 3) the Buckeye Pipeline complex, 4) the huge Hosensack electric station in Lower Milford, and 5) lands along Schantz Spring Road around Eastern Industries east of the Turpike. A thin strip of land in Alburdis between the County's Furnace Park and the new Jaindl development in Lower Macungie is zoned Light Industrial. We recommend it be changed to residential.

Mixed Uses - These are Village Center districts in Lower Milford. These are located in Hosensack, Dillingersville and Limeport. These areas allow a mix of single family homes, two family homes and light commercial uses. Some heavier uses (such as gas stations and auto sales) are allowed with Zoning Hearing Board approval.

Generalized Existing Zoning Map of Region (includes Adjacent Zoning)

## Existing Land Uses Map of Alburdis

## Existing Land Uses Map of Emmaus

## Existing Land Uses Map of Macungie

Fold-out Existing Land Uses of the Region Map and Land Use Plan Map of the Region in a sleeve

## Future Land Use Plan for Alburdis Area

## Future Land Use Plan for the Emmaus Area

## Future land use plan for the Macungie area

## Land Use Plan Recommendations

The following describes land use categories, as shown on the Land Use Plan Maps on the preceding pages. In most cases, these categories are intended to generally relate to zoning districts. The Land Use Plan is primarily intended to:

- a) protect existing residential neighborhoods,
- b) moderate the rate of housing construction to avoid overloading the public school systems, roads, utilities and groundwater supplies,
- c) coordinate development across municipal borders, including municipalities that are not part of the Regional Comprehensive Plan,
- d) avoid serious traffic congestion and safety problems, particularly by avoiding new commercial strip development along major roads,
- e) promote new business development in appropriate locations, particularly by strengthening older business areas, with careful attention towards the types of businesses allowed in areas near homes, and
- f) make sure development properly relates to the natural features of the land, particularly to protect steeply sloped areas, major water supplies and creek valleys.

### Policies Affecting Many Land Use Categories

- In many residential areas, it would be desirable to provide a density bonus if housing is limited to persons age 55 and older. Also, in the boroughs and the more developed areas, it may be desirable to allow taller building heights (such as 6 stories) if an apartment building is limited to persons age 55 and older and if fire safety issues are fully addressed. In most other cases, outside of the downtowns of the boroughs, a maximum building height of 2 and 1/2 or 3 stories is recommended.
- To promote home ownership and neighborhood stability, and to avoid parking problems, the conversions of existing one family homes into additional numbers of housing units should be prohibited or very strictly regulated in most of the region.
- If any lot is not served by both central water and central sewage service, then a minimum lot size of at least one acre is recommended. Where higher densities are described in this Plan, they assume that both central water and central sewage services would be provided. If a new lot will be served by an on-lot septic system, the lot should be approved for both a primary and an alternative drain field location before the lot is created.
- It is recommended that places of worship (such as churches) and public and primary schools be allowed in most areas, except possibly some conservation and agricultural conservation areas. (Note - Federal and State law control the ability of a municipality to limit locations of religious activities. There are differing court opinions about whether a municipality can limit the location of a public school).
- To promote use of Transfer of Development Rights (described below), it would be appropriate to consider reducing the maximum densities of some of the residential districts in the townships if transfer of development rights is not used. The lower base densities should generate stronger interest in using TDRs.
- Interconnecting recreation trails should be sought, particularly to connect existing trails, the Little Lehigh Creek valley, the downtowns, neighborhoods, parks and schools. These trails will not only be beneficial for recreation, but also could be useful for bicyclists to reach work. An emphasis should be placed on developing off-road trails that run parallel to roads that are unsafe for pedestrians and bicyclists and which cannot be easily improved, such as along Vera

Cruz Road. These trails are described further in the Community Facilities and Services section.

- Thick natural vegetation should be preserved or planted along creeks to filter out pollutants from runoff, avoid erosion and maintain good water quality.

### Existing Preserved Farmland and County-Owned Land Recommended to be Preserved

This category includes farmland that has already been permanently preserved by County conservation easements. These easements permanently preserve the land, although the land typically remains privately owned. This category also includes County-owned land, which this Plan recommends be protected by easements to prevent its future use for buildings. All of the lands in this designation are also recommended to be part of the Agricultural Conservation land use category, which is described below. In addition, the Existing Land Uses Map shows additional lands for which the County is considering for purchase of agricultural easements. As much as practical, farmland should be preserved adjacent to previously preserved farmland to result in large contiguous blocks with few homes.

### Agricultural Conservation

The need for agricultural preservation and the method of agricultural conservation zoning are described in more detail in the Natural Features and Agricultural Conservation section of this Plan.

In these areas, residential development is recommended to be limited to approximately 10 percent of a tract of land. The remaining land would need to remain in large tracts. The intent is to preserve large contiguous areas of prime farmland, and to protect the public investment in conservation easements. One goal is to avoid a dense residential subdivision in the middle of permanently preserved farmland - to protect the investment of the public and the adjacent farmers.

Owners of land in these areas are strongly encouraged to sell conservation easements to the County. As an alternative, owners of land are encouraged to consider selling conservation easements to a developer in return for a "transfer of development rights" (as described later in this chapter).

In addition to controlling the number of homes in prime agricultural areas, it is also important to carefully locate new homes on a tract to minimize conflicts with agricultural activities.

This Plan recommends continuing the Agricultural Conservation zoning that exists in western Lower Macungie. This Plan also recommends adding Agricultural Conservation zoning on land in Upper Milford east and west of the Turnpike. Agricultural Conservation zoning should also be considered in the future in other areas of Upper Milford and Lower Milford, particularly where there is grass roots support among the majority of the property-owners.

Lower Macungie Township could provide an incentive to promote the preservation of land in the Agricultural areas through TDR (described later in this chapter). For example, for every home that would have been allowed on an Agricultural Conservation-zoned tract, the landowner could be allowed to sell the rights to a developer to build 2 additional homes in a more appropriate area of the Township.

Also in Lower Macungie, consideration should be given to allowing the Open Space Development option (see below), particularly in areas that are at the edges of the Agricultural Conservation areas. This could utilize extensions of a very limited extension of nearby public water and sewage services to allow clustering of homes. This option would guarantee permanent preservation of the majority of the land through permanent easements, as opposed to the temporary preservation that arises from zoning regulations. This option could also result in substantial areas of public parkland.

### Conservation

This category is mainly intended to include areas that are not logical locations for development. These areas are highly unlikely to ever be served by public water and sewage services. Most of these areas include sensitive natural features, including steeply sloped lands, creek valleys and wetlands. Portions of these areas have poor road access. Many of these roads would be extremely difficult, expensive or impossible to improve because of the presence of buildings, wetlands or cliffs close to the road.

These areas are intended to provide for approximately 2 or more acres per home, without open space preservation. A 3 acre or more minimum would be appropriate if a principal building is proposed on very steep slopes (over 25 percent). Stricter standards may be appropriate where there are large concentrations of steep slopes, particularly on the South Mountain in Upper Milford Township.

However, if an applicant chooses to use the Open Space Development option (described below), then approximately one or 1.5 acre minimum lots should be allowed, if 40 to 50 percent of the tract is permanently preserved in open space. Where farmland preservation is not feasible and a public park is not desired, then alternative open space uses could be appropriate, such as homeowner association open space, Christmas Tree Farms, plant nurseries, hayfields, golf courses, and horseback riding academies. Open Space Development is described later in this section.

Policies for the conservation of natural areas and agricultural preservation are described in the Agricultural and Natural Features Conservation Plan section. Where concentrations of prime agricultural soils exist in the Conservation areas, an emphasis should be placed upon agricultural preservation. A sub-category is shown on the Land Use Plan that is identified as "Areas Where Agricultural Preservation is Recommended." This is a sub-category of the Conservation land use category. This sub-category is not intended to result in a separate zoning district, but is instead intended to highlight some contiguous areas where agricultural preservation is most likely to be viable over the long-term.

This Plan recommends an emphasis upon encouraging the selling of agricultural easements to the County or the municipality. On large tracts, it may be desirable to use the Open Space Development option to lands for agriculture, such as tree farms. Where there is grass roots support among the majority of the affected property owners, then additional areas should be considered for Agricultural Conservation zoning, which includes stricter limits on the numbers of homes and their location on a tract.

### Rural

These areas are mainly intended to provide for agricultural uses and single family homes on 1 to 1.5 acre minimum lots. In most cases, these areas are not intended for public water and sewage services. If 1.5 acre minimum lots would be required, then under the Open Space Development option, 1 acre minimum lots could be allowed with 30 percent open space. If appropriate central water and sewage services would be provided, it may be appropriate to consider allowing Open Space Development with

1/2 acre lots and 40 to 50 percent of the tract permanently preserved in open space.

### Low Density Residential

This category is primarily intended to provide for single family detached development at approximately 1.1 to 2.9 homes per acre. With central water and sewage services, a lot size of approximately 1/2 acre to 1/3 acre would be appropriate in most areas. Through the Open Space Development option, approximately 1/3 to 1/4 acre lots could be provided, with 30 percent of the tract preserved in open space. Also, lot sizes as small as 1/4 acre could be appropriate through the Transfer of Development Rights (described below).

### Medium Density Residential

This category is primarily intended to provide for single family detached homes, twin houses and townhouses. With central water and sewage services, an average of approximately 3 to 4 homes per acre would be appropriate. The Open Space Development option could provide for approximately 1/4 or 1/5 acre average lot sizes with 30 percent of the tract preserved as open space. All developments of attached housing should include some recreation land or open space in any case. Also, lot sizes as small as 1/5 acre average lot sizes could be appropriate through the Transfer of Development Rights.

### Medium High Density Residential

This category is intended to provide for a mix of housing types at an average of 4 to 5 homes per acre. A maximum density of 5 to 6 homes per acre could be appropriate through the Transfer of Development Rights option. All apartment and townhouse developments (except the smallest) should be required to include some recreation or open space area for residents.

### High Density Residential

This category is intended to provide for a mix of housing types at densities at over 5 homes per acre. Higher densities (such as 8 or 9 homes per acre) could be appropriate if the housing was limited to persons age 55 and older or through transfer of development rights (described below). These areas should allow for all housing types. These areas are particularly important to meet obligations under State law to offer opportunities for all types of housing. It also is important to provide opportunities for various housing types in order to meet the needs of different types of households, such as empty nesters, singles, and senior citizens. All apartment and townhouse developments (except the smallest) should be required to include some recreation or open space area for residents.

### Town Center/Village Center

This category is intended to provide for a mix of light businesses and a mix of housing types. These areas should provide for retail stores, offices, personal services, day care centers, banks, exercise clubs and similar uses. The intent is to prohibit the heaviest commercial uses that are most likely to spur demolition or create nuisances for neighbors, such as 24 hour convenience stores, gas stations, vehicle repair, restaurants with drive-through service and vehicle sales.

In the downtowns and older villages, development should be encouraged that complements, rather than detracts from, the existing character of historic areas. In older areas, buildings should be placed with setbacks from the road/street that are similar to nearby older buildings. To the maximum extent feasible, parking should be located to the rear or side of buildings.

The densities of housing in the "Town Centers" of Macungie, Alburtis and Emmaus should be approximately 10 to 20 homes per acre. Upper story apartments should be encouraged above street-level business uses. In the Village Center in Limeport, a density of approximately one home per acre is appropriate with wells and septic systems, and approximately 2 to 4 homes per acre with central water and sewage. In the Village Centers of Dillingersville and Hosensack, central water and sewage services are not recommended. Therefore, the maximum density should not be greater than one home per acre.

The Historic Preservation Plan section discusses methods that can be used to control demolition of historic buildings, particularly in the downtowns and villages.

### Village Overlay

The Village Overlay areas are intended to promote new development that is compatible with older villages, including promoting front yard setbacks that are similar to nearby older buildings. However, the Village Overlay is intended to remain primarily residential. The Village Overlay is not intended to provide for the same range of business uses as the Village Center (described above). An "overlay" means that additional zoning provisions are provided in addition to the provisions of the underlying regular zoning district. Therefore, the densities of housing should be the same as the adjacent residential areas. In the Village Center of Old Zionsville, central sewage service is not currently recommended. Therefore, a maximum density of one home per acre would be appropriate.

### Commercial

This category is intended to provide for a wide range of commercial development, particularly in areas of more "highway" oriented commercial development. As opposed to the Village Center/Town Center areas described above, these areas should provide opportunities for uses such as gas stations, vehicle sales and auto sales. A careful set of standards are needed to require coordinated traffic access among different uses.

If an excessive amount of commercial zoning is allowed at one time, it may encourage sprawled development, with businesses simply relocating from one business site to a new site, leaving the old site vacant. There are a number of shopping centers with large vacant spaces in the surrounding region, as new stores have decided to build on new sites instead of reusing sites of stores that have closed. However, if the supply of commercially zoned land is held to a moderate amount, it will encourage rehabilitation and redevelopment of older commercial sites.

### Office/Business and Very Light Industrial

These areas are intended to provide for certain business uses such as offices, very light industrial uses, day care centers and similar uses. In most cases, these areas are not suitable for types of industries that would generate significant hazards, nuisances or tractor-trailer traffic.

### Industrial

Industrially-zoned areas should be separated into a Light and a General Industrial district. Most industrially-zoned areas should be within the Light Industrial district. The Light Industrial areas would provide for a range of light industrial uses that are not likely to cause significant nuisances or hazards, in addition to providing for offices and a few types of related businesses.

The General Industrial areas are intended to provide for a wide range of industrial uses. These areas are particularly important to meet obligations under State law to provide opportunities for all types of business uses, including some uses that are less desirable. The heaviest industrial uses should need special exception from the zoning hearing board or conditional use approval.

Because this plan involves a multiple municipalities, it will not be necessary for each municipality to provide for all types of industrial uses. It is recommended that the heavier industrial uses be concentrated along Schantz Road east of the Turnpike, and that heavy industrial uses be prohibited in other industrial areas. These heavy industrial uses could include petroleum tank farms, asphalt plants, cement plants, trash transfer stations and hazardous chemical plants.

A careful set of performance standards should be used to control noise, dust, vibration and other nuisances and hazards, especially from industrial uses. The types of uses that are most likely to cause nuisances or hazards should require special exception approval from the zoning hearing board or conditional use approval from the borough council/supervisors. Extensive landscaped buffers should be required next to homes. Where a very intensive use is proposed next to homes, a landscaped earth berm and/or solid fencing should also be required.

A high quality setting will help to attract additional desirable types of business development and higher paying types of jobs. In most business areas, a set of site design regulations should be used to promote a landscaped campus-like environment. Truck parking and outdoor storage areas should be required to be screened from view from roads. The majority of the first 30 feet along a road should be landscaped, with truck loading docks and truck parking located to the side or rear of buildings.

Some or all of the General Industrial areas east of the Turnpike should also provide opportunities for commercial development as an option.

### **Extend the best features of older development into newer development.**

Consideration should be given to strongly encouraging forms of “traditional neighborhood development.” This involves extending the best features of the older areas into new neighborhoods. As discussed later in this Chapter, this concept also involves making sure that development or redevelopment of lots within older neighborhoods occurs in a way that fits within the “urban fabric.” This concept is illustrated on the sketch on the following page. Traditional neighborhood development primarily involves the following:

- Street trees should be planted to eventually provide a canopy of shade over streets. Studies show that mature street trees can increase the value of homes up to 10 percent. If it is not appropriate to have shade trees in the right-of-way, they can be required immediately outside of the right-of-way.
- Requiring that new street lights meet a certain design standard that is similar to older styles of street lights.
- Sidewalks should be provided (or asphalt paths along main roads in rural areas). There should be an orientation to pedestrians, with an ability to walk or bicycle to stores, schools and parks. Overly wide residential streets and intersections should be avoided to discourage speeding and to make it easier for pedestrians to cross the street.
- A modest density should be encouraged that is similar to the typical development that occurred

during the 1930s through 1940s. This density (such as 5 to 8 homes per acre) should make best use of available land, while avoiding overly dense development and parking problems.

- Whenever practical, parking should be located to the rear or side of buildings, so that the front yard can be landscaped. At best, parking and garages would be placed to the rear of lots, with access using alleys. This design avoids conflicts between sidewalks and vehicles backing into the street, and allows the entire curbside to be available for on-street parking.
  - If rear access to garages is not practical, then garages should enter onto the side of homes whenever possible, particularly on corner lots. If a front-entrance garage is proposed, it should be designed so that it is not an overly prominent part of the street. For example, a one lane driveway can pass along the side of a house and then widen to enter a two-car garage that is setback from the front of the house. "Snout" houses should be avoided that have a front entrance garage as the home's most prominent feature.
  - Care is needed to discourage new twin and townhouse development that has numerous driveways entering directly onto a street from the front. Garage doors should not be an overly prominent part of the views of housing from the front. Where garages and parking cannot be avoided in the front yard, larger lot widths should be required to make sure that there is green space in the front yard. Regulations are needed to make sure that the majority of the front yards of housing developments are not covered by paving.
- Buildings should be placed relatively close to the street, with front or side porches, to encourage interaction among neighbors. On a corner lot, a side porch can have the same effect. If residents spend time on their front porch, they can help oversee the neighborhood and report suspicious activity to the police.

Under the State Planning Code, a municipality can require some of these features in zoning ordinances. Or, a municipality could offer density incentives for this type of traditional development.

A density bonus could be provided if a development incorporates the features of a "Traditional Neighborhood." Traditional Neighborhood Development can be particularly attractive to developers by allowing single family lots that are more narrow than would otherwise be allowed. This reduction in lot width can result in dramatic reductions in the average costs of improvements per housing unit. Allowing relatively narrow single family detached lots can also provide an alternative to building townhouses - at the same density.

The photos on this page and the next page illustrate a type of Traditional Neighborhood Development of homes.



These photos are from the largest Traditional Neighborhood Development in Pennsylvania - Eagleview, which is west of Route 100 south of the Pennsylvania Turnpike. The majority of the front yards are maintained in landscaping, with street trees and sidewalks. Most driveways pass to the side of homes or provide access from rear alleys or side streets.

This development of townhouses in Eagleview uses rear alleys, allowing the front yards to be landscaped with front porches.

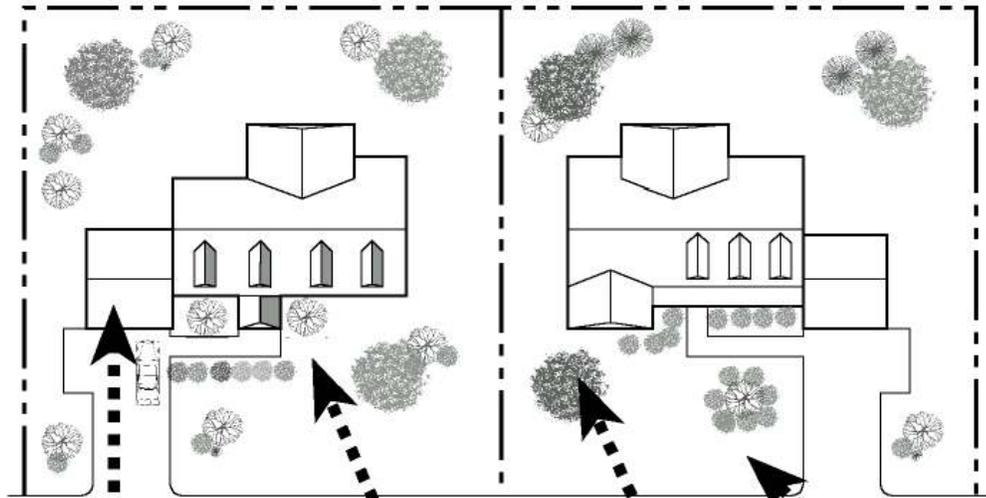
**Note - Photos deleted from PDF version to make file easier to download.**

This photo of Celebration in Orlando, Florida shows a new single family housing development that re-creates the best features of older neighborhoods in boroughs.

The following photos illustrate how the Traditional Neighborhood Development concept can also apply to commercial development.

# Suburban vs. Neotraditional Design

## Suburban Design

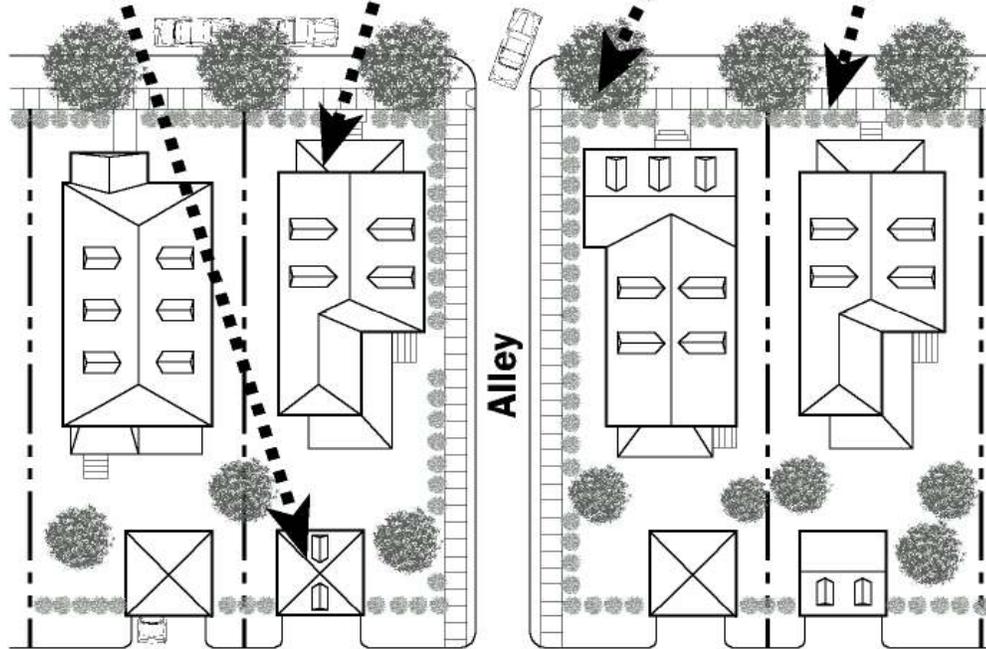


Garages forward  
Garages on alleys

Deep front yards  
Shallow yards, porches

Trees in yards  
Trees along street

No Sidewalks  
Sidewalks



Alley

## Neotraditional Design



### **Traffic Access Control**

If traffic access onto a major road is properly managed, the road will be able to safely handle large volumes of traffic. However, if a road combines a large number of business driveways entering a road at many locations, there will be right-hand turns and left-hand turns at many locations. The constant stopping and starting from these turns greatly affect the smooth flow of vehicles and create safety hazards. This is known as “strip” commercial development.

At best, intense business development should be concentrated in well-planned developments with internal roads that access a major road with a traffic signal and turn lanes. Where a traffic signal is not warranted at the present time, there should still be a plan for where traffic signals are intended to be built in the future. This will allow driveways and street intersections to be directed towards those intersections so that the traffic signal will be well-placed in the future. Where traffic signals are not appropriate, adjacent commercial uses should have shared driveways and interconnected parking lots. The interconnected parking lots are particularly valuable so that a person can visit more than one adjacent business without having to enter and re-enter a major road.

### **Traffic Impacts of Various Types of Development**

Various types of development generate differing amounts and types of development. For example, the average apartment or townhouse generates less traffic than the average single family detached dwelling. The average age-restricted housing unit generates less traffic than a home that is not age-restricted.

The amounts of traffic generated from development is typically measured as peak hour traffic and total average weekday traffic. Some uses, such as shopping centers and places of worship, may generate their own peak traffic during weekends. Peak hour weekday traffic deserves the most attention. Business offices typically have some of the highest peak hour traffic generation.

Particular care needs to be taken in the location of industrial uses. Most industrial uses generate tractor-

trailer truck traffic, which consumes a great amount of capacity on the road system and at intersections. Also, tractor-trailers need sufficient maneuvering space to turn at intersections. Because of the inadequacy of the road system, few new land areas are proposed in this Plan for new industrial development.

The majority of the traffic impacts from future development are expected to be within Lower Macungie Township because that is where the majority of the development is occurring. Macungie and Emmaus will see increased traffic simply because they are crossroads that must be traversed to travel throughout the region. To a lesser extent, Alburtis will experience increased traffic, particularly for residents of Berks County to reach jobs in western Lehigh County. Upper Milford will experience increased traffic, particularly along Routes 29 and 100 for residents of the Lehigh Valley to reach jobs to the south. Lower Milford will continue to see increased traffic on various roads, particularly from residents of the Lehigh Valley traveling to the Northeast Extension of the Turnpike and jobs to the south.

Additional traffic studies will be needed to monitor traffic impacts that occur from the opening of the new Route 222 and the new Route 100 segments, and the new interconnecting roads. Great care is needed to make sure that the new Route 222 boulevard is not overwhelmed with new commercial development to the point where it cannot serve its primary purpose of carrying through-traffic.

Ordinances of each municipality should require a traffic impact study for all major developments. That study should also address traffic safety hazards, and require that the applicant state whether they agree to fund or construct any road improvements.

### **Transfer of Development Rights (TDRs)**

This concept should be a voluntary option in the Zoning Ordinances of the townships. TDRs offer incentives for private developers to pay to preserve land. If a developer of one tract of land pays an owner of another tract to permanently preserve their land, then the developer could receive approval to build at a higher density on the developer's tract. The tract that receives the higher density would need to be in an area that the township has designated as being suitable for a higher density. The tract that would be permanently preserved would need to be in an area that the township has targeted for preservation. The developer and the owner of the open land would negotiate on their own to determine how much the developer pay to the other landowner for the preservation.

sketch

- This method allows development to be shifted from locations where preservation is desired to allow a higher density on other tracts in a township that are well suited for development.

- The township would then approve the development at a higher density at the same time as a conservation easement went into effect to preserve the other land. The preserved land would remain privately owned but could never be developed. The preserved land could be re-sold and could be used for agriculture or certain open space uses.
- For example, this process might allow preservation of land in the Agricultural Conservation or Conservation-Residential District, in return for allowing a higher density in a Low Density Residential or Medium Density Residential District. Or, density might be transferred from one part of a Rural District to another part of the Rural District.
- The number of homes that could be transferred from one tract to another tract would be based upon a “Yield Plan.” This sketch plan would show how many homes would have been permitted on the tract that is to be preserved. Once the township accepts this Yield Plan, that number of homes could be transferred from one tract to another tract. However, there would still be limits on the density of the tract being developed to make sure that it is not excessive.
- TDR can also be used in combination with commercial development. For example, for every housing unit that is transferred from one area of a township, an additional amount of building coverage or impervious coverage could be allowed in a business district.

### **Open Space Residential Development**

The use of Open Space Development should be strongly encouraged, including strong incentives to promote the permanent preservation of substantial portions of a tract in open space. Conservation easements would be used to preserve the open space. Homes should be clustered on the most suitable portions of a site, and important natural areas should be planned for preservation before any lot lines are proposed. Greater attention should be paid to the standards for the open space - to avoid narrow and unusable areas counting as open space.

Example of Conventional Development

Example of Open Space Development

Open Space Residential Development involves development in which a substantial percentage of the land area of the tract is permanently preserved as open space. For example, many Open Space Developments are designed with 25 to 60 percent of the total land area of a development preserved in some form of open space. Open Space Development typically allows smaller lots and smaller setbacks

than would be allowed under conventional development without open space. This concept is also known as “Conservation Design” Development.

The use of Open Space Development should be strongly encouraged with attractive incentives and strong disincentives for developers. The overall number of homes possible on a tract is intended to be slightly higher (such as 15 or 20 percent higher) in an Open Space Development than what is possible under conventional development. This modest density bonus is valuable to encourage developers to choose to preserve the open space.

To make sure that Open Space Development is not mis-used to result in a dramatic increase in the number of homes allowed on a tract, a "Yield Plan" should be used. This involves requiring a developer to submit an accurate sketch plan showing the number of homes that would be possible under conventional development. The accuracy of this Plan would be subject to acceptance by the municipality. Once the Yield Plan was accepted, then the developer would be allowed to build a certain percent increase in density - such as 15 or 20 percent higher than was possible under the conventional development. Proper standards are also needed to make sure that the open space serves a public purpose, as opposed to simply being fragments of "leftover" lands with little development or recreation value.

If a density incentive is not provided, developers may decide to propose conventional subdivisions with little or no open space, and with all lots being the same size and shape regardless of the features of the land.

Legally binding conservation easements would be used to permanently preserve the open space. The areas of the tract that are to be preserved as open space should be determined very early in the site design process—not as an afterthought. Great attention should be paid to the standards for the open space—to avoid narrow and unusable areas counting as open space.

Throughout the nation, this concept has been promoted by the Natural Lands Trust and the Pennsylvania Department of Conservation and Natural Resources.

Advantages of Open Space Developments - Based upon the work of the Natural Lands Trust, the following are some of the major advantages of Open Space Developments:

- *Important natural features can be preserved.* Open Space Developments should include standards that direct buildings away from steep slopes, wetlands, waterways and other important natural features. As a result, homes are placed on portions of the tract that are most environmentally suitable for development—as opposed to being evenly spread across the land. Large contiguous areas can remain in woods and other natural vegetation—which are important as wildlife corridors. Thick natural vegetation can be preserved along creeks—which is essential to filter out eroded soil and other pollutants from runoff before it enters the creek. This vegetation along creeks is also important to maintain high quality fishing habitats.
- In comparison, if an entire tract is divided into lots, it is likely to mostly be in mowed grass—which is a “mono-culture” that does not have the same environmental benefits.
- With open space preservation, stormwater runoff can be managed in a more natural manner that encourages recharge into the groundwater.
- *Scenic features can be preserved.* Open Space Developments can place homes on less visible

portions of a tract, while maintaining scenic views. For example, many open space subdivisions setback homes from main through-roads and limit placement of homes on major ridgelines. As a result, the main angle of vision along major roads involves green space.

- Mature woods can be preserved in locations that hide views of development. The preservation of open space also provides visual relief from seeing continuous development.
- Stormwater runoff can also be managed in a more attractive manner—as opposed to within deep man-made channels and detention basins.
  
- *Recreational opportunities can be increased.* Open Space Developments typically include attractive areas for walking, jogging, cross-country skiing and nature study. In some cases, active recreation facilities can be included. These open space can also increase interaction among neighbors.
  
- *Developers can achieve lower costs* for grading, lengths of roads, lengths of utilities and other improvements.
  - Developers may also be able to save time and money by avoiding wetland alterations and waterway crossings.
  - Open Space Developments can provide the flexibility in layout to move homes off of steep slopes, which are more expensive to build upon. Avoiding steep slopes can also reduce the need for blasting.
  - By allowing flexibility in placement of buildings, it is easier to find suitable sites for septic systems.
  
- *The townships can save on maintenance costs.* Shorter lengths of roads, utilities and other improvements mean there is less to maintain. It is expensive to maintain and plow snow from steeply sloped roads. Open Space Developments can result in roads being placed at more modest slopes.
  
- *Developers can often achieve higher sales prices.* More and more developments are stressing in their advertising that homes are adjacent to preserved open spaces. Developers can often receive a premium price for lots that are adjacent to or overlook preserved open space. The presence of trails and other open space amenities can also spur sales.
  - Studies have also shown that homes near preserved open space are likely to increase in value faster than other homes.
  
- *Reliable central water and sewage services* can be extended. It is usually uneconomical to provide central water and sewage services with lot sizes of 2 acres or larger. However, if homes are clustered on a tract, then it is often possible and/or necessary to provide central water and sewage services. Public water and sewage services typically are more reliable than individual wells and septic systems.
  - Central sewage service avoids the threat of groundwater contamination from failing malfunctioning septic systems. Central water service avoids the risks of well water contamination from various sources.

Proper standards are needed to make sure that the preserved open space is well-located and improved so that it serves important public functions. In many cases, mature woods, steep slopes and creek valleys

should simply be preserved in their natural state. In other cases, the open spaces may be intended for active recreation. In still other cases, trees should be planted in the open spaces and trails should be installed. The key is to avoid a process in which the “open space” is simply the land that is left over after the most economical set of lots and roads are laid out. Narrow strips of open space should be avoided, unless they would preserve a scenic tree line or provide an important trail link.

### **Use a four-step process to result in conservation-oriented design in development.**

The Natural Lands Trust promotes the following four-step process in the design of new development in order to emphasize land conservation principles. The townships’ development regulations and procedures should require that this process be followed. These steps should be accomplished at the sketch plan stage - before any detailed engineering is completed.

#### **1. Identify Lands that Should Be Preserved.**

The mapping should not only consider the area proposed for development, but also any future phases of development, plus the areas that are immediately adjacent to the development site on other lots.

First, the areas that are most worthy of preservation should be mapped, including wetlands, flood-prone areas, creek valleys, and very steeply sloped lands. These are known as the Primary Conservation Areas.

Then, other features that are important for conservation should be mapped, such as woodlands, tree lines, scenic views, historic buildings, and prime farmland. These are known as the Secondary Conservation Areas.

Then, the most important areas for preservation should be identified.

The areas with the fewest important natural, scenic and historic features should be considered the “Potential Development Area.”

#### **2. Locate Home Sites.**

Next, the most appropriate locations for homes should be chosen. The zoning ordinance should establish a maximum overall density for the site, but should not include overly strict lot requirements that would prevent reasonable flexibility in the site layout. Home sites should be chosen to avoid the important features mapped in the first step. Home sites should also work to take advantage of scenic views within the tract.

#### **3. Locate Roads and Trails.**

After the home sites are selected, then a road system should be designed that serves those homes. A trail system should also provide links between homes and to destinations outside of the tract.

#### **4. Draw in the Lot Lines.**

The last sketch plan step is to draw in lot lines. In conventional development, with strict standardized minimum lot requirements, this is often the first step - before any consideration of

natural features of the site.

**Use great care in the design and location of preserved open space areas within development.**

In addition to preserving agriculture, a priority of this Plan is to have substantial amounts of permanently preserved open spaces that create a true feeling of open space. The goal is to have open space that truly serves a public purpose, as opposed to areas that are simply “leftover” after a developer’s preferred pattern of roads and lots are laid out.

Valid public purposes for open space include:

- To preserve land for agriculture, hayfields, orchards and tree farms.
- To preserve environmental sensitive areas, particularly creek valleys and concentrations of mature woods.
- To manage stormwater in a more attractive and naturalistic manner that protects water quality, as opposed to engineered channels and traditional fenced-in detention basins.
- To provide usable recreation areas and important links in a trail system.
- To preserve large contiguous swaths of open space in visible locations that maintain a feeling of open space and that provide a visual relief between developments. At best, some open space would be preserved along exterior roads.

In most cases, at least half of the required open space should be in one contiguous area. Isolated areas (such as less than one acre) and narrow areas of land (such as less than 75 feet wide) should not be counted as open space. However, more narrow stretches may be suitable as open space if they truly serve as part of a regional trail system. Detention basins should not be considered open space unless they are designed as a major scenic asset (such as a natural appearing pond) or are clearly suitable for recreation. Roads and parking should not count as open space, even if the parking is intended to serve recreation uses. Narrow buffers should not count towards open space, but wider buffers may be appropriate. It may be appropriate to establish a maximum percentage of open space that can be covered by impervious surfaces.

To count towards the required open space, land should need to:

- be landscaped in trees, shrubs and other attractive vegetation,
- be maintained in agricultural uses, which may include a tree farm,
- be preserved in woods or natural wetlands vegetation,
- not be used for commercial recreation, other than a golf course, and/or
- be developed as recreational facilities, but not including buildings (other than pavilions).

Open Space should be interconnected with common open space areas on abutting parcels where possible, including provisions for public trails to link trail systems within the municipalities.

## **Strengthening Older Areas of the Region**

It is extremely important that the older areas of the Southwestern Lehigh County Region remain strong and viable business and residential areas. This includes the older areas of Alburdis, Emmaus and Macungie, as well as villages throughout the region. The goal is to make sure that older areas remain healthy and desirable places in which to live and conduct business.

### **Strengthening Older Residential Areas**

This section recommends actions to stabilize and improve older residential neighborhoods. Stable neighborhoods are not only important to provide desirable places to live, but also to protect the health of nearby business areas. If the residential areas deteriorate, they will cause crime and vandalism problems that will discourage business activity. If the surrounding residential areas are strengthened, they will provide a strong base of customers who will hopefully find the downtowns a convenient place to serve their shopping and service needs.

To maintain its economic health, it is important to continually work to attract and retain middle-income households in older areas. This is particularly true because there will always be existing residents moving into newer and more expensive houses, and because there will always be older residents who will be moving to nursing homes, personal care centers or retirement communities. To maintain the same owner-occupancy rate, there needs to be a continual stream of new home-buyers.

This Plan supports the Borough of Emmaus' application to the Pennsylvania Elm Street Program. This program provides funding to assist in strengthening older residential areas that are near older commercial areas. The program offers funding for local staff, studies and physical improvements to support revitalization. Macungie and Alburdis should also consider seeking to take advantage of this program in the future.

Promoting Home Ownership - Many households could afford the monthly costs of owning a home, but do not have sufficient savings for the closing costs and downpayment. These households need to be linked with available programs to help them achieve home ownership. Many of these programs are operated in Lehigh County by the Neighborhood Housing Services of Allentown.

However, care is needed to avoid placing very low-income households in subsidized home-ownership. In too many cases, these households do not have the funds to pay for repairs that are periodically needed in an older home. If they have no equity in the home, they may be tempted to walk away from the mortgage. As a result, a property can stand vacant for months until foreclosure occurs and the property is resold. During this time, the property can deteriorate and/or be vandalized.

Maintaining Housing Conditions - It is important to prevent blight and deterioration before it occurs. A single problem property can encourage responsible residents of nearby properties to move out of the neighborhood and can discourage new home-buyers from investing in the neighborhood. A problem property can also discourage homeowners from investing in improvements to their home because they do not believe they will be able to see any return on their investment if they sell.

To promote home ownership and neighborhood stability, and to avoid parking problems, the conversions of existing one family homes into additional numbers of housing units should be prohibited or very strictly regulated in most areas. This policy is already in effect in most of Emmaus and Macungie. Owner-occupied housing typically has a much higher level of property maintenance than older renter housing. Types of new housing should be promoted that are most likely to be owner-occupied, such as singles, side-by-side twin homes and townhouses, as opposed to apartments or one unit above another unit. Exceptions could be provided in zoning regulations to allow limited conversions of unusually large existing homes.

The municipalities must continue to emphasize enforcement of the basic property maintenance codes to require property-owners to: a) properly maintain their buildings or b) sell the buildings to another party who will make the needed improvements. The goal in code enforcement must be to intervene before buildings deteriorate to the point where it is no longer cost effective to repair them. If property-owners are forced to complete basic maintenance and repairs in a timely manner, severe deterioration can be avoided.

Many older communities have adopted programs for the periodic inspection of rental properties to make sure they meet basic safety standards. To target an inspection program to the properties that are most likely to involve fire and safety hazards, inspections could be limited to buildings that were constructed prior to the enforcement of any comprehensive building codes. This would avoid the need for regular inspection of apartment buildings built during the last few decades, because those buildings typically have fire-resistant construction and safe means of access.

One option would be to require inspections when there is a change in tenants. This would make the program less intrusive to tenants. This option would also target the program to the housing units with the most turnover, which often are the units that need the most improvements. The cost of inspections can be covered by an annual license fee.

Emphasize housing rehabilitation - Most housing efforts primarily involve low-interest loans to rehabilitate homes owned by households with low or moderate incomes. Expanded marketing efforts are needed to make sure that eligible owners of properties in need of rehabilitation are aware of the financing programs that are available. Particular attention needs to be paid to low-income resident owners of property who need to make improvements to comply with municipal codes.

The County Office of Aging also offers a "Home Modification" program for minor household repairs and safety modifications. In most cases, the homeowner only pays for the cost of materials. The program is mainly aimed towards older persons with limited incomes and persons with disabilities.

Buyers of older homes should be encouraged to take advantage of the Federal Housing Administration's 203(k) program. This allows a homebuyer to receive a single loan to purchase a home and to complete a major rehabilitation of it.

It would be desirable to combine job training funding with County housing rehabilitation programs. The Federal Government has provided greater flexibility to use Federal job training dollars in ways that address local needs. Local non-profit housing organizations should work with job training agencies to design programs to meet mutual needs. Residents can learn useful job skills, while the job training programs help provide funding for needed housing rehabilitation.

Densities - This Plan does not recommend providing areas for new high density residential development. Instead, the intent is to maintain a moderate density in most of the older areas. Higher densities should only be considered for: a) housing developments that are limited to senior citizens and the physically handicapped, and b) the conversions of older non-residential buildings (such as old mills) into apartments.

Density bonuses should be considered for developments limited to persons age 55 and older and their spouses, with no children under age 18. These density bonuses are logical because the typical household of older persons generates less traffic, less need for parking and less water and sewage usage compared to other types of housing. Housing for older persons also does not generate additional public school students, thereby avoiding negative impacts upon school finances.

Compatibility in Uses - It is important to protect older residential areas from incompatible development. This is a particularly a concern in older areas where there is typically a relatively dense mix of commercial, industrial and residential uses, with small setbacks.

In commercial areas near neighborhoods, the types of commercial uses should be carefully controlled. Most commercial areas near neighborhoods should not allow for heavy commercial uses, such as gas stations, 24 hour convenience stores, taverns, nightclubs and auto repair. Where practical, the hours of operation and hours of trucking activities should be controlled (such as conditions upon any zoning hearing board approval that is needed). Other problem uses should be very carefully controlled or prohibited, such as after hours clubs that are open after 2 a.m. The zoning hearing boards should carefully review changes to existing business uses in residential zoning districts (which are called "nonconforming uses") to make sure they will not harm the neighborhood.

In industrial areas near neighborhoods, great care is needed about the types of uses that are allowed. The heavier types of industrial uses should be prohibited from these areas or need special exception or conditional use approval.

Neighborhood Character - Zoning provisions can be put into place to require that new buildings in older neighborhoods, downtowns and villages be compatible to nearby buildings. This is known as "Traditional Neighborhood Development" and is illustrated on a previous page of this Chapter. For example, driveways can be required to access onto an alley or side street where it is available, as opposed to having a front garage and driveway. This design avoids conflicts between sidewalks and vehicles backing into the street, and allows the entire curbside to be available for on-street parking.

Otherwise, new driveways may remove as many parking spaces as they create.

New buildings can be required to have a maximum setback from the street that is similar to other buildings on the block. New buildings can also be required to include front porches. Front porches encourage interaction among neighbors, which builds more of a community spirit. If residents spend time on their front porch, they can help oversee the neighborhood and report suspicious activity to the police.

Most new parking can be required to be placed to the rear or side of the main building on the lot, which makes the building and not parked cars the most visible feature along the street.

New street trees can be required by a zoning ordinance as part of the construction of any new principal building, instead of only being required for new subdivisions. Neighborhood character can also be established with older styles of street lights and street name signs.

### **Strengthening Older Business Areas**

One goal of this Plan is to strengthen the downtowns of all three boroughs as business, cultural and civic centers for the region. Emmaus for a number of years has conducted a very successful "Main Street Program," based upon a set of Main Street programs that are underway in towns across the country. While Emmaus is larger than Macungie and Alburtis, many of the same types of policies could be applied to strengthen their downtowns.

The Main Street Program stresses four major approaches:

- Organization and Cooperation - To have a strong organization of all interested parties working cooperatively in partnerships to carry out needed actions.
- Design and Renewal - To improve the physical environment including the "streetscape" and the attractiveness of the fronts of buildings (particularly through rehabilitation of historic features), and providing adequate parking.
- Economic Development - To recruit and retain businesses and investors to expand job opportunities and generate additional local tax revenue. To provide information to support new business development. To maintain regular contacts with existing businesses to help them remain and grow in the downtowns.
- Promotion - To market the downtowns with a unified identify. To use special events to attract new customers and businesses. To emphasize high-quality distinctive products and services, including businesses serving a special market niche that is not served by mass-market discount retailers.

Improving Appearance - The appearance of an older commercial area can impact the ability to attract businesses and customers. Appearance is particularly important for destination-oriented businesses, such as antique shops, gift shops and clothing stores. Special attention is needed to the major entryways to each Borough - because first impressions matter. For most people, the Main Streets represent the most highly visible "face" of each town and the surrounding region.

A set of public improvements should be selected, such as street lights, street trees, traffic signal poles, benches, trash cans and sidewalk paving accents. This could allow some features to be replaced

gradually over time, following a pattern that will eventually be consistent. For example, if an existing unpainted aluminum traffic signal post needs to be replaced in the future, it should be replaced with a post that is coated with a dark color. On their own property, property-owners can also be encouraged to plant species of trees and install light fixtures that follow the overall scheme.

A Facade Improvement Program involves working with private property-owners to encourage them to improve the appearance of the fronts of their buildings. Many boroughs (including Emmaus) offer matching grants or low-interest loans for this purpose. The funding typically is provided by a State grant or a loan pool by banks. The improvements typically must be approved by a local committee. The emphasis should be placed upon improvements that restore or uncover historic architectural features or that are generally consistent with the historic architecture of the corridor. The goal is not only to make buildings more attractive, but also to make business entrances more inviting to customers. Many types of facade improvements can be made with a low cost, such as a well-chosen color scheme or addition of awnings.

Decorative banners are being used in Macungie and Emmaus. Banners add a great deal of color and help to provide a sense of unified identity.

Street Trees - Street trees are important to make older areas more attractive and to make walking more pleasant during the Summer. Species of street trees can be chosen that do not obstruct the visibility of businesses and do not cause damage to sidewalks.

One ideal species is Zelkova. The Zelkova species includes strong well-shaped attractive trees that is similar in appearance to an Elm. Because they have a medium mature size, they are less likely to create conflicts with the many overhead utility lines or grow against buildings than larger trees (such as oaks). At the same time, Zelkovas are large enough to create a shaded canopy effect and to not obstruct pedestrians with low horizontal branches. Another ideal species is Little Leaf Lindens.

In some places, there may not be enough room within the right-of-way to plant new trees. In these cases, cooperative efforts could be made with property owners to plant trees just outside of the right-of-way.

One way to carry out a street tree planting program at little public expense would be to ask adjacent property-owners to pay the purchase price of street trees. The borough would then buy the trees in bulk, select the best locations for the trees considering underground utilities, and then have a contractor do all of the planting at one time. This would minimize the costs and paperwork for each homeowner. It also would ensure that the street trees would be located where an adjoining property-owner is interested in helping to maintain the tree - because that landowner volunteered to pay for it.

Pedestrian Safety - The Main Streets in Emmaus and Macungie are both heavily traveled. It is often very difficult for pedestrians to cross these Main Streets and some cross-streets. Pedestrian crossings are particularly troublesome for senior citizens and persons with disabilities who cannot walk very fast.

Until the installation of the Chestnut Street traffic signal, Downtown Macungie did not have any traffic signals, and therefore had few breaks in traffic and no pedestrian crossing signals. In the future, it would be desirable to install an additional set of traffic signals at Main and Church Streets in Macungie to provide for pedestrian crossings towards the center of town.

Pedestrian crossings are especially difficult when there are large numbers of vehicles making right-hand turns onto a street that a pedestrian is trying to cross. Unfortunately, few motorists comply with the State law regarding pedestrian crossings. Most turning vehicles do not wait for pedestrians to cross. Prohibitions on right turns on red can be helpful in this regard, particularly during hours when pedestrians are more common.



Crosswalks should be highly-visible. Where the most pedestrian crossings occur, it is desirable to use different paving patterns to make the crosswalks very visible. As seen on the attached sketch, it is desirable to extend curbs outward at intersections so that pedestrians do not have as long a length of street to cross. These extended curbs may also slow down the speed of vehicles that are turning, which reduces hazards to pedestrians. These curbs are known as "Bulb-Out Curbs" and are illustrated on a sketch on the following page and in the photo to the left. These extended curbs should be avoided at intersections with heavy truck or bus traffic.

A landscaped center median can be helpful in some instances to provide pedestrians a safe refuge while crossing a main street. The median allows pedestrians to cross one lane of traffic at a time, as opposed to having to wait for both directions to be clear. This type of median may be logical in part of Macungie's Main Street where there is little need for a turn lane, and as an extension of the Triangle in Emmaus.

Sidewalks - This Plan does not recommend multi-million dollar expenditures on entirely new brick sidewalks and placing utilities underground. However, if a sidewalk does need to be replaced, consideration should be given to adding some decorative paving patterns, such as a row along the curb that has the appearance of red brick. (Note - In downtowns, patterned concrete is often used in place of actual brick, because it is likely to break apart.)

## Streetscape sketch

Utility Lines - The placement of all utility lines underground is typically so expensive that it should not be considered unless large areas of sidewalk are being replaced. The boroughs should work with utility companies to try to persuade them to move some overhead utility lines over time from the front sidewalks to rear alleys. This change can most easily be accomplished by cable television lines.

Parking - It is essential to not only provide sufficient amounts of parking, but also to properly manage the spaces that are available. Many persons have come to expect a parking space close to their destination. It is desirable to limit the most sought after parking spaces to a reasonable time limit (such as 2 hours) so that they are available for high turnover use by many persons throughout the day. As unpopular as parking tickets can be, they are essential to avoid use of the best parking spaces by a single car for an entire day. If this is routinely allowed to happen, persons wishing to visit a downtown business for a quick trip will turn away and not return.

In addition, it would be desirable to provide additional numbers of public spaces in Macungie and Emmaus. In Macungie, this could include purchasing underused property towards the center of town. In Emmaus, this may involve purchasing private parking that it is available for public use. At best, underutilized rear yards would be acquired for public parking because it would result in a total increase in the number of available spaces. If adjacent rear yards are combined into one coordinated parking area, it often results in a much higher number of parking spaces because they layout is more efficient.

The boroughs should not try to replicate suburban parking or it will destroy the historic character and streetscape that makes the towns special. However, there may be additional opportunities over time to provide additional parking, particularly by demolishing accessory buildings and underused rear extensions of buildings in the inside of blocks. This is a method to increase parking supply without harming the “face” of the downtown along streets.

It is difficult to find suitable locations for new municipal parking lots in Macungie because the business district is relatively long and linear. Also, it is important to avoid demolition of buildings along Main Street that are historic or add to the character of the street. The parking areas in Macungie Memorial Park are available most of the year, but are not widely used because they are not close enough to most businesses. Unfortunately, many shoppers have become spoiled and expect to be able to park within a very close distance and within eye-sight of their destination.

Marketing and Promotion - Marketing efforts are needed to persuade employees of nearby businesses to regularly visit downtown businesses, particularly during lunch-times and immediately after work. Once tourists are visiting one attraction (such as the events at Macungie Park), it is critical to encourage them to visit downtown businesses. These visitors need to be made aware of the locations and types of businesses that are available. Furthermore, it should be easy to walk from these events to local businesses. Some activities and marketing can be aimed towards wives and kids of persons attending the auto shows. Some late evening activities may be desirable after the auto show closes.

Markets for Downtown Businesses - Several markets exist for Downtown businesses, including:

- People who work within each town or nearby, especially over lunch-time and immediately after work. For example, in Macungie, this includes employees of the public schools, Allen Organ and Mack. In Emmaus, this includes employees of Rodale and area offices.
- Persons traveling the Route 100 corridor or Main Street/Chestnut Street corridor in Emmaus who

- can be encouraged to stop on their way to and from their destination
- People who live nearby
  - Visitors to the region, particularly persons visiting events at the Macungie Memorial Park and Kalmbach Memorial Park.
  - Persons who are already visiting another business in the Downtown, and might be encouraged to visit additional businesses
  - Lastly, persons who are encouraged to make a special visit to the Downtown, or who are looking for a pleasant and interesting experience, or who desire items or services they cannot easily obtain elsewhere

It is difficult for a business to be successful if it is not open during the hours when most people have free time to shop - which is evenings and weekends. At the same time, operators of small family businesses often are over-extended with long hours. One option on weekdays would be to shift from 10 a.m. to 5 p.m. to 11 a.m. to 6 p.m. business hours. Moreover, it may be possible to emphasize a single weekday shopping night when most businesses would be open.

Special Events - Special events are important to bring people into a downtown so that they can see what is available. Even if these visitors do not purchase many goods or services on the day of the event, they are much more likely to come back another day. Many area residents have gotten out of the habit of shopping in a downtown. Special events can provide the motivation for them to return.

Organization and Promotion - It is important that downtown businesses and property-owners be organized, particularly to put together joint promotions, joint marketing and special events. Many individual businesses have little money to advertise individually, but when their resources are pooled together, they can afford joint advertisements and flyers and other promotions. This type of advertising is particularly important because the goal is to get customers to visit more than one downtown business at one time.

Financing - Any grants and low-interest loan programs should be geared towards physical improvements that will have long-term benefits, regardless of what business occupies a particular space. Low interest loans and grants are particularly valuable for improvements that are appearance-oriented, such as historic rehabilitation.

Financing programs can be valuable to spur intensified use of upper story spaces, such as for market-rate apartments or offices. Large expenses can be needed to meet fire safety requirements if the use of upper story space is changed. For example, if storage space is proposed to be converted to apartments, then a second fire-safe stairwell and fire-resistant wall and ceiling separations are often needed.

Moderate the Supply of Commercial Zoning - If an excessive amount of commercial zoning is allowed at one time, it may encourage sprawled development, with businesses simply relocating from one business site to a new site, leaving the old site vacant. There are a number of shopping centers with large vacant spaces in eastern Pennsylvania, as new stores have decided to build on new sites instead of reusing sites of stores that have closed. However, if the supply of commercially zoned land is held to a moderate amount, it will encourage rehabilitation and redevelopment of older commercial sites.

## Concept Plan for Downtown Emmaus

The following ideas relate to numbers shown on the attached map.

1. Add exclusive "Walk" signals at the intersection of 4<sup>th</sup> and Chestnut. Extend the curbs outward in a manner that does not reduce the turning radius and does not remove on-street parking. These are known as "bulb-outs" and are intended to reduce the length of street that a pedestrian must cross.
2. Investigate the proper treatment of the alley known as "Brunner Street." One option would be to close the alley to most traffic, and improve it as a pedestrian pathway from the parking to Downtown stores. The alley should still be accessible by service vehicles and fire trucks. This closing would simplify pedestrian crossings at 4<sup>th</sup> and Main because the curb could be extended. It may also be possible to gain an extra on-street space.
3. The northbound travel lane of 4<sup>th</sup> St. now must shift over to the left as traffic passes through the Chestnut Street intersection. If the diagonal parking on 4<sup>th</sup> is converted over to parallel parking, then there would be space to move the travel lanes away from the Triangle. As a result, a sidewalk and street trees could be added along the 4<sup>th</sup> Street side of the Triangle without reducing the current green space. The sidewalk and curbing should also be extended further south from the Triangle (towards the Emmaus Theater) so that pedestrians do not have to cross as wide a lane of traffic.
4. The Triangle should be landscaped using canopy shade trees that are trimmed so that people can walk under them. These trees should eventually provide a canopy over the adjacent streets. This similar to the central green space in Nazareth. We are not proposing the removal of the existing evergreen tree in the center, unless it would be replaced by another tall evergreen tree.
5. The Borough of Emmaus has designed a new alignment for traffic on the south side of the Triangle. A Federal Transportation Enhancement Grant has been approved to help fund improvements around the Triangle and the Downtown to improve pedestrian safety. A new crosswalk is being proposed with bulb-out curbs to reduce the length of street that pedestrians need to cross.
6. Adjacent to the crosswalk at the east end of the Triangle, the directions of the driveways on the south side should be reversed. The in would become an out and the out would become an in. This would reduce conflicts between turning vehicles and pedestrians.
7. If the parking adjacent to Buss Paints would be reconfigured, it might be possible to close the alley next to the Wachovia Bank building to traffic. Instead, this alley could mainly serve pedestrians and service vehicles. This would move some of the traffic and turning movements away from the crosswalk.
8. The parking area between Buss Paints and the Wachovia Drive-Through could be laid out in a manner that would allow more spaces. The alleys running through the area could be vacated. Ideally, some or all of these parking spaces should be acquired for public parking (possibly with meters with 2 hour limits)
9. To improve sight distances for the parking exit onto 3<sup>rd</sup> Street, consideration should be given to

restricting parking close to the corner on the west side.

10. As much as possible, turning movements should be concentrated at a spot that is not close to crosswalks. Ideally, pedestrians would be encouraged to cross the street at the marked crosswalks.
11. The intersection of 3<sup>rd</sup> and Main should have exclusive "Walk" pedestrian signals. The curblines should be extended outward in a way that does not reduce the turning radius and does not remove any on-street parking spaces. This reduces the length of street that must be crossed by pedestrians. Also, narrower streets psychologically help to encourage motorists to slow down.
12. It would be desirable to have a new municipal parking area, if it is cost-effective. The largest and most under-utilized area for a potential parking area would be east of 3<sup>rd</sup> Street behind the buildings on Main Street. Most of this land is not currently used for parking during most of the week - so any parking would be a net gain to the town.
13. Adjacent property-owners should be encouraged to coordinate their rear parking lots. This will increase the total number of spaces by having a more efficient layout. In addition, different businesses have different peak hours of demand. Therefore, if businesses share the spaces, there will be more efficient use. For example, an office may need parking from 8 a.m. to 5 p.m. weekdays, while a restaurant needs the most parking on weekends and after 5 p.m. on weekdays.
14. If Railroad Street would be made one-way westbound, it would minimize traffic hazards at the railroad bridge where there are limited sight distances and large numbers of pedestrians crossing at night to reach the Theater.
15. Diagonal parking does not work well on heavily traveled streets, but can work well on low-traffic streets. If Railroad Street between 4<sup>th</sup> and 5<sup>th</sup> would be made one-way, it could allow diagonal parking on one side. This could result in many more spaces. It may be possible to lease a couple feet of land from the railroad for a widened street if it is necessary.
16. The intersection of Jubilee and 4<sup>th</sup> Streets at times is a difficult pedestrian crossing - mainly because of the speed of traffic along 4<sup>th</sup> St. Over the long-term, consideration could be given to a 3 way stop, with well-marked crosswalks.
17. Over the long-term, if part of Jubilee Street might be made one-way, it could allow diagonal parking on one side or both sides. This could result in many more spaces. It probably would be necessary to start any one-way restriction west of Borough Hall, to avoid difficulties for the Police Department.
18. The intersection of Broad and 4<sup>th</sup> Sts. should be considered for a 4 way stop, as opposed to the current 3 way stop. This would reduce speeding on 4<sup>th</sup> St. and make pedestrian crossings easier. In addition, signs could be posted designating Broad Street as a "Bike Route." The width of Broad Street makes it the best route towards the Community Park. However, a bike lane should not be painted on the street because studies show that can result in a false sense of security among bicyclists.

# Emmaus Downtown Concept Plan Map

## **Concept Plan for Downtown Macungie**

### Pedestrian Safety

There is a need to improve the convenience and safety for pedestrians and bicyclists in the Downtown. This includes making it easier to cross Main Street, particularly to reach schools, Macungie Park, the Macungie Institute and downtown businesses.

A traffic signal should be sought at Church and Main Streets, with walk signals. This signal will not only help bicyclists and pedestrians, but also result in breaks in traffic that will make it easier for vehicles to turn on Main Street at other locations.

- Curbs can be extended outward at intersections where there is little truck traffic. This provides pedestrians with a safe area to wait and reduces the width of the roadway that they need to cross.
- Where there is little need for a turn lane, a concrete center median might be considered. This can serve as a refuge for pedestrians so they only need to cross one direction of traffic at a time.
- Well-marked crosswalks can be helpful when combined with other measures. Crosswalks can be constructed of textured colored concrete that has the appearance of brick. The color increases the visibility and the texture makes a noise that discourages speeding.
- Some municipalities have crosswalks that are raised slightly above the road pavement. These are called “speed tables.” They work to slow traffic down like a speed bump, but they are much less abrupt.
- Crosswalk ahead signs and flashing lights could be placed over a crosswalk to increase their visibility.
- Some communities even have lights built into the crosswalk that are activated when a “Walk” signal is on.
- Some boroughs place plastic “Stop-Pedestrian Crossing” signs in the middle of streets at key crosswalks during peak periods of activity, such as special events.
- Continued efforts are needed to make sure that sidewalks are in reasonably safe condition.

### Parking Issues (Other than Zoning Regulations)

All downtowns face a similar problem. Most Americans have become much more auto-dependent in recent years. Most people have become “spoiled” in having parking spaces within eyesight of their destination, and are not in the habit of walking a full block from a parking space to a store. This trend is most pronounced in the growth of drive-through restaurants, banks and pharmacies.

There appears to be plentiful parking in the Downtown during most periods of the week. However, it is not always as close to and as visible from destinations as some persons would like.

The key in downtown parking is not to only provide sufficient amounts of parking, but to make sure it is properly managed. This involves making sure that the most convenient parking spaces are available for high-turnover by customers. This is usually achieved through time limits on the best parking spaces (which does not require parking meters).

Then, there should be no time limits where there are excess parking spaces. This encourages employees of downtown businesses and residents to park in these locations. There also can be exceptions on time limits for persons who live within a block.

## HISTORIC PRESERVATION

Southwestern Lehigh County has a rich heritage, as described in the “Overview of the Region’s History” section in the Appendix.

### **Consider historic zoning provisions to protect the most important historic buildings.**

Some form of zoning provisions should be considered by each municipality to protect important historic buildings. This could include historic building provisions that would create a layer of provisions that apply in addition to standard zoning. These provisions could be created under the authority of the State Municipalities Planning Code (MPC), as opposed to the State Historic District Act (which is much more difficult to use).

Unlike a historic district ordinance, zoning regulations on demolition would not regulate changes to buildings, such as window replacements or installation of siding. These zoning provisions also would not regulate the architecture of new construction or building additions. Instead, these historic zoning provisions could be limited to only regulating demolitions of the most important buildings. For example, the zoning ordinance could require that any demolition of a very significant historic building need zoning approval from the Board of Supervisors or Borough Council as a "conditional use." The demolition would only be allowed if the applicant proved that the building could not be economically reused or that the demolition is necessary to allow a project of special public importance (such as an intersection improvement needed to improve public safety). This prohibition on demolition would only apply to buildings listed by the municipality as the most significant.

In addition, a municipality's ordinance could require that any application for a proposed subdivision, land development, conditional use or special exception use must include a full description of any historic building on the property and how the application may adversely affect the building. The Zoning Hearing Board could also be authorized to consider impacts upon historic buildings in determining whether to approve a special exception use.

An alternative to regulating demolition could involve a simple delay of up to 90 days from the time a person applied for a demolition permit until it could be approved. This delay would only apply to a list of important historic buildings. This delay is intended to provide time for interested persons to convince a property owner that there are alternatives for demolition. For example, a new buyer might be found who would be willing to restore the building, or the owner might be persuaded to incorporate the building into their plans for the property.

In any case, an exception should be allowed where a building inspector certifies that a building needs to be demolished because of an imminent public safety hazard.

### **Consider zoning incentives for rehabilitation of historic buildings.**

If a designated building is preserved and rehabilitated in a sensitive manner, the zoning ordinance could allow the building to be used for certain additional uses beyond those uses that are normally allowed under zoning. Therefore, for example, an historic building in a non-commercial zoning district should be allowed to be used as a bed and breakfast inn, office, day care center, antique store, funeral home or similar light commercial use. This should help create a stronger market to encourage investment in the restoration of these buildings. These uses would only be allowed within existing buildings, plus modest-sized building additions that are designed to be compatible with the historic building as viewed from the road. The zoning provisions could require an applicant to submit plans prepared by a registered architect showing that the important features of the building that are visible from a public road will be preserved and rehabilitated. Modern features could be added in areas that are not visible from a public road or street.

### **Promote increased interest and awareness in historic resources, and more detailed identification of historic buildings.**

Increased public interest in historic buildings can help spur interest in persons buying and rehabilitating historic properties.

The Lehigh County Historical Society is the lead historic organization in the County. There are also several volunteer local historic organizations, including in Alburtis and Macungie. These volunteer organizations mainly collect information on the history and of the region and collect historic materials and photos. Each municipality has the option of establishing a formal Historic Commission that would provide advice to the municipal government and to property-owners.

Efforts should be considered to list additional buildings on the National Register of Historic Places. Listing on the Register does not by itself involve any additional regulations upon a private property owner. It does offer public recognition of the importance of a building, and can provide limited Federal income tax benefits as part of a major historic rehabilitation of an investment property. Listing on the National Register provides protection against actions involving Federal or State funds in ways that would adversely affect the building.

### **Encourage property-owners to follow proper standards in making changes to older buildings.**

It is important to make property-owners aware of appropriate ways that old buildings can be modernized or rehabilitated in ways that retain their historic appearance as viewed from a road or street. The following are recommended advisory guidelines (not regulations) for older buildings in the region:

1. Modern uses should be found for historic buildings that require minimal changes to the exterior features of the building that define the building's character.
2. Historic exterior materials and features should be preserved and not be removed or covered.
3. A new building in a historic area does not need to appear old, but should include features that respect nearby historic buildings, such as similar massing, materials, window openings and scale.

4. If deteriorated historic features cannot be repaired, they should be replaced with new features having the same appearance.
5. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials should not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
6. The proportional relationship between the width and the height of the front of historic buildings should be maintained.
7. If doors or windows are replaced, the window and door openings should remain the same size.
8. Any rhythm of solid wall areas vs. windows and doors should be maintained.
9. Any new construction or additions should seek to continue setbacks from a road that are similar to nearby historic buildings.
10. Any rhythm of building projections should be maintained.
11. Materials should be used (such as brick, stone and older styles of siding), that is similar in appearance to authentic materials of surrounding buildings.
12. Roof shapes and roof lines should be maintained, and new buildings should have similar roof lines to nearby historic buildings.
13. Barn walls should be maintained in wood, preferably painted red, white or other historic colors.
14. Views of outdoor storage from roads and residential properties should be minimized.