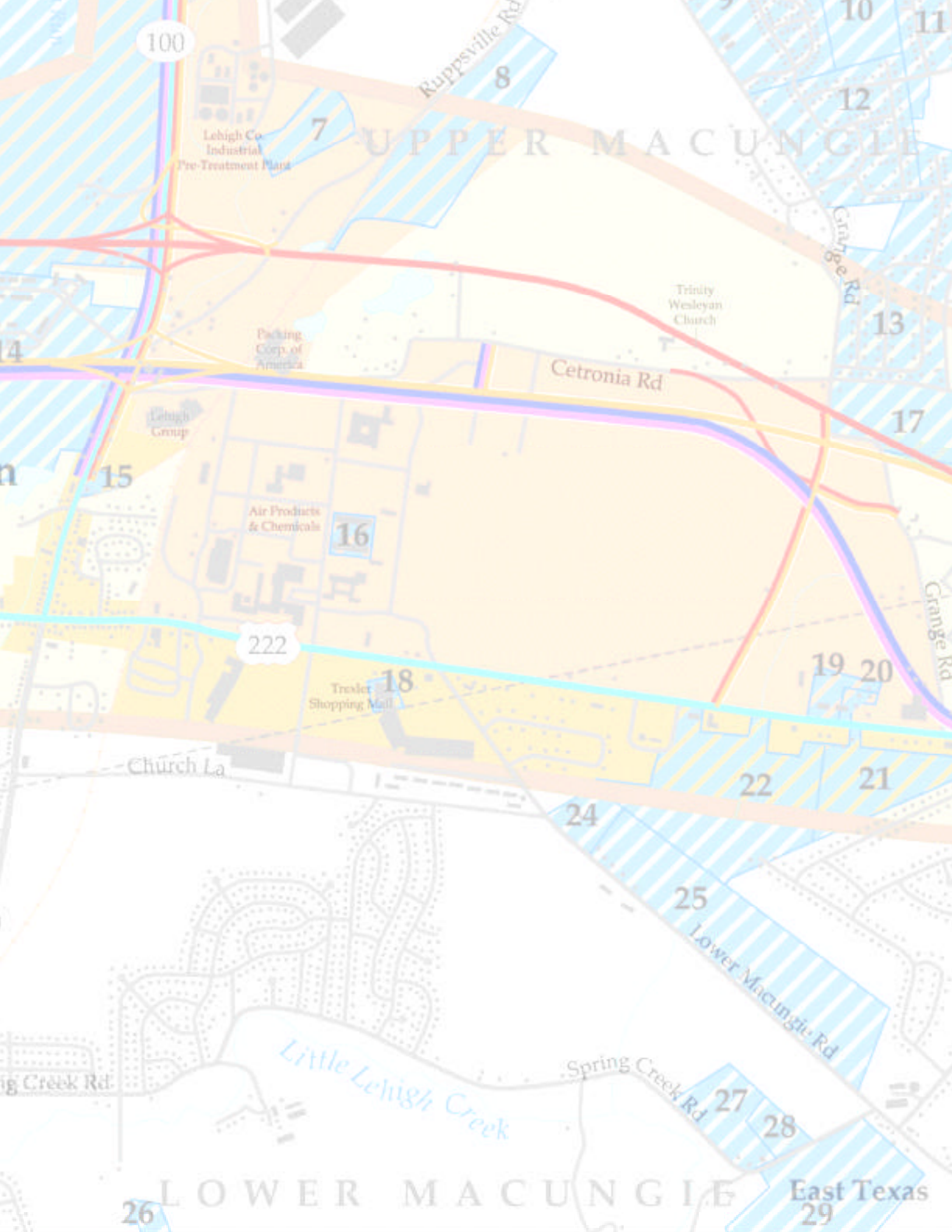


V. Zoning Techniques

In this inventory we speak of “best practices”, tools that have been used in Pennsylvania. The predominant, and perhaps oldest, development tool in the United States is zoning. Introduced in Germany at the end of the 19th century as a way to manage density and bulk, zoning was a reaction to the squalid conditions of the working class. Zoning was adopted for use in the United States in the early 20th century as New York City enacted the first comprehensive city zoning ordinance, dividing the city into three zones: residential, commercial, and uncontrolled use. Since that time, zoning has been applied to various conditions across the United States: urban and rural, new and old, northern and southern.

Zoning is a process whereby the government, in protecting the public interest, can place reasonable limitations on the use and development of private land without the need to compensate the landowner. If the limitations are so severe that the use of the land has been significantly diminished, the government must pay reasonable compensation. The concepts of “police power” and reasonable compensation are not strictly defined and have been legally shaped many times during the past century.

Many of Pennsylvania’s municipalities, in looking to protect the interests of their citizens, have adopted zoning ordinances, and continue to apply and revise these ordinances. This chapter is dedicated to a discussion of these zoning concepts as they exist in Pennsylvania. ■



100

Rupperville Rd

Lehigh Co. Industrial Pre-Treatment Plant

UPPER MACUNGIE

Grange Rd

Packing Corp. of America

Trinity Wesleyan Church

Cetronia Rd

Lehigh Group

Air Products & Chemicals

222

Trexler Shopping Mall

Church La

Lower Macungie Rd

Little Lehigh Creek

Spring Creek Rd

LOWER MACUNGIE

East Texas

26

29

1. Effective Agricultural Zoning

DESCRIPTION:

Effective Agricultural Zoning (EAZ) is a method of preserving farmland by limiting the number of dwellings permitted to a truly rural density, such as one dwelling per 20, 30, or more acres. It is a tool that requires the strong support of the agricultural land-owning community for its adoption and successful implementation. It is generally most applicable in rural areas without suburban development pressures.

The building density permitted under agricultural zoning may be regulated either in terms of a “fixed rate” (such as “x acres per dwelling”) or in terms of a variable rate, where the number of dwellings permitted is greater on smaller parcels which are presumed to have less viability for continued agricultural use. For example, the variable rate approach, known commonly as “sliding-scale zoning”, would typically allow the first dwelling on the basis of the first two acres, the second on the basis of the next five acres, the third on the basis of the next ten acres, the fourth on the basis of the next 20 acres, and so on, until the ultimate “plateau” is reached. That plateau might be 20 acres, 30 acres, 40 acres, or 50 acres. After reaching that plateau, the zoning reverts to the “fixed rate” mode, so that for each additional 20 acres (for example, when 20 acres represents the plateau), one additional dwelling is permitted.

Beyond this zoning density control, this technique also often includes a spatial regulation, to prevent a 100-acre field from being subdivided into five 20-acre farmettes. In such cases, a maximum lot

size of one or two acres (in unsewered areas) is typically established, so that 90 percent of the land will remain undivided. Sliding-scale zoning can also be combined with conservation subdivision design to set standards regulating which parts of the property will be divided into house lots (commonly the least productive soils, and/or those parts of the property furthest from any livestock operations). Some communities take an additional step to ensure that the agricultural land which has been preserved in this way does not later become future house lots. That extra step involves requiring the owner of the remainder parcel to place a permanent conservation easement on that part of his property, legally preventing further development in a manner which will preserve the land even if the zoning is later changed.

BENEFITS:

By limiting the number of new households being established in rural areas, EAZ helps to preserve farmland in two ways. First, the majority of land is set aside for permanent open space uses. Next, the potential for conflicts between new residents and established farmers is reduced since there are fewer neighbors exposed to the effects of farming (i.e., manure dressed fields, pesticides, etc.), and because traffic issues will be correspondingly minimized.

IMPLEMENTATION:

Because farmers typically subdivide only one or two lots at a time, over a number of years, this approach requires

(Effective Agricultural Zoning, Cont'd)

additional record-keeping on the part of the municipality. To begin with, the municipality must maintain an accurate record of the number of parcels existing on each farm at the time the ordinance is adopted. Accurate record-keeping must continue, as land owners apply for permission to divide new lots from their larger parcels. To assist with this process, it is useful to require that notes be attached to deeds and/or subdivision plats stating how many development rights have been used and how many remain on each parcel.

EXAMPLES IN PENNSYLVANIA:

Many townships in both Lancaster and York Counties have employed EAZ for a number of years. In **Lancaster County**, where agriculture is the predominant land use, approximately 350,000 acres have been placed in Effective Agricultural Zoning. It is interesting to note that only about one-tenth of that amount (35,000 acres) has been preserved through purchase of development rights. The sliding-scale approach was first devised by the **York County** Planning Commission, and these techniques have successfully withstood legal challenges in state courts.

CONTACT INFORMATION:

Lancaster County Planning Commission
(717) 299-8333

York County Planning Commission
(717) 771-9870

FUNDING SOURCE(S):

The **State Planning Assistance Program (SPAG)** provides funds on a 50-50 match basis for visioning and

comprehensive planning projects involving multi-municipal efforts.

The World Class Communities Program (WCCP) also provides funds up to 50 percent for multi-municipal planning and visioning efforts.

Small Communities Planning Assistance Program (SCPAP) provides up to 100 percent of the cost to prepare multi-municipal Comprehensive Plans and implementing ordinances. Program guidelines emphasize compliance with Community Development Block Grant Program requirements.

For more information please contact the Governor's Center for Local Government Services at 1-888-2CENTER (223-6837). ■



2. Cluster Development

DESCRIPTION:

This technique provides flexibility in housing density on a parcel as a means of integrating at least a minimal amount of open space into new subdivisions. Typically, both the lot size reductions and the percentage of open space that is created are fairly modest, often ranging between 20 and 40 percent. Frequently, density is calculated on the basis of total tract area (rather than on actual buildable land area), a practice that inflates the density on parcels containing significant amounts of undevelopable land. In addition, most cluster provisions permit the open space to consist of mostly undevelopable and marginally usable land.

The open space that is protected through cluster design may be owned by a homeowner association, a nonprofit conservation organization (such as a land trust), the municipality, or by a combination of the above. Part of the open space may be divided into large "conservancy lots" that are individually owned.

BENEFITS:

Cluster developments, when well designed according to ordinance standards pertaining to the quantity, quality, and configuration of the open space, can produce very attractive and livable neighborhoods that preserve noteworthy features of the natural and cultural landscape. They can also reduce construction costs for developers and long-term maintenance costs for the municipality through shorter lengths for streets and utilities.

Cluster developments are well received by homebuyers when the open space is usable, highly visible, and well distributed through the neighborhood. Readers are referred to the description of a related technique, known as "Open Space Zoning/Conservation Design," which takes the clustering principle to a more advanced level, and which is particularly well-suited for use in lower density situations.

IMPLEMENTATION:

Cluster ordinances ideally base density on net usable land (or on "Yield Plans") to reflect the number of dwellings that could be built on the property with conventional lot layout. In addition to wetlands and steep slopes, cluster ordinances specify a percentage of the relatively flat, dry land as the minimum required open space, to provide suitable areas for village greens, playing fields, conservation meadows, and even agricultural operations. They sometimes offer a modest density incentive paired with a similarly modest density disincentive applied to conventional layouts.

A factor adversely affecting implementation is the typical designation of clustering as a Conditional Use, which adds to costs, lengthens the review period, introduces an additional public hearing to which all the neighbors are specifically invited. This increases the uncertainty of approval for applicants.

Cluster ordinances are ideally offered as a "by-right" option in the ordinance, subject to numerous but clear and detailed design standards for both the

(Cluster Development, Cont'd)

developed portions and the conserved parts of the subdivision.

EXAMPLES IN PENNSYLVANIA:

Numerous municipalities have provisions permitting cluster development and their zoning ordinances. Examples include:

- **Bucks County, PA** – Lower Makefield, Buckingham, Doylestown, and Tinicum Townships;
- **Chester County, PA** – Pennsbury, Willistown, East Goshen, Easttown, and Tredyffrin Townships; and
- **Delaware County, PA** – Radnor Township.

In addition, mandatory cluster development is required in **East Hempfield Township, Lancaster County**.



CONTACT INFORMATION:

Lower Makefield Township, Bucks County
(215) 493-3646

Buckingham Township, Bucks County
(215) 794-8834

Doylestown Township, Bucks County
(215) 348-9915

Tinicum Township, Bucks County
(610) 294-9154

Pennsbury Township, Chester County
(610) 388-7323

Willistown Township, Chester County
(610) 647-5300

East Goshen Township, Chester County
(610) 692-7171

Easttown Township, Chester County
(610) 644-9000

Tredyffrin Township, Chester County
(610) 408-3601

Radnor Township, Delaware County
(610) 688-5600

East Hempfield Township,
Lancaster County
(717) 898-3100

FUNDING SOURCE(S):

The State Planning Assistance Program (SPAG) provides funds on a 50-50 match basis for visioning and comprehensive planning projects involving multi-municipal efforts.

The World Class Communities Program (WCCP) also provides funds up to 50 percent for multi-municipal planning and visioning efforts.

Small Communities Planning Assistance Program (SCPAP) provides up to





■ V. ZONING TECHNIQUES

(Cluster Development, Cont'd)

100 percent of the cost to prepare multi-municipal Comprehensive Plans and implementing ordinances. Program guidelines emphasize compliance with Community Development Block Grant Program requirements.

For more information please contact the Governor's Center for Local Government Services at 1-888-2CENTER (223-6837). ■



3. Planned Residential Development (PRD)

DESCRIPTION:

Planned residential development (PRD) provisions are a means of permitting and encouraging innovative, well planned developments. PRD provisions allow some variation in dimensional and use requirements to achieve the preservation of sensitive natural areas or historic sites. This is accomplished by permitting development to be shifted to more appropriate portions of the site. In Pennsylvania, Article VII of the Municipalities Planning Code (MPC) provides municipalities with the authority to permit PRDs and provides procedures for their implementation.

Planned Residential Developments may be permitted throughout a municipality, but more commonly are permitted in limited areas as specified in the zoning ordinance. Furthermore, a community may define more than one category of PRD. Municipalities may limit PRDs to single family detached homes, but more commonly a variety of housing types are permitted in a PRD development. Nonresidential uses may also be permitted in a PRD.

BENEFITS:

PRDs provide a method for allowing innovative developments not permitted under existing traditional zoning. This practice recognizes that large-scale developments can be planned to include a variety of housing types.

IMPLEMENTATION:

PRD provisions are included within the zoning ordinance of the municipality;

site design requirements for PRDs are also included in the zoning ordinance. These include basic requirements such as minimum site size, maximum density, minimum open space, maximum impervious surface, etc. Within the zoning ordinance the municipality must specify where PRDs are permitted, the uses to be allowed in a PRD, and standards for density of development within the PRD. The review procedures and any special design requirements may be included in the subdivision and land development ordinance.

The MPC provides a review process for PRDs that is different from the subdivision and land development approval process. All aspects of the design are addressed through one review by the governing body. Rather than submitting a preliminary plan, a tentative plan is prepared. The municipality may require that the PRD tentative and/or final plans include different information than a preliminary plan for a standard subdivision or land development, as well as also requiring submission of a written statement explaining the merits of the proposal.

EXAMPLES IN PENNSYLVANIA:

Bedminster Township, Bucks County – Bedminster Township allows a PRD in its R-3 district, on parcels of at least 50 acres. Permitted density is five units per acre, with 50 percent open space required. On projects of more than 100 acres, non-residential development is permitted, limited to less than five percent of the gross site area.

*(Planned Residential Development (PRD),
Cont'd)*

1994 Quakertown Area Zoning

Ordinance, Bucks County - Allows PRD in residential districts on sites of at least 50 acres. The development must consist of residential neighborhoods and a town center. The town center (10 percent to 20 percent of the total site area) must include a village green and civic and/or commercial uses.

CONTACT INFORMATION:

Bedminster Township, Bucks County
(215) 795-2190

Quakertown Borough, Bucks County
(215) 536-5001

FUNDING SOURCE(S):

The State Planning Assistance Program (SPAG) provides funds on a 50-50 match basis for visioning and comprehensive planning projects involving multi-municipal efforts.

The World Class Communities Program (WCCP) also provides funds up to 50 percent for multi-municipal planning and visioning efforts.

Small Communities Planning Assistance Program (SCPAP) provides up to 100 percent of the cost to prepare multi-municipal Comprehensive Plans and implementing ordinances. Program guidelines emphasize compliance with Community Development Block Grant Program requirements.

For more information please contact the Governor's Center for Local Government Services at 1-888-2CENTER (223-6837). ■

4. Flexible Setback Requirements

DESCRIPTION:

Flexible setback requirements include provisions in the zoning ordinance to allow a range of flexibility in building setback distances. This can include building setback requirements for front, side and rear yards for both residential and nonresidential development. While these standards may not be necessary or appropriate for certain development forms, they can be especially important for infill development. With flexible setback requirements, mixed use, medium to high-density villages, boroughs and urban cores, setbacks can be adjusted to maintain the character of a community and maintain the character of existing development. Single family home developments with minimal setbacks (the zero lot line approach) are an increasingly accepted design for higher density projects.

BENEFITS:

This approach allows the continuation of existing character development in villages, boroughs, and urban settings. It encourages pedestrian activity in commercial and mixed-use centers and can reduce housing costs and preserve open space by allowing smaller, yet usable lot sizes. This practice is an important tool for infill development.

IMPLEMENTATION:

In high-density, mixed-use centers, some municipalities not only allow reduced setbacks, but also require development to be set close to the street by using build-to lines. A build-to line determines where the

front wall of the building must be located, and is often set at the limit of the street right-of-way for non-residential development, or with room for a small front yard (based on the location of existing homes) for residential development.

In moderate density residential areas, lot areas are reduced to lower the land cost associated with the purchase. (Lot sizes are also reduced in performance standard, open space, or cluster developments where homes are grouped together to preserve open space or natural resources). However, once lots are made smaller, some of the standard dimensional requirements must also be modified, especially setback requirements. Options include having attached housing types, which by design, have no side yards or single family detached homes with zero lot line side yards. Zero lot line homes are provided an easement on the property adjacent to the lot line wall. This provision is written into each lot's deed and noted on the site plan and/or record plat. An easement gives the homeowner the ability to enter the neighbors property to perform any necessary repairs for maintenance to the lot line wall.

EXAMPLES IN PENNSYLVANIA:

The Borough Core District in Sellersville, Bucks County, permits a mix of residential and commercial uses, has no front setback requirement, and requires only 5-foot side yards and a 25-foot rear yard.

(Flexible Setback Requirements, Cont'd)

The 1994 Quakertown Area Zoning Ordinance in Bucks County permits zero lot line development, as well as village house development, in performance standard developments and planned residential developments. Zero lot line housing types include patio homes and atrium homes, which have no minimum side yard requirements and a minimum front yard setback of only five feet; however, the lots must be enclosed by a fence and all rooms must open onto a private open area.

CONTACT INFORMATION:

Sellersville, Bucks County
(215) 257-5075

Quakertown Borough, Bucks County
(215) 536-5001 ■

5. Incentive (Bonus) Zoning

DESCRIPTION:

Through incentive or bonus zoning, developers are encouraged to provide amenities, such as parks, additional landscaping, plazas, streetscape improvements, access improvements, or affordable housing. In return for the developer's investment in public improvements, the municipality allows a higher density or intensity of development of a site. As alternatives to increasing the amount of development, some communities have devised bonuses which reduce development costs, such as reduced parking or setback requirements.

Other communities use this practice to encourage private developers to provide affordable housing. Bonuses can be offered for providing a certain number or ratio of low and moderate income housing units within a proposed development.

BENEFITS:

Municipalities can receive improvements above and beyond what are normally found in a subdivision and land development ordinance through incentive or bonus zoning, because the developer is not required but rather, chooses to provide the added amenities.

IMPLEMENTATION:

Provisions for bonuses are included within the municipality's zoning ordinance. The ordinance should state the purpose of the provisions, the specific improvement or amenities

required of the developer, and the related amount of density or intensity bonus that the municipality will grant in return. Density/intensity bonuses are often found in overlay provisions, applied to special areas of the municipality.

Neighbors may oppose density/intensity increases. For this practice to be successful, these neighbors must be assured that new development will be compatible with existing community character.

Use of this approach also requires research of the real estate market prior to ordinance enactment. The goal should be to discover what the approximate value of additional density on a site is worth to a developer and set the amenity requirements at this cost.

EXAMPLES IN PENNSYLVANIA:

In the **1994 Quakertown Area Zoning Ordinance in Bucks County**, density bonuses are awarded for providing: extra open space, subsidized low/moderate income housing, unsubsidized moderate income housing, planned residential developments, school site, recreational facilities, access roads, commuter train stop, water systems dedicated to the municipality and fire equipment/facilities.

CONTACT INFORMATION:

Quakertown Borough, Bucks County
(215) 536-5001 ■

1. Open Space Zoning/ Conservation Design

DESCRIPTION:

Open space zoning/conservation design is an enhanced variation on the cluster zoning technique in which a higher percentage of the site is dedicated to open space. The purpose of this more advanced technique is to preserve a larger amount of land for conservation uses, while still allowing full-density development. In contrast to cluster zoning, where the emphasis is more often placed on providing active recreational areas, open space zoning is more suited for protecting farmland, woodland habitat, historic sites, and scenic views. Although it was originally devised for use in rural areas, it can be easily adapted to residential areas.

Under this technique, subdivisions are required to dedicate a significant portion of their unconstrained land to permanent open space uses. House lots, usually for single-family homes, are sited on the remaining parts of the property, where they have views of and access to the open space. The open space is typically owned and managed (according to an approved management plan) by a homeowner association. Other possible owners include land trusts, the municipality, or individuals with large "conservancy lots", which are a form of non-common open space.

BENEFITS:

This technique preserves large open spaces while allowing full-density development. When done, the open space in each new subdivision will

ultimately join together to form interconnected systems of conservation lands.

IMPLEMENTATION:

Open space zoning/conservation design can be implemented through a municipality's zoning ordinance. The number of dwellings permitted is based on the net acreage of buildable land and the underlying density in the zoning district. Easements are then placed on the open space to ensure that it will not be further subdivided or developed. Although open space subdivisions can be offered to developers as an option, sometimes accompanied by density bonus incentives to encourage their use, it can be more effective to allow full-density to be attained in projects that follow these design principles, with lesser density available for conventional layouts consisting entirely of houselots and streets.

The best way to ensure that land is protected in a coordinated fashion, to preserve open space networks, is to apply this subdivision design approach consistently throughout a given zoning district.

EXAMPLES IN PENNSYLVANIA:

Wallace, West Vincent, London Britain, Warwick, and Newlin Townships in Chester County. Milford and Springfield Townships in Bucks County. Upper Salford Township in Montgomery County. (This technique

(Open Space Zoning/Conservation Design, Cont'd)

is related to the "Land Preservation District" approach advocated by the Montgomery County Planning Commission.)

Montgomery County Planning Commission
(610) 278-3730

Upper Salford Township, Montgomery County
(610) 287-6160 ■

CONTACT INFORMATION:

For information relating to model ordinances available through the Growing Greener Program contact the PA Department of Conservation and Natural Resources (DCNR) Bureau of Recreation and Conservation (717) 772-3742

Natural Lands Trust
(610) 353-5587



Bucks County Planning Commission
(215) 345-3400

Milford Township, Bucks County
(215) 536-2090

Springfield Township, Bucks County
(610) 346-6700

Chester County Planning Commission
(610) 344-6285

Wallace Township, Chester County
(610) 942-2880

West Vincent Township, Chester County
(610) 827-7932

London Britain Township, Chester County
(610) 255-0388

Newlin Township, Chester County
(610) 436-6388



2. Maximum Lot Size Standards

DESCRIPTION:

Maximum lot size standards may be used to limit the amount of land that can be devoted to a use.

Maximum lot size standards may be used for:

- Agricultural land preservation;
- Affordable housing provision;
- Maintaining community character;
- Encouraging compact development; and
- Facilitating efficient service provision.

BENEFITS:

When used in rural areas, maximum lot size standards can help preserve agricultural land. When used in a development district, it can ensure development occurs at planned intensities so that infrastructure costs are minimized.

IMPLEMENTATION:

The maximum lot size is incorporated into the zoning ordinance as a dimensional requirement, along with minimum lot sizes, setbacks, etc. It should be noted that maximum lot size standards, if used to encourage affordable housing, do not guarantee more affordable houses. If the standards are used to influence character and aesthetics, courts have held that these are not sufficient public purposes for zoning. However, use of maximum lot size requirements for the purpose of agricultural land preservation was upheld by Pennsylvania Commonwealth Court in Codorus Twp. vs. Rodgers, (1985).

If one compares maximum lot size standards with the flexible lot size standards practice, you see that the maximum lot size standard would be voided. It is important *not* to combine these practices.

EXAMPLES IN PENNSYLVANIA:

Maximum lot sizes have been used in conjunction with area-based allocation zoning for agricultural land preservation in a number of townships in York County.

Lower Merion Township, Montgomery County

West Vincent Township, Chester County

CONTACT INFORMATION:

York County Planning Commission
(717) 771-9870

Lower Merion Township, Montgomery County
(610) 645-6145

West Vincent Township, Chester County
(610) 827-7932 ■



3. Lot Averaging Standard

DESCRIPTION:

Lot averaging adds flexibility to subdivision design. This practice allows lot sizes to vary while the overall density of a site is kept constant. Lot averaging can be used to assist in the preservation of natural features, such as wetlands or wooded areas. Allowing variation in lot sizes may also make it easier to create a well designed subdivision on an awkwardly shaped parcel.

BENEFITS:

Lot averaging is a tool that facilitates full development of difficult areas within the development district. It facilitates development of sites with natural resource or other limitations to their full potential.

IMPLEMENTATION:

Provisions authorizing lot averaging should be included in the zoning ordinance under the sections that deals with dimensional requirements.

The number of dwelling units permitted in subdivisions using lot averaging is determined by density limits in the zoning ordinance. However, to avoid disturbing natural features on a site, the size of the lots vary. Some homes are sited on large lots so that the house may be placed on the lot without encroachment into wetlands, wooded areas, or other natural features. Since some lots on the site are made larger, the size of other lots is reduced on areas of the site without resource limitations. This allows the

number of units permitted by the ordinance to be located on the site.

EXAMPLES IN PENNSYLVANIA:

Doylestown, Warrington and Upper Southampton Townships in Bucks County include provisions in their zoning ordinance for lot averaging.

Schuylkill, West Whiteland and Birmingham Township in Chester County include provisions in their zoning ordinances for lot averaging.

CONTACT INFORMATION:

Doylestown Township, Bucks County
(215) 348-9915

Warrington Township, Bucks County
(215) 343-9350

Upper Southampton Township, Bucks County
(215) 322-9700

Schuylkill Township, Chester County
(610) 933-4428

West Whiteland Township, Chester County
(610) 363-9525

Birmingham Township, Chester County
(610) 793-2600 ■



4. Flexible Lot Size

DESCRIPTION:

Large lot size zoning has been the traditional method for land regulation in rural areas. This approach sets minimum lot sizes at one or more acres per dwelling unit throughout areas of the community where rural character predominates, minimal public infrastructure is planned, and little development is anticipated.

Provisions for larger lots may be useful in areas that are not served by public water or sewer (on-lot sewage systems need adequate drainage field areas to function properly or wells must be located a safe distance away from the septic system's drainage field). Large lot developments may also be appropriate in areas with less productive farmland and/or sensitive natural features.

BENEFITS:

Flexible Lot Size provisions are easy to devise, establish and administer.

IMPLEMENTATION:

Lot size standards are part of a municipality's zoning ordinance. The Pennsylvania courts have limited municipality's ability to require large lot sizes for single family homes. Courts place the burden of proof on the municipality to show that a large minimum lot size requirement furthers a legitimate public purpose and that it is not discriminatory.

EXAMPLES IN PENNSYLVANIA:

Newtown Area Zoning Ordinance in Bucks County –

- Conservation Management District: Three-acre minimum lots to protect groundwater resources in an area dependent on wells.
- Jericho Mountain District: Five-acre minimum lots, due to steep slopes, poor suitability for on-lot sewer systems, high erosion potential, and extremely limited groundwater availability.

Quakertown Area Zoning Ordinance in Bucks County –

- Resource Protection District: Five-acre minimum lots to protect areas consisting of natural features, such as forest, steep slope, scenic areas, wetlands, floodplains, and lakes/lakeshores.

CONTACT INFORMATION:

Bucks County Planning Commission
(215) 345-3400

For more information please contact the Governor's Center for Local Government Services at 1-888-2CENTER (223-6837). ■



5. “Traditional” Neighborhood Development (TND)

DESCRIPTION:

Traditional Neighborhood Development (TND) is a compact form of development. It may be used to create a more diversified community for residents, by having a pedestrian oriented design and central community facilities, parks and stores.

Recreating small town character is a primary goal of traditional neighborhood development. This is achieved through a number of aspects of community design. Providing a hospitable environment for pedestrians is an important goal of a TND and vital to ensuring that residents can conveniently visit central community facilities. Within a TND all streets have sidewalks and on-street parking is common. The design of the streets (narrow, with multiple intersections) is intended to slow traffic and reduce its volume.

TNDs also include a central, mixed-use core of community facilities (schools, day care centers, post office, churches) and small retail establishments (corner markets, dry cleaners) and a variety of housing types. Public spaces reminiscent of town squares are an important component of TNDs and strict architectural codes are common. Most villages in Pennsylvania are TNDs.

BENEFITS:

TND is a compact form of development, which uses land efficiently. Residents can walk to central community facilities and street design is intended to slow traffic.

IMPLEMENTATION:

TND is a relatively new concept. It requires a large site and/or coordinated development of adjacent sites for full implementation of the concept.

Before a municipality can approve a project with a TND design, it must usually amend local zoning and subdivision ordinances to permit the design.

EXAMPLES IN PENNSYLVANIA:

Uwchlan Township, Chester County – The Gardens at Eagleview is a TND of approximately 100 dwelling units built on a street-grid pattern. The Gardens at Eagleview feature zero lot lines and alleyways.

Nine Mile Run Project, City of Pittsburgh – The 238-acre Nine Mile Run site is the largest land acquisition in the Urban Redevelopment Authority's history. The site, formerly used as a landfill for waste byproducts of steelmaking operations throughout the region, will be the site of a new neighborhood that could support more than 700 upscale housing units.

CONTACT INFORMATION:

Chester County Planning Commission
(610) 344-6285

Uwchlan Township, Chester County
(610) 363-9450

City Planning Office, City of Pittsburgh
(412) 255-2200 ■



1. Landscape Features/ Site Analysis Map

DESCRIPTION:

A Landscape Features/Site Analysis Map is a tool used to provide more information than is typically presented for subdivisions that produce only house lots and streets. Information needed to compile the site analysis map is readily available from existing published sources, and is therefore economically feasible for applicants. Landowners should be consulted because they may possess valuable information about their properties. The site analysis map is perhaps one of the more important documents in the subdivision design process, because it provides the information to assist with design decisions.

BENEFIT:

This tool provides an information base for the site design and design type to be used in development. It provides early identification of highly regulated and sensitive natural resources.

IMPLEMENTATION:

Information that is typically required on a landscape features/site analysis map may include the following:

1. Location, size and ownership of any underground utilities, rights-of-way, or easements;
2. Contours indicating existing slope of land;
3. Natural features, large trees, wood lands, floodplains, lakes, ponds, watercourses, wetlands, soils, wildlife habitat and steep slopes;

4. Buildings, farmlands, historic, archaeological, and cultural features;
5. Views into and out from the site; and
6. Groundwater recharge areas.

The various landscape features can be grouped into two categories. The first, "primary conservation areas," includes inherently unbuildable lands that are unsuitable for development. Other resources fall into the category of "secondary conservation areas," which comprise noteworthy elements of the property that are not wet, flood prone, or steep, but which should still be considered for conservation purposes. If a community-wide Natural Resources Inventory has been completed as part of the municipality's comprehensive plan, much of this information may already exist.

Once all the pertinent features have been identified, located, and evaluated in terms of their significance, they may be compiled and looked at together and incorporated into a composite map. All "buildable" land will be those areas not limited by the primary conservation areas. The residual land to be considered for development will therefore consist of one or more of these other resource types, which are then prioritized to select those that are most critical, significant or irreplaceable (secondary conservation areas). These decisions should be based on the community or county-wide goals and desires for preservation of sensitive land features.

After completing the existing resources/site analysis map, a joint field visit

(Landscape Features/Site Analysis Map, Cont'd)

should be conducted to allow for planning commission members to walk the property with the developer and his design team.

EXAMPLES IN PENNSYLVANIA:

Ringfield, Chadds Ford Township, Delaware County – Approximately 55 acres of this 64-acre site have been preserved as open meadows and natural woodlands. With meadowland, dogwood trees, and a pond occupying the public viewshed, the layout of the neighborhood helps to preserve the township's rural character. The original stone farmhouse is situated on an outparcel.

Farmview, Lower Makefield Township in Bucks County – Located on a 418 acre site, Farmview is a 322 lot "density-neutral" subdivision whose layout was designed to conserve 213 acres of land, including 145 acres of cropland and 68 acres of mature woods. While 59 percent of the original farmland was needed for development, 41 percent categorized as prime agricultural and farmland of statewide importance was able to be preserved in addition to nearly all of the wooded areas.

CONTACT INFORMATION:

Natural Lands Trust
(610) 353-5587 ■



2. Early Sketch Plan Alternatives

DESCRIPTION:

The sketch plan is a useful first step in the preliminary design process, showing the general location of proposed roads, development areas and conservation areas. The Municipalities Planning Code (MPC) does not provide for a Sketch Plan requirement before the Preliminary Plan and the Final Plan; the early sketch plan is a separate procedure.

In its basic form, the early sketch plan may consist of simple “bubble maps” drawn on tracing paper overlay sheets placed on top of the landscape feature/site analysis map, and for this reason they are sometimes referred to as “Sketch Plan Overlays”.

BENEFITS:

Sketch plans cost little to prepare, as they involve virtually no engineering input except for a general knowledge of soil and slope conditions (which are pertinent for septic systems and street alignments). These plans can encourage innovative and high quality development and alert a developer to early limitations and potential conservation areas. When employed in the earliest stages of site planning, this tool often saves time overall by effectively avoiding protracted discussion and delays at the preliminary plan stage.

IMPLEMENTATION:

This tool is not specified in the MPC. However, if the local ordinance requires a sketch plan to be submitted, it must be reviewed as a preliminary plan within the required ninety-day time limit.

EXAMPLES IN PENNSYLVANIA:

Farmview, Lower Makefield Township, Bucks County - Located on a 418 acre site, Farmview is a 322 lot “density-neutral” subdivision whose layout was designed to conserve 213 acres of land, including 145 acres of cropland and 68 acres of mature woods. While 59 percent of the original farmland was needed for development, 41 percent categorized as prime agricultural and farmland of statewide importance was able to be preserved in addition to nearly all of the wooded areas.

CONTACT INFORMATION/ FUNDING SOURCE(S):

Natural Lands Trust
(610) 353-5587 ■





1. Residential Performance Zoning

DESCRIPTION:

Performance zoning, like cluster zoning, allows lot sizes to be reduced, in exchange for providing open space on a site. Residential performance zoning allows increased flexibility in site design to protect sensitive natural areas and allow for the provision of a variety of housing types. Performance zoning is more sophisticated than cluster zoning, in that it requires natural resource protection and allows for developments with multiple housing types.

The three standards controlling performance-zoning subdivisions are:

Density – The number of dwelling units allowed per acre of the site. Most communities using performance zoning require a site capacity calculation be made, to determine the number of permitted units on the site.

Impervious Surface Ratio – Performance zoning limits the percentage of a site that can be covered by impervious surfaces.

Open Space Ratio – All performance-zoning subdivisions are required to have a minimum percentage of community open space. Undeveloped land devoted to natural resource protection can count toward fulfilling open space requirements. Some communities require that a certain amount of the open space be suitable for recreation purposes.

Within zoning districts of a community, each of the performance zoning standards

for density, open space, and impervious surface can vary to permit development with the desired character. The tool permits a variety of housing types to be used in the subdivision, so long as the required density, open space, and impervious surface requirements are met.

BENEFIT:

Residential performance zoning ensures protection of sensitive natural areas and allows innovation in project design. It also provides opportunity for construction of a variety of housing types.

IMPLEMENTATION:

Performance zoning is a complex form of zoning. The zoning ordinance should specify minimum lot sizes, setbacks, parking requirements, and any other site design requirements for each housing type. This type of zoning can require more engineering and higher design costs compared with conventional zoning.

The list of calculations and formulas that must be met for performance zoning developments is substantial. It is useful for a municipality enacting performance zoning to have educational materials available to illustrate how these calculations are made, and the benefits that performance zoning can have.

EXAMPLES IN PENNSYLVANIA:

Bucks County Planning Commission – has developed a model Performance Zoning Ordinance that has been

(Residential Performance Zoning, Cont'd)

adopted, with slight modifications, by 29 of the county's 54 municipalities. This model ordinance provides standards for natural resource protection, as well as density, open space ratios, and impervious surface limits for a variety of housing types in a number of districts.

CONTACT INFORMATION:

Bucks County Planning Commission
(215) 345-3400 ■

2. Design and Improvement of Commercial Settings: Commercial Boulevards, Buffer Yard Provisions and Parking Provisions

DESCRIPTION:

Three commercial performance standards exist to facilitate the design and improvement of commercial settings. They are: commercial boulevards, buffer yard provisions and parking provisions.

Commercial Boulevards – Designating and improving a commercial boulevard is a method of enhancing the appearance and character of a community. It can give identity to a stretch of road and make it a safer and more attractive place to travel and shop.

One of the most viewed portions of suburban areas is the highway strip. Communities can institute programs to give highway strips a more inviting identity.

Buffer Yard Provisions – Areas used to soften the outline of buildings, to screen glare and noise, and to create a visual and/or physical barrier between land uses. Buffer yards may be provided for between different types of uses (e.g. industrial and residential) and along existing or proposed streets. The amount of buffering required is determined by the type of use proposed and the adjacent uses or street types surrounding the proposed development.

Parking Provisions – Parking is one of the most necessary, and often the least attractive elements of site development. Parking lots can cause environmental degradation. However, there are steps municipalities can take to reduce the amount and impacts of parking on their community. These include: public transportation, incentives for

carpooling, public parking garages, off-site parking lots, staggered shared parking, reduces parking requirements, reductions in space sizes, angled parking, and pervious surface paving.

BENEFITS:

With commercial boulevards public and private investment is made towards improvements. By investing in the roadway, local government provides an example to neighboring property owners of its commitment to corridor improvements, thus encouraging property owners to make similar investments. Examples of roadway improvements include:

- traffic management improvements;
- landscaping;
- installation of street trees;
- sidewalks/bike paths;
- relocation of utilities below ground;
- lighting improvements; and
- coordination of traffic signage.

Buffer yard provisions, on the other hand, minimizes the impacts of neighboring uses. Communities can allow existing vegetation to count toward buffering requirements.

Parking provisions can help a municipality minimize the impacts on the streetscape and the environment.

IMPLEMENTATION:

Commercial Boulevard – Effective commercial boulevard programs have two components:

1. Public investment in the roadway; and

(Design and Improvement of Commercial Settings, Cont'd)

2. Regulation of private development along the roadway.

Improvement of the amenities within the road right-of-way are the responsibility of the municipality, unless they are state highways under the authority of the Pennsylvania Department of Transportation (PennDOT) and would need to be coordinated with PennDOT.

Sometimes the highway corridor is designated as a unique zoning district. More often, an overlay district is placed along the corridor. The corridor district sets zoning ordinance requirements which facilitate safe travel along the corridor, through permitting compatible land uses and requiring their siting and access design to be in keeping with the character of the corridor. Examples include: sign controls, land use limitations, landscaping requirements and access management.

Buffer Yard Requirements – Buffer Yard Provisions should include:

1. A method of determining when buffer yards must be installed;
2. The width of the buffer yards; and
3. Screening requirements (either landscaping or fence wall).

Under performance-based buffer yard requirements, a table is devised, where the proposed uses are matched with existing adjacent uses (or zoning class of adjacent vacant land), and a resulting required buffer yard class is set. In general, uses that have greater incompatibility require larger width yards and/or increased amounts of landscaping. Options are provided for the method of landscaping as well.

Parking Provisions – Municipalities can take steps to ensure that parking areas will be designed and landscaped to minimize their impacts on the streetscape and the environment. Examples include: buffer requirements, landscaping requirements and prohibiting front yard parking.

EXAMPLES IN PENNSYLVANIA:

Warrington Township in Bucks County has a Growth Management Plan that includes a discussion of a boulevard treatment of Route 611 through the Township.

Middletown Township in Bucks County provides several planting options and allows existing vegetation to contribute to the buffer.

Buckingham Township in Bucks County has provisions in its zoning ordinance for shared parking lots, off-site parking, and reductions in required parking amounts.

CONTACT INFORMATION:

Warrington Township, Bucks County
(215) 343-9350

Middletown Township, Bucks County
(215) 943-0300

Buckingham Township, Bucks County
(215) 794-8834

For more information please contact the Governor's Center for Local Government Services at 1-888-2CENTER (223-6837). ■



3. Industrial Performance Standards

DESCRIPTION:

Industrial performance standards provide a method for determining the manufacturing uses permitted within a zoning district and allow industrial uses based on the impacts of the manufacturing process. Maximum standards for emissions of noise, vibrations, odor, and other aspects are specified in a zoning ordinance. Industrial facilities that violate federal, state or local standards are not permitted in the zone, and may be forced to cease operation and/or be fined.

BENEFITS:

Industrial performance standards recognize the ability of industry to change and adjust its process to minimize impacts. The standards regulate actual impacts.

IMPLEMENTATION:

The review standards for this tool should be measurable and fair. Absolute numbers and thresholds can be measured and met. Potential impacts of a project are estimated at the site plan review stage. This requires an understanding of the process that will occur on the site, the materials being used and created in the process, and any remediation measures being implemented. Understanding all these factors requires knowledge, and the actual plan review may take a considerable amount of time. Communities may wish to evaluate potential impacts prior to construction of a project.

EXAMPLES IN PENNSYLVANIA:

Doylestown Borough and East Rockhill Township in Bucks County have performance standards for noise, emissions, odor, and other potential impacts which may apply to all development in the municipality.

CONTACT INFORMATION:

Doylestown Borough, Bucks County
(215) 345-4140

East Rockwell Township, Bucks County
(215) 257-9156 ■





4. Overlay Zoning Provisions

DESCRIPTION:

An overlay zoning district applies regulations to an area in addition to and superseding the requirements of the underlying zoning district(s). Such a district may recognize unique features, either natural or man-made, requiring special attention, or may facilitate development of a special character.

BENEFITS:

Overlay zoning allows regulations to be tailored to specific conditions. Administration is the same as any zoning district.

IMPLEMENTATION:

In general, the provisions of a zoning district must apply uniformly to each class of uses or structures within each district. However, Section 605 of the MPC authorizes additional classifications, potentially through the use of overlay zoning, for:

Making transitional provisions at and near the boundaries of districts;

Regulating nonconforming uses and structures;

Regulating, restricting, or prohibiting uses and structures at, along or near:

- major thoroughfares, their intersections and interchanges, transportation arteries and rail or transit terminals
- natural or artificial bodies of water, boat docks and related facilities

- places of relatively steep slope or grade, or other areas of hazardous geological or topographic features
- public buildings and public grounds
- aircraft, helicopter, rocket and spacecraft facilities
- places having unique historical, architectural or patriotic interest or value
- floodplain areas, agricultural areas, sanitary landfills, and other places having a special character or use affecting and affected by their surroundings;

Encouraging innovation and the promotion of flexibility, economy and ingenuity in development, including subdivisions and land developments, and for the purpose of authorizing increases in the permissible density of population or intensity of a particular use based upon expressed standards and criteria set forth in the zoning ordinance; and

Regulating transferable development rights on a voluntary basis.

EXAMPLES IN PENNSYLVANIA:

Yardley Borough in Bucks County

has placed areas adjoining the Delaware Canal in an overlay district to protect its historic and recreational qualities.

Hollidaysburg Borough in Blair County

has an overlay zoning district encompassing the National Register Historic District of the Borough.

(Overlay Zoning Provisions, Cont'd)

CONTACT INFORMATION:

Yardley Borough, Bucks County
(215) 493-6832

Hollidaysburg Borough, Blair County
(814) 695-7543 ■

5. Overlay Districts

DESCRIPTION:

The concept of an overlay district implies that, for a specific area within a municipality, because of some unique characteristic of that area, more than one zoning district regulates development. An overlay can be used as a layer over more than one zoning district; it can even cross municipal boundaries if applied at a multi-municipal or county level by the participating municipalities. While the underlying zoning district(s) designates basic zoning regulations, such as permitted uses, conditional uses, and yard and bulk requirements, the overlay district may establish more restrictive development regulations, such as setbacks, design guidelines, signage, buffers and an additional list of uses. The overlay district regulations will generally prevail over those of the underlying zoning district(s).

For infrastructure planning, overlay districts can be used in a variety of ways for managing concerns related to such things as viewshed protection, safety, access, environment, mobility, aesthetics and land use planning in the area. Examples of the use of overlay districts for these purposes would include a scenic overlay district, an interchange overlay district, and a floodplain overlay district.

BENEFITS:

In the context of infrastructure planning, overlay districts provide buffers for adjacent land uses while allowing continued traffic movement around the overlay district. They provide sufficient setbacks to facilitate potential widening of right-of-way and/or access ramps,

without disrupting surrounding uses. And, maintain circulation movement through the overlay district while accommodating additional development.

IMPLEMENTATION:

When an overlay district crosses municipal boundaries, impacts from outside the municipality can adversely affect the district and hinder its success. In this case a multi-municipal or county plan may be a successful approach to overlay district planning.

EXAMPLES IN PENNSYLVANIA:

Examples where scenic overlay districts have been used include:

The Newlin Township, Chester County Comprehensive Plan emphasizes the unique value of scenic roads to the Township, and summarizes the Township's Scenic Roads Inventory. Scenic roads in the inventory were classified by applying a set of standard physical characteristics, including proximity to watercourses, horizontal and vertical curves, narrow cartways, focal points, historic sites, and so on. Each road has different scenic qualities due to views of streams, woodlands and mature trees, meadows, farmlands, notable or historic structures, and other scenic features. The Comprehensive Plan recognizes that natural features adjacent to these roads impose strong design limitations for improvement of roads. The scenic road element of the Township Comprehensive Plan provides strong support for efforts the township may undertake to protect the scenic quality of its roads. To this end, the implementation section of the plan

(Overlay Districts, Cont'd)

indicates that the zoning ordinance will be linked to the protection programs identified in the Open Space, Recreation, and Environmental Resources Plan for scenic and historic resources.

The North Coventry Township, Chester County, Zoning Ordinance, adopted in 1996, includes a Scenic Preservation Overlay District. The purpose of this district includes the preservation of scenic approaches to the Township, promotion and preservation of historic structures, and encouragement of the continued preservation of open space, recreation, and conservation uses. The ordinance specifies the location and extent of the district on each side of Route 724, a scenic entranceway into the Township. While uses permitted in the district are limited, the ordinance allows open space and recreation uses associated with residential development to be located within the designated setback. It is hoped that this will encourage developers to use the cluster development option in a way that will both preserve open space and limit visual intrusion into the scenic district. Adaptive reuse of historic structures within the district is also permitted to encourage their preservation. The use of off-premises signs (billboards) and portable signs is prohibited within the district. The construction of new roads and driveways crossing the overlay district is discouraged where access can be taken from existing roads and driveways.

Examples where Interchange Overlay Districts have been used:

1. **North Coventry Township, Chester County**, has an Interchange Overlay District in their zoning ordinance. The district is comprised of land

areas adjacent to the Route 100/724 interchange. This district permits certain uses by conditional approval, in addition to those permitted by the base zoning. The district also establishes additional regulations for buffers, transition between uses, signage, parking, and access management.

2. **Lower Pottsgrove Township, Montgomery County**, adopted an Interchange District in 1972. The district is located south of the Pottstown bypass (S.R. 422), and allows a mix of uses, aimed toward the "future economic vitality of the interchange area."
3. **Upper Providence Township, Montgomery County**, has successfully used two zoning districts along the Pottstown Expressway (S.R. 422) to encourage the development of corporate centers in the Interchange Office District, and multi-use commercial and office campuses with compatible uses planned as per a master plan for the complete tract in the Interchange Office Support District.

CONTACT INFORMATION:

Newlin Township, Chester County
(610) 436-6388

North Coventry Township, Chester County
(610) 323-1694

Lower Pottsgrove Township, Montgomery County
(610) 323-0436

Upper Providence Township, Montgomery County (610) 323-0436 ■

