



Traditional Neighborhood Development

A Fresh Look at an

Alternate Development Approach



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INTRODUCTION

The Lehigh Valley Planning Commission introduced the Traditional Neighborhood Development (TND) concept to Lehigh Valley audiences as an alternative approach to development in the 1994 report *Traditional Neighborhood Development: An Alternate Approach to Development*. The report

- Explained the background of the TND movement,
- Described TND objectives and characteristics,
- Evaluated TND effectiveness in achieving the objectives and
- Considered the applicability of TNDs to the Lehigh Valley.

The report concluded that TNDs were consistent with the Planning Commission's Comprehensive Plan and recommended that the Commission support TND proposals in areas recommended for urban development. However, the report recommended that advocacy for TNDs be accorded a low priority because "the Lehigh Valley housing market may not be ready for TNDs."

Little has taken place in connection with TNDs in the Lehigh Valley in the intervening 17 years. A few municipalities adopted TND provisions in their zoning ordinances. However, no TNDs have been proposed or built. This lack of response does not negate the value of the development approach. This report has been prepared to spark new awareness of and interest in TND development locally.

Unlike in the Lehigh Valley, TND development has taken place elsewhere in Pennsylvania, mostly in the southeastern part of the state. In the western part of the state, Cranberry Township, a fast growing municipality in Butler County, has made extensive use of TNDs to create an attractive and functional community. As a fresh look at TNDs, this report provides current information including changes in the state laws. At the time that the 1994 report was written, the PA Municipalities Planning Code (MPC) had no specific provisions for TNDs. Such provisions have since been created and amended.

This report is illustrated with images from amongst 14 TNDs that have been built or have been proposed in Bucks County. The TNDs, most of which have been built, are diverse. Eight are in boroughs and six are in townships. They range in acreage from 1.5 to 198. Several consist of a single housing type. Others include four housing types plus office and retail development. The largest has 463 dwelling units. The smallest has 10 dwelling units. The densities are modest. With a single exception, they range from 1.2 dwelling units per acre to 7.2 dwelling units per acre. One small project is built at 15 dwelling units per acre.

DEFINITION

The PA Municipalities Planning Code defines Traditional Neighborhood Development (TND) as follows: "Traditional neighborhood development, an area of land developed for a compatible mixture of residential units for various income levels and nonresidential commercial and work-place uses, including some structures that provide for a mix of uses within the same building. Residences, shops, offices, workplaces, public buildings, and parks are interwoven within the neighborhood so that all are within relatively close proximity to each other. Traditional neighborhood development is relatively compact, limited in size and oriented toward pedestrian ac-

tivity. It has an identifiable center and a discernable edge. The center of the neighborhood is in the form of a public park, commons, plaza, square or prominent intersection of two or more major streets. Generally, there is a hierarchy of streets laid out in a rectilinear or grid pattern of interconnecting streets and blocks which provide multiple routes from origins to destinations and are appropriately designed to serve the needs of pedestrians and vehicles equally.”



This view of Bedminster Square illustrates several TND characteristics: short front yard setbacks, street walls, and multiple transportation choices (cars, bicycling and walking).

PA MUNICIPALITIES PLANNING CODE

The PA Municipalities Planning Code was amended in 2000 by the addition of Article VII-A. This article is devoted to TNDs. It explicitly grants authority to municipalities to adopt TND provisions. In addition to granting power to municipalities, the article also spells out TND objectives, standards and conditions, procedures and relationships to other planning tools. A reading of the article reveals that it offers broad powers to municipalities while at the same time imposing few requirements. Act 111 of 2010 modified the provisions of Article VII-A. A copy of Article VII-A is attached as Appendix A.

The requirements set forth in Article VII-A as amended are as follows:

- TND provisions shall be included in the zoning ordinance. The adoption procedures are identical to those of other zoning ordinance amendments. (Section 702-A)
- Municipalities may adopt TND provisions by one of two methods. First, the municipality can create a zoning district “reserved exclusively” for TND. Alternately, the municipality can allow TNDs as a form of development in any standard zoning district. (Section 702-A1)
- Design standards specific to TNDs for streets and similar features may be located in either the zoning ordinance or in the SALDO, at the municipality’s discretion. (Section 708-A1)
- The manual of Written and Graphic Design Guidelines (itself an optional element) can be included in either the zoning ordinance or in the SALDO. (Section 708-A)

The remaining provisions of Article VII-A, while extremely detailed, are all preceded by the terms “may”, “should” or “recommended”. As such, the adoption of provisions like “The distance between the sidewalk and residential dwellings should as a general rule, be occupied by a semi-public attachment, such as a porch or, at a minimum, a covered entryway.” (Section 706-A(d) (4)) are entirely at the discretion of the municipality. Their adoption is not required by the article.

At the same time, the article provides municipalities with considerable freedom to adopt measures that they consider appropriate. The repeated use of the phrase “but not limited to” in provisions like “It is recommended that the provisions adopted by the municipality pursuant to this article include, but not be limited to, all of the following:” Section 706-A(d) exemplifies this freedom. The creation of standards seems limited only by relevance to the goals and objections found in the comprehensive plan. Article VII-A includes provisions for:

- Transfer of development rights
- Sketch plan procedures and
- Manual of Written and Graphic Design Guidelines.

OBJECTIVES

TNDs can be used to meet various objectives. These include objectives related to:

- Transportation
- Safety (crime)
- Social
- Housing
- Visual character and
- Identity.

Transportation

- **Reduce vehicle miles travelled.** TNDs can reduce the vehicle miles travelled as compared to conventional developments. The reduction can come by many means. By making multiple transportation modes viable, transit, bicycling and pedestrian trips can substitute for the automobile trips required by more scattered development patterns. Mixed uses allow destinations like stores, work places, recreation and community facilities to be closer to one’s home, shortening the length of trips. A gridiron or gridiron derived road network allows for shorter trips as the greater number of connections between roads produces more direct routings between origins and destinations than road networks which force all trips onto arterial roads.
- **Reduce traffic congestion.** Gridiron or gridiron derived road networks create more routing options than road networks where most if not all trips use a series of collector and arterial roads between sets of cul-de-sacs or otherwise disconnected roads. Traffic is more evenly distributed between roads rather than being concentrated on the ar-

terial roads. Fewer automobile trips are needed as residents can walk, bicycle or use transit to reach destinations.

- **Increased transportation choices.** In addition to walking, other choices like bicycling and transit can become more viable alternatives to the use of automobiles. Bicycling is promoted through the shorter trip lengths, the design of roads and pathways that provide for safe and convenient bicycle routes. Increased transit use is related to higher densities, transit friendly design such as siting buildings closer to the transit stop and mixed land uses.
- **Walkable.** TNDs can be arranged so that walking to destinations like stores, parks, work places and community facilities is a viable choice. Destinations are closer. Sidewalks and pathways are pleasant, well maintained and direct.



A network of shaded sidewalks provides access throughout the Lantern Hill TND. This particular grouping of houses fronts on the sidewalk, not on a street. The alley to the rear of the houses provides access to off-street parking. Lantern Hill uses a housing court concept in parts of the TND.

Safety (Crime)

- **Promote safe, secure areas.** Certain TND features can have a positive impact on the safety and security of an area. The presence of people on porches could increase security along the streetscape by their surveillance. Similarly in TND commercial areas, safety can be increased as people living in apartments over stores can observe these areas and report crimes to police or prevent such crime through surveillance.

Social

- **Promote interaction.** Running counter to trends that promote greater isolation among people, TNDs can serve as a means of bringing people together. The design of TNDs provides more opportunities to meet other people. The strategic location of community facilities and the mixed uses throughout the TND are an essential means of establishing social contact. People will meet and interact as they walk to stores, workplaces, parks and community facilities. Creating street life is another way that TNDs maximize socialization. Streets are designed to maximize pedestrian use. Short build-

ing setbacks are used to increase interaction in the street spaces. Architectural features like porches encourage interaction between residents and pedestrians.

- **Sense of community.** By establishing the TND as an area that reflects the character of the existing community, TNDs reinforce the sense of place, fulfilling a psychological need. TNDs provide residents and those who do business in them with a distinct sense of inclusion in a unique place. In contrast, much recent new development has a generic character that could be located almost anywhere around the country, giving no clue to its surroundings or environment. TNDs use the development pattern, land uses and architecture to provide the sense of community.
- **Diversity.** TNDs are designed to provide for many segments of society, not just one income group or age group. Conventional subdivisions, in contrast, tend to be more monolithic in that the lack of variety in housing type and uniformity in pricing will attract similar income and life stage buyers. The diversity possible in TNDs results from a variety of housing types in a range of prices. Typically in TNDs, the varied lot widths and sizes tie in to the diversity of housing prices and types. The availability of schools, stores, parks and community facilities within walking distance makes TNDs suitable for the old and young alike.

Housing

- **Variety and affordability.** TNDs can include a variety of housing types, allowing a wide range of housing needs to be met. Housing types often associated with TNDs include apartments built over garages and apartments over stores or offices. These scattered units can help meet the needs for rental units without overwhelming an area with massive apartment complexes. The opportunity for creating more affordable housing arises from the higher densities found in TNDs and by the inclusion of rental units and ownership housing units, like condominiums and single family attached housing, in the housing mix.



Bedminster Hunt West includes three housing types consisting of single family detached dwellings, townhouses and multi-family dwellings. The multi-family dwelling in this image has been designed to architecturally blend with the other housing types.

Visual Character

- **Compatibility.** The placement and architecture of the buildings are also key elements in establishing the TND's distinctive character. The buildings are designed in the vernacular architectural style of the community. That is, the architecture is to reflect the prevalent architectural style of the surrounding area. Often, emphasis is placed on older, historic motifs. The architectural features like roof types, window treatments and materials would be mimicked in the TND. Design guidelines will be used to specify architectural standards. The location and bulk of the buildings are other aspects of compatibility with existing development. Building facades are used to define street space. Instead of using minimum building setback distances, TNDs will specify "build to" lines. Buildings must be located at the "build to" line, not forward of or back of that line.



The architecture found in TNDs like Bedminster Hunt West is derived from features found in historic styles.

Identity

- **Self-sufficient community.** Through the provision of housing, parks, community facilities, workplaces and shops, larger TNDs can meet many of their residents' routine daily needs. Thus, the TND can establish a distinct identity.
- **Distinctiveness.** TNDs will not resemble conventional subdivisions. Their road network, selection of land uses, architecture and development layout will be distinctive compared to conventional subdivisions and developments. This distinctiveness can be a marketing advantage. TNDs will stand out in comparison to their competitors.

TECHNIQUES

This section of the report will review the techniques that can be used to accomplish the objectives previously described. In addition to describing each technique, this section will indicate which objectives each technique will help accomplish.

Density

- **Appropriate density.** Several considerations come into play when setting standards for density. (Density standards are achieved through lot size standards for residential development, floor area ratio standards and the other dimensional standards related to building coverage, impervious coverage, setbacks and building height.) First, the TND density should approximate the density of the existing developed area that the TND is emulating. This density may often be greater than that found in contemporary zoning practice because the existing developed areas feature higher densities than typical suburban style development. Second, the densities should be consistent with the recommendations contained in the county comprehensive plan. In urban areas, this includes single family detached dwellings at 4 to 7 units per acre, single family semi-detached dwellings at 6 to 10 units per acre, single family attached dwellings at 8 to 15 units per acre and multi-family dwellings at 8 to 15 units per acre. In areas with a more suburban character, appropriate densities would be 4 to 6 units per acre for single family detached dwellings, 6 to 7 units per acre for single family semi-detached dwellings and 8 units per acre for single family attached dwellings and multi-family dwellings. Using these standards is necessary for achieving a number of the TND objectives. These include promoting a walkable community, increased transportation choices like transit, promoting interaction, housing affordability and distinctiveness.

Land Uses

- **Variety.** TNDs serve numerous functions: residential, shopping, work, recreation and community life. TNDs need to incorporate a variety of land uses in order to serve these functions. Houses, apartments, stores, offices and other places of employment, public and semi-public buildings and parks are among the possible uses. Not every TND needs to include all of these uses. The choice of uses is particular to the objectives of that district and to the surrounding community. Providing a variety of land uses relates to nearly all TND objectives. These include reducing traffic congestion and vehicle miles travelled, promoting walkability and increased transportation choices and interaction, establishing the compatibility of visual character, a sense of community, distinctiveness, a self-sufficient community, diversity, and providing for varied housing needs.
- **Mixed uses.** TNDs, like the communities they emulate, feature different uses side by side. With a variety of uses to accommodate, mixed uses are a natural for TNDs. Additionally, TNDs can include buildings with two or more different uses. For instance, apartments or condos could be located above a first floor store or office. If appropriate for the community, the TND ordinance could even mandate that multi-story condos or apartments feature first floor stores or offices. The decision to allow or mandate mixed use buildings can take a cue from the existing community. Mixed uses can accomplish the same objectives as cited under the variety of uses above. The LVPC publication *Mixed Uses Guide and Model Regulations* can serve as a resource for municipalities in creating provisions for mixed uses.
- **Focal point uses.** The design of TNDs can establish the character of the neighborhood by the judicious incorporation of focal points. Focal points are prominent locations within the TND. The prominence can be created by taking advantage of the land-

form. For instance, an elevated location can make a location visually prominent. Focal points can also be created through the road system, where roads lead to the selected location. Appropriate uses for the focal points include public and semi-public buildings and parks. Uses like libraries, houses of worship and municipal buildings are examples of appropriate uses. The incorporation of focal points is very individual to the TND. Focal points may be appropriate in some cases but not in others. The inclusion of focal point use provisions in the TND regulations needs to be expressed more in permissive terms than as a prescribed element. Focal points can accomplish several TND objectives including promoting interaction, distinctiveness, a self-sufficient community and a sense of community.



Ivyland Village features parks as focal points. This one has a gazebo.

Architecture and Design

- **Architecture.** The look of the TND is formed by its architecture. The intent is to create a look that is consistent with the historic architectural style of the community. El-



TNDs feature architectural styles not typically found in current construction. The windows are prominent in this example from Bedminster Hunt West.

ements that form the look include building materials, building height, the patterns of doors and windows, decorative features, the style and pitch of the roof, etc. TND regulations often place considerable emphasis on a manual of design guidelines. These written and graphic guidelines are often created by or with input by an architect. The design guidelines are individualized to reflect the indigenous architectural style of the community and can be quite detailed in their requirements. The architectural provisions are helpful for meeting TND objectives of creating visual character compatibility, distinctiveness and a sense of community.



This example of TND architecture is found in Ivyland Village. Note the steeply pitched roof.

- **Porches.** Porches are a signature design feature often found in TNDs. Their function is to establish a semi-public space, a transition between the private space of the house and the public space of the street. Porches are intended to enhance the social experience by providing an opportunity for interaction between the residents who would be enjoying the porch and passers by. Secondly, the occupants of the porch can provide increased security by having “eyes on the street.” Other TND objectives advanced by porches include promoting distinctiveness, a sense of community and visual character compatibility (where the existing community features porches).



Porches are a prominent feature in TNDs. This one is in Lantern Hill.

Roads

- **Connected street pattern.** TNDs are well known for their use of the gridiron street pattern, reflecting pre-World War II development patterns. The important aspect of the gridiron pattern is not the gridiron itself, but the higher degree of connectivity that it features. That is, the network provides more options in getting from one's origin to the destination. This availability of options tends to disperse the traffic rather than concentrate the traffic on a few roads. The effect of the more recent road pattern is to funnel all traffic from local roads to collector roads and eventually to arterial roads before reversing the pattern and returning the traffic to collector roads and, in the end, local roads. Therefore, any road pattern that features high degrees of connectivity achieves the objectives, not just straightforward gridiron patterns. In addition to reducing congestion by not forcing all traffic onto a few roads, the highly connected street pattern provides for shorter trips by allowing more direct driving between origins and destinations than the modern circulation systems. This allows for reduced trip lengths. Since sidewalks largely are at the sides of roads, the more direct travel paths also make the community more walkable by reducing trip distances. Other TND objectives promoted by the connected street pattern are increasing transportation choices and distinctiveness. The LVPC thoroughly explores the issues of connected street patterns and provides recommendations in the report *Street Connectivity*. Readers should reference this document.



Bedminster Hunt West provides this pedestrian shortcut at the end of an alley.

- **On-street parking.** Roads in TNDs feature on-street parking. On-street parking brings several advantages. First, it reduces the amount of off-street parking needed. Second, it has a tendency to slow down traffic as motorists drive more carefully. Third, it promotes walkability by providing a buffer between pedestrians on the sidewalk and the travel lanes on the road. TND standards can reflect on-street parking by reducing the off-street parking requirements equivalent to the amount of on-street parking available.



Residents in Bedminster Square use on-street parking in addition to the private garages to the rear of the single family dwellings.

- **Context sensitive roads.** The term *context sensitive roads* is built around the idea that one shouldn't overdesign roads, just as one wouldn't use a sledge hammer to kill a fly. Overdesigned roads are roads built with good intentions. In the name of safety, they are wide, straight, sometimes with multiple lanes and obstacle free. Driver behavior on such roads is often to speed as most drivers will proceed at the maximum speed with which they feel safe, regardless of the posted speed limit. Where the function on the road is to serve a neighborhood or town, the resulting speed may be counter to the livability of the area by, among other attributes, increasing danger to pedestrians attempting to cross the road. The context sensitive road approach can be applied to both new roads and to existing roads. The TND standards should include road standards that produce adequate and safe roads but not roads that have the ability to move traffic or produce higher speeds than needed for the road's role in the overall traffic circulation system. By increasing walkability, context sensitive roads also promote increased transportation choices.



This road in Bedminster Square follows context sensitive principles. The road allows parking on one side. The width has been created so that two vehicles can simultaneously pass the parked vehicle but at moderate speeds. A wider road would allow passing at higher speeds, not a desirable objective in the TND.

- **Alleys.** Along with the gridiron road network, alleys are a feature commonly associated with TNDs. Aside from their reflection of historic development patterns, alleys can serve useful functions. In residential areas, alleys can serve as the primary access to the property, eliminating driveways from the street. Parking can be more continuously provided along the street. Service functions like garbage collection can be shifted to the alleys. In making a decision as to whether or not to incorporate alleys into the road layout, the municipality should focus on future maintenance issues. In many



Bedminster Hunt West features an elaborate alley between two rows of townhouses. The alley occupies an area forty feet in width. Two travel lanes are provided. Interestingly, both travel lanes offer one-way travel in the same direction. A parking area is found in between the two travel lanes. The parking area is provided in addition to private garages.

TND developments, alley maintenance is the responsibility of the homeowners' association. If the TND does not involve a homeowners' association or the association will not take responsibility for alley maintenance, the responsibility will fall to the municipality. The expenses will be borne solely by the municipality because the alley will not meet minimum PennDOT standards for liquid fuels funds. (The standards require among other things that the road have a minimum 33 foot right-of-way.) If the alley



This alley in Lantern Hill provides access to the off-street parking spaces and the service functions. It is the least elaborate alley of the ones seen in Bucks County TNDs.

is to serve a service function, the cartway should be wide enough to accommodate the trucks involved in the servicing. Alleys can help meet TND objectives related to reducing traffic congestion, increasing walkability, visual compatibility with the existing development and distinctiveness.

Building Arrangement

- **Setback from street.** TNDs influence the look and feel of the community through the setback of the buildings from the street. Typically, zoning ordinances control setbacks by establishing a minimum setback distance. This approach gives the developer the opportunity to set the building back at any distance, so long as it is not less than the prescribed standard. This approach often leads to the newer buildings being set back further than the existing development. A better way of matching TND setbacks to that of the existing development is by establishing build to lines. In this approach, the setback is firmly established. Setbacks that are closer to the street can promote walking as distances are reduced. The setbacks can also meet the objective of differentiating the TND from conventional development.



Lantern Hill features front yard setbacks that are less than those found in typical subdivisions.

- **Transit supportive design.** Building design and layout can make a difference in the ease of using transit. Where transit service is available and the objective of promoting transportation choices exists, building design that encourages transit use should be incorporated into the zoning provisions. Features that promote transit use include minimizing the distance between the transit stop and the door to the building, providing a safe path to the front door (i.e. one in which the person does not have to dodge traffic within a parking lot) and having the main entrance oriented toward the street rather than to a parking lot. By encouraging transit use through transit supportive design, objectives related to reducing traffic congestion and vehicle miles travelled, and promoting walkability, transportation choices, diversity, distinctiveness and a sense of community can be reached. The LVPC report *Community Planning and Transit* provides a detailed examination of the ways in which community development can be arranged to support transit use.

- **Street wall.** Street walls refer to the three dimensional space formed by the street and the open part of the property extending to the façade of the buildings (horizontal) and the height of the buildings (vertical). This space can be modified by walls, hedges and other landscaping that frame one's perception of the space. The street wall forms part of the character of the area. To mimic the existing development in a TND, one must first measure the existing development to learn the dimensions of the street wall. The regulations then require the TND development to match the existing dimensions. In addition to meeting TND objectives for compatible visual character, street wall provisions provide for differentiation from conventional subdivision development.



The dwellings in Bedminster Square are effectively arranged to create the street wall. Closer to the street, the fence and the hedges create a secondary street wall.

- **Parking lot location.** TND design emphasizes the placement of off-street parking lots to the side or preferably rear of the buildings. Parking lot placement between the building and the street is discouraged. Moving the parking lots to the rear allows the buildings to be placed closer to the street and is favorable for walking and transit use. It also influences the character of the streetscape, allowing buildings to assume a more dominant role rather than parking lots and cars. Mandating that the parking lots be located to the side or rear of the buildings allows for greater visual compatibility with existing development where such placement is already the pattern.

Summary Overview

Table 1 provides a quick overview of objectives and techniques. It provides an assessment of the applicability of the techniques to each objective. To use the table, one should reference the objectives the municipality wishes to achieve. The techniques are then arrayed. The techniques which have a strong relationship or a relationship to the desired objective should be considered for use.

**TABLE 1
TND TOOLS AND TECHNIQUES**

OBJECTIVES	TECHNIQUES													
	Appropriate Density	Variety	Mixed Uses	Focal point uses	Architecture	Porches	Connected street pattern	On-street parking	Context sensitive roads	Alleys	Setback from street	Transit supportive design	Street wall	Parking lot location
Reduce vehicle miles travelled	W	R	R	W	W	W	R	W	W	W	W	R	W	W
Reduce traffic congestion	W	R	R	W	W	W	R	W	W	R	W	R	W	W
Walkable	R	R	R	W	W	W	S	R	S	R	R	S	W	W
Increased transportation choices	S	R	R	W	W	W	R	W	S	W	R	S	W	W
Promote safe, secure areas	W	W	W	W	W	R	W	W	W	W	W	W	W	W
Promote interaction	R	R	S	S	W	R	W	W	W	W	W	W	W	W
Sense of community	W	R	R	S	R	W	W	W	W	W	W	R	W	W
Diversity	W	S	S	W	W	W	W	W	W	W	W	R	W	W
Housing variety and affordability	R	R	R	W	W	W	W	W	W	W	W	W	W	W
Visual compatibility	P	R	P	P	S	P	P	P	R	P	S	P	S	P
Self-sufficient community	W	S	S	S	W	W	W	W	W	W	W	W	W	W
Distinctiveness	R	R	S	S	S	S	R	W	W	R	S	S	S	R

Key:

- S - Strong relationship
- R - Relationship
- W - Weak or no relationship
- P - Possible relationship

TND AND THE COUNTY COMPREHENSIVE PLAN

The *Comprehensive Plan The Lehigh Valley ... 2030* directly supports the use of the technique. The housing section of the plan includes the goal “to promote the orderly development of new well-planned residential environments.” (Page 65) A supportive policy on page 65 states “encourage the utilization of innovative residential development techniques such as ... traditional neighborhood development ...” The connected implementation measure on the same page states “The LVPC will encourage the adoption of cluster, CD, TND and PRD provisions and their use where it would be consistent with the policies of this plan.”

The land use section of the plan also includes policies and implementation measures directly supporting the use of the TND approach. On page 47, the plan offers the following policy in cities: “Encourage high quality and innovative urban design practices in private and public open spaces. Development in cities and boroughs should stress urban design motifs not suburban design.” TNDs would fulfill that policy. The plan supports the use of TNDs in suburban areas with the policy stating “consider traditional neighborhood development concepts instead of conventional subdivision design practices.” (Page 49) The implementation strategy found on page 43 states “Support innovative techniques such as transferrable development rights, traditional neighborhood development, and conservation development practices.”

CREATING TND PROVISIONS

Once a municipality has made a decision that TND offers a potential for creating better development, the municipality can proceed in two ways. Some municipalities wait for a progressive developer to propose TND style development. Upon acknowledgment that the municipal land use regulations do not allow TND style development, the municipality, feeling favorable to the concept, agrees to work with the developer to create a set of regulations that reflects both the developer’s ideas and the municipal interests. The advantages of this approach are that the municipality does not undergo the up front effort or cost of developing TND regulations until a developer wishing to use the approach is at hand. Collaborating with the developer may also be advantageous. The disadvantages of this approach relate to timing and its reactive nature. The creation of TND provisions can consume a number of months if not longer. Thus, a developer wishing to build a TND cannot proceed with the project or even its preceding steps of submitting plans for review and approval until the regulations have been created and adopted. This adds considerable time to the development process. Also, this approach means that the municipality is in a reactive position to the developer’s ideas instead of proactively creating the vision.

The other approach is for the municipality to create TND provisions. These provisions can be created as an alternative approach to development. Municipalities can structure the regulations so that TND development is the preferred approach. The regulations can provide incentives to encourage developers to use the TND approach. Alternately, municipalities can mandate the TND approach by substituting the TND provisions for the current conventional regulations. The choice is related to the degree of the municipal commitment to creating TND style development.

We have created a model process that municipalities can use to create TND regulations. The following text outlines the steps involved.

Step 1 – TND Areas

The first step is to determine the areas of the municipality where TNDs would be potentially desirable. This involves identifying property available for development in the municipal or multi-municipal comprehensive plan.

Step 2 – Initial Inventory

The second step is to gather basic information about the area that had been preliminarily identified in step 1 as potentially suitable for TND development. In this step, the data to be collected includes:

- The size (acreage) of the area.
- Significant natural features that would inhibit development. Such features include floodplains, steep slopes and other features.
- The generalized character of the abutting or surrounding area. (Whether the area is primarily residential, commercial, mixed use or other.)

Step 3 – Objective Selection

Starting with the list of possible objectives covered earlier in this report, the municipality should select those that are desired. The selection should reflect the character of the area and the available land.

Step 4 – Technique Selection

Using the list of techniques presented earlier in this report, the municipality should select techniques that it wishes to use. These techniques should be tailored to the objectives for which the technique is useful.

Step 5 – Detailed Inventory

Once the techniques have been selected, detailed data collection is needed. The data collection is intended to enable compatibility between the TND and the existing developed community. The data to be collected will vary based on the techniques selected. The inventory could involve:

- Lot sizes, densities
- Land use types
- Housing types
- Street pattern
- Road widths
- Use of alleys
- Use of on-street parking

- Sidewalk location, width and design
- Parking lot locations
- Transit service
- Architectural styles
- Exterior building materials
- Roof styles and materials
- Building setbacks and heights and
- Presence of porches.

Step 6 – Ordinance Drafting

This last step involves the integration of the previous steps. The standards to be drafted are to promote the objectives, using the selected techniques and reflecting the elements of the existing community discovered through the detailed inventory.

CASE STUDY – A TRUE STORY FROM THE LEHIGH VALLEY

Background

Bethlehem Township was among the fastest growing municipalities in the Lehigh Valley during the 1980s and 1990s. During the early 2000s, the Township Planning Commission and planning staff became aware of smart growth principles and the TND development concept. The Township thought that TND might provide a better approach for both developing remaining large vacant parcels as well as the redevelopment and infill development of mature development corridors. Acting on this interest, the Township engaged a planning consultant. The consultant prepared, and the Township adopted, a comprehensive plan that incorporated smart growth principles and promoted the use of TND.

An opportunity to apply these principles and TND arose shortly thereafter when the owners of three large properties in the same corridor expressed interest in developing their properties in ways not allowed by the then applicable zoning ordinance. All three property owners/developers needed fundamental changes in the ordinance in order to realize their development ideas. Of the three property owners, one expressed an interest in working with the Township to undertake a TND style development. (The others did not.) That property owner hired a consultant to work collaboratively with the Township and its consultant to create a set of development regulations reflecting a TND style development. That effort bore fruit as an amendment to the zoning ordinance was enacted by the Township. The ordinance outlined the TND style development for the property. The ordinance made the TND the only allowable development on the property. Other uses and development approaches were not allowed.

After the ordinance had been enacted, the developer approached the Township asking for relief from the provisions of the newly adopted ordinance. The developer indicated that the TND style of development was not financially viable due to marketability issues. That is, the developer did not feel that TND would be profitable because insufficient demand for a TND style of development existed among potential homebuyers, retailers and office building owners. Secondly, the developer indicated that financial viability of the project was adversely affected by high development costs, particularly by costs for off-site transportation improvements. Eventually, the Township further revised the zoning ordinance by creating regulations that allowed both TND style development and conventional development.

The aspect of the comprehensive plan that supported the application of smart growth and TND style development for smaller infill projects failed to bear fruit. Elected officials, upon further consideration of the concept, felt that the style of development would be disruptive to those areas. Consequently, no changes to the zoning ordinance were enacted for the infill areas.

Outcomes

Bethlehem Township has an adopted comprehensive plan that embraces smart growth and TND style development. Zoning provisions provide for TND style development as one option for the development of a single large parcel. TND zoning provisions were not adopted for the other two large parcels or for infill areas. No TNDs have been built or are currently being proposed. The prospects for future TND development are slim.

The developer involved in the TND ordinance has sold the property to a regional public institution which has purchased the property as a reserve.



TNDs are subject to market forces as are all other developments. Milford Pointe completed much of the infrastructure but only two houses. The property is up for Sheriff's Sale at the writing of this report.

Lessons Learned

- **Commitment.** TND development requires a developer who is firmly committed to a TND style development.
- **Market forces rule.** Developers will not undertake TNDs absent adequate profitability.



Features like Belgian Block curbs along alleys add to development and housing costs in Ivyland Village.

- **Market strength.** TNDs are best undertaken in the presence of robust, high demand markets. In those up periods, developers can use TNDs to distinguish their products from those of their competitors.
- **Market segment.** TNDs are likely to involve a high end product. Developers will seek to create this product to offset their development costs.



Realtors are offering townhouses in the Belvedere Square TND in Doylestown at prices ranging from \$489,900 to \$549,900, an example of the high end price range of TNDs in southeastern Pennsylvania.

APPENDIX A

PA Municipalities Planning Code

as amended

ARTICLE VII-A

ARTICLE VII-A

Traditional Neighborhood Development

[Added by Act 68 of 2000]

Section 701-A. Purposes and Objectives.

(a) This article grants powers to municipalities for the following purposes:

(1) to insure that the provisions of Article VI which are concerned in part with the uniform treatment of dwelling type, bulk, density, intensity and open space within each zoning district, shall not be applied to the improvement of land by other than lot by lot development in a manner that would distort the objectives of Article VI;

(2) to encourage innovations in residential and nonresidential development and renewal which makes use of a mixed use form of development so that the growing demand for housing and other development may be met by greater variety in type, design and layout of dwellings and other buildings and structures and by the conservation and more efficient use of open space ancillary to said dwellings and uses;

(3) to extend greater opportunities for better housing, recreation and access to goods, services and employment opportunities to all citizens and residents of this Commonwealth;

(4) to encourage a more efficient use of land and of public services to reflect changes in the technology of land development so that economies secured may benefit those who need homes and for other uses;

(5) to allow for the development of fully integrated, mixed-use pedestrian-oriented neighborhoods;

(6) to minimize traffic congestion, infrastructure costs and environmental degradation;

(7) to promote the implementation of the objectives of the municipal or multimunicipal comprehensive plan for guiding the location for growth;

(8) to provide a procedure, in aid of these purposes, which can relate the type, design and layout of residential and nonresidential development to the particular site and the particular demand for housing existing at the time of development in a manner consistent with the preservation of the property values within existing residential and nonresidential areas; and

(9) to insure that the increased flexibility of regulations over land development authorized herein is carried out under such administrative standards and procedure as shall encourage the disposition of proposals for land development without undue delay.

(b) The objectives of a traditional neighborhood development are:

(1) to establish a community which is pedestrian-oriented with a number of parks, a centrally located public commons, square, plaza, park or prominent intersection of two or more major streets, commercial enterprises and civic and other public buildings and facilities for social activity, recreation and community functions;

(2) to minimize traffic congestion and reduce the need for extensive road construction by reducing the number and length of automobile trips required to access everyday needs;

(3) to make public transit a viable alternative to the automobile by organizing appropriate building densities;

(4) to provide the elderly and the young with independence of movement by locating most daily activities within walking distance;

(5) to foster the ability of citizens to come to know each other and to watch over their mutual security by providing public spaces such as streets, parks and squares and mixed use which maximizes the proximity to neighbors at almost all times of the day;

- (6) to foster a sense of place and community by providing a setting that encourages the natural intermingling of everyday uses and activities within a recognizable neighborhood;
- (7) to integrate age and income groups and foster the bonds of an authentic community by providing a range of housing types, shops and workplaces; and
- (8) to encourage community oriented initiatives and to support the balanced development of society by providing suitable civic and public buildings and facilities.

Section 702-A. Grant of Power. The governing body of each municipality may enact, amend and repeal provisions of a zoning ordinance in order to fix standards and conditions for traditional neighborhood development. The provisions for standards and conditions for traditional neighborhood development shall be, *except as otherwise provided in this article, consistent with Articles VI and shall be included within the zoning ordinance and the enactment of the traditional neighborhood development provisions shall be in accordance with the procedures required for the enactment of an amendment of a zoning ordinance as provided in Article VI.* The provisions shall:

- (1) Set forth the standards, conditions and regulations for a traditional neighborhood development consistent with this article. *A zoning ordinance or amendment may authorize and provide standards, conditions and regulations for traditional neighborhood development that:*
 - (i) *designate a part or parts of the municipality as a district or districts which are reserved exclusively for traditional neighborhood development; or*
 - (ii) *permit the creation of a traditional neighborhood development in any part of the municipality or in one or more specified zoning districts.*
- (2) Set forth the procedures pertaining to the application for, hearing on and preliminary and final approval of a traditional neighborhood development, which shall be consistent with this article for those applications and hearings.

[Act 111 of 2010]

Section 703-A. Transfer Development Rights. Municipalities electing to enact traditional neighborhood development provisions may also incorporate provisions for transferable development rights, on a voluntary basis, in accordance with express standards and criteria set forth in the ordinance and with the requirements of Article VI.

Section 704-A. Applicability of Comprehensive Plan and Statement of Community Development Objectives. All provisions and all amendments to the provisions adopted pursuant to this article shall be based on and interpreted in relation to the statement of community development objectives of the zoning ordinance and shall be consistent with either the comprehensive plan of the municipality or the statement of community development objectives in accordance with section 606. Every application for the approval of a traditional neighborhood development shall be based on and interpreted in relation to the statement of community development objectives, and shall be consistent with the comprehensive plan.

Section 705-A. Forms of Traditional Neighborhood Development. A traditional neighborhood development may be developed and applied in any of the following forms.

- (1) As a new development.
- (2) As an outgrowth or extension of existing development.
- (3) As a form of urban infill where existing uses and structures may be incorporated into the development.
- (4) In any combination or variation of the above.

Section 706-A. Standards and Conditions for Traditional Neighborhood Development.

(a) All provisions adopted pursuant to this article shall set forth all the standards, conditions and regulations by which a proposed traditional neighborhood development shall be evaluated, and those standards, conditions and regulations shall be consistent with the following subsections.

(b) The provisions adopted pursuant to this article shall set forth the uses permitted in traditional neighborhood development, which uses may include, but shall not be limited to:

(1) Dwelling units of any dwelling type or configuration, or any combination thereof.

(2) Those nonresidential uses deemed to be appropriate for incorporation in the design of the traditional neighborhood development.

(c) The provisions may establish regulations setting forth the timing of development among the various types of dwellings and may specify whether some or all nonresidential uses are to be built before, after or at the same time as the residential uses.

(d) The provisions adopted pursuant to this article shall establish standards governing the density, or intensity of land use, in a traditional neighborhood development. The standards may vary the density or intensity of land use, otherwise applicable to the land under the provisions of a zoning ordinance of the municipality within the traditional neighborhood development. It is recommended that the provisions adopted by the municipality pursuant to this article include, but not be limited to, all of the following:

(1) The amount, location and proposed use of common open space, providing for parks to be distributed throughout the neighborhood as well as the establishment of a centrally located public commons, square, park, plaza or prominent intersection of two or more major streets.

(2) The location and physical characteristics of the site of the proposed traditional neighborhood development, providing for the retaining and enhancing, where practicable, of natural features such as wetlands, ponds, lakes, waterways, trees of high quality, significant tree stands and other significant natural features. These significant natural features should be at least partially fronted by public tracts whenever possible.

(3) The location and physical characteristics of the site of the proposed traditional neighborhood development so that it will develop out of the location of squares, parks and other neighborhood centers and subcenters. Zoning changes in building type should generally occur at mid-block rather than mid-street and buildings should tend to be zoned by compatibility of building type rather than building use. The proposed traditional neighborhood development should be designed to work with the topography of the site to minimize the amount of grading necessary to achieve a street network, and some significant high points of the site should be set aside for public tracts for the location of public buildings or other public facilities.

(4) The location, design, type and use of structures proposed, with most structures being placed close to the street at generally the equivalent of one-quarter the width of the lot or less. The distance between the sidewalk and residential dwellings should, as a general rule, be occupied by a semi-public attachment, such as a porch or, at a minimum, a covered entryway.

(5) The location, design, type and use of streets, alleys, sidewalks and other public rights-of-way with a hierarchy of streets laid out *with an interconnected network* of streets and blocks that provide multiple routes from origins to destinations and are appropriately designed to serve the needs of pedestrians and vehicles equally. As such, most streets, except alleys, should have sidewalks. [Act 111 of 2010]

(6) The location for vehicular parking with the street plan providing for on street parking for most streets, with the exception of alleys. All parking lots, except where there is a compelling reason to the contrary, should be located either behind or to the side of buildings and, in most cases, should be located toward the center of blocks such that only their access is visible from adjacent streets. In most cases, structures located on lots smaller than 50 feet in width should be served by a rear alley with all garages fronting on alleys. Garages not served by an alley should be set back a minimum of 20 feet from the front of the house or rotated so that the garage doors do not face any adjacent streets.

(7) The minimum and maximum areas and dimensions of the properties and common open space within the proposed traditional neighborhood development and the approximate distance from the center to the edge of the traditional neighborhood development. It is recommended that the distance from the center to the edge of the traditional neighborhood development be approximately one-quarter mile or less and not more than one-half mile. Traditional neighborhood developments in excess of one-half mile distance from center to edge

should be divided into two or more developments.

(8) The site plan to provide for either a natural or manmade corridor to serve as the edge of the neighborhood. When standing alone, the traditional neighborhood development should front on open space to serve as its edge. Such open space may include, but is not limited to, parks, a golf course, cemetery, farmland or natural settings such as woodlands or waterways. When adjacent to existing development the traditional neighborhood development should either front on open space, a street or roadway, or any combination hereof.

(9) The greatest density of housing and the preponderance of office and commercial uses should be located to *anchor* the traditional neighborhood development. If the neighborhood is adjacent to existing development or a major roadway then office, commercial and denser residential uses may be located at either the edge or the center, or both. Commercial uses located at the edge of the traditional neighborhood development may be located adjacent to similar commercial uses in order to form a greater commercial corridor.

[Act 111 of 2010]

(e) In the case of a traditional neighborhood development proposed to be developed over a period of years, standards established in provisions adopted pursuant to this article may, to encourage the flexibility of housing density, design and type intended by this article:

(1) Permit a variation in each section to be developed from the density, or intensity of use, established for the entire traditional neighborhood development.

(2) Allow for a greater concentration of density or intensity of land use, within some section or sections of development, whether it be earlier or later in the development than upon others.

(3) Require that the approval of such greater concentration of density or intensity of land use for any section to be developed be offset by a smaller concentration in any completed prior stage or by an appropriate reservation of common open space on the remaining land by a grant of easement or by covenant in favor of the municipality, provided that the reservation shall, as far as practicable, defer the precise location of such common open space until an application for final approval is filed so that flexibility of development which is a prime objective of this article can be maintained.

(f) Provisions adopted pursuant to this article may require that a traditional neighborhood development contain a minimum number of dwelling units and a minimum number of nonresidential units.

(g) (1) The authority granted a municipality by Article V to establish standards for the location, width, course and surfacing of streets, walkways, curbs, gutters, street lights, shade trees, water, sewage and drainage facilities, easements or rights-of-way for drainage and utilities, reservations of public grounds, other improvements, regulations for the height and setback as they relate to renewable energy systems and energy-conserving building design, regulations for the height and location of vegetation with respect to boundary lines, as they relate to renewable energy systems and energy-conserving building design, regulations for the type and location of renewable energy systems or their components and regulations for the design and construction of structures to encourage the use of renewable energy systems, shall be vested in the governing body or the planning agency for the purposes of this article.

(2) The standards applicable to a particular traditional neighborhood development may be different than or modifications of the standards and requirements otherwise required of subdivisions or land development authorized under an ordinance adopted pursuant to Article V, provided, however, that provisions adopted pursuant to this article shall set forth the limits and extent of any modifications or changes in such standards and requirements in order that a landowner shall know the limits and extent of permissible modifications from the standards otherwise applicable to subdivisions or land development.

Section 707-A. Sketch Plan Presentation. The municipality may informally meet with a landowner to informally discuss the conceptual aspects of the landowner's development plan prior to the filing of the application for preliminary approval for the development plan. The landowner may present a sketch plan to the municipality for discussion purposes only, and during the discussion the municipality may make suggestions and recommendations on the design of the developmental plan which shall not be binding on the municipality.

Section 708-A. Manual of Written and Graphic Design Guidelines. Where it has adopted provisions for a traditional neighborhood development, the governing body of a municipality may also *provide*, upon review and recommendation of the planning commission, where one exists, a manual of written and graphic design guidelines. *The manual may be included in or amended into the subdivision and land development ordinance, the zoning ordinance or both.* [Act 111 of 2010]

Section 708.1-A. Subdivision and Land Development Ordinance Provisions Applicable to Traditional Neighborhood Development.—*The municipality may enact subdivision and land development ordinance provisions applicable to traditional neighborhood development to address the design standards that are appropriate to a traditional neighborhood development, including but not limited to, compactness, pedestrian orientation, street geometry or other related design features. The provisions may be included as part of any ordinance pertaining to traditional neighborhood development and may be subject to modification similar to Section 512.1.* [Act 111 of 2010]

Section 709-A. Applicability of Article to Agriculture.— Zoning ordinances shall encourage the continuity, development and viability of agricultural operations. Zoning ordinances may not restrict agricultural operations or changes to or expansions of agricultural operations in geographic areas where agriculture has traditionally been present, unless the agricultural operation will have a direct adverse effect on the public health and safety. Nothing in this section shall require a municipality to adopt a zoning ordinance that violates or exceeds the provisions of the act of June 30, 1981 (P.L. 128, No.43), known as the "Agricultural Area Security Law," the act of June 10, 1982 (P.L. 454, No.133), entitled "An Act Protecting Agricultural Operations from Nuisance Suits and Ordinances Under Certain Circumstances," and the act of May 20, 1993 (P.L. 12, No.6), known as the "Nutrient Management Act."