



Traditional Neighborhood Development Design Guidelines

A Policy Guide for
Traditional Neighborhood Developments
in Winston-Salem and Forsyth County, North Carolina

City-County
Planning
BOARD
FORSYTH COUNTY
& WINSTON-SALEM,
NORTH CAROLINA

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Adopted by the City-County Planning Board: September 26, 2002

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Introduction

When the *Wall Street Journal* asked one suburban mother what social reform would most improve her quality of life, she replied, "Lower the driving age to 10." To keep up with the demands of life in today's automobile-oriented development, she had put 40,000 miles on her minivan in 18 months by ferrying her children around the suburbs (*Why Smart Growth: A Primer*, pg. 31).

Historically, the growth pattern in Forsyth County had a much different appearance than that of more recent years. For generations, the human settlement pattern was one where people benefitted culturally, economically and politically from living in convenient proximity to one another. Only in the last several decades have we experienced a somewhat more dispersed form of development in which many of life's daily activities (employment, commerce, education, worship, leisure, etc.) are only accessible via automobiles.

The term "sprawl" is used to define a spread-out land use pattern characterized by the separation of low-density uses, i.e., residential subdivisions, shopping centers and office parks, that are only connected by high-capacity roadways. Sprawl also entails a general lack of civic or public space such as sidewalk-lined streets and neighborhood parks and schools that are within walking distance. The effects of sprawl are decreased farmland and open space, clogged thoroughfares, degraded air and water quality and increased vehicle miles traveled per day by area residents (**Figures 1 and 2**).

Several factors have contributed to the evolution of sprawl, including advancements in communications, transportation, manufacturing, retailing, local land use codes and local lending practices. We are now becoming acutely aware of the once hidden social, environmental and fiscal costs of sprawl. This awareness has led us to conclude that many of our current land development practices are not sustainable.

In response, many local governments across the country are taking a fresh look at their land development ordinances in order to remove any barriers to creating walkable, mixed-use communities. One model that is gaining popularity is the Traditional Neighborhood Development (TND).

TNDs combine the time proven planning principles that were widely used prior to World War II with the market needs of today's diverse population. While such an alternative is not a cure-all to the many challenges faced by urban America, TNDs may reduce our expensive, almost total reliance upon the single-occupancy vehicle and pro-

tect some of our diminishing natural resources. The differences in layout between conventional subdivisions and TND projects can be seen in **Figure 3**.

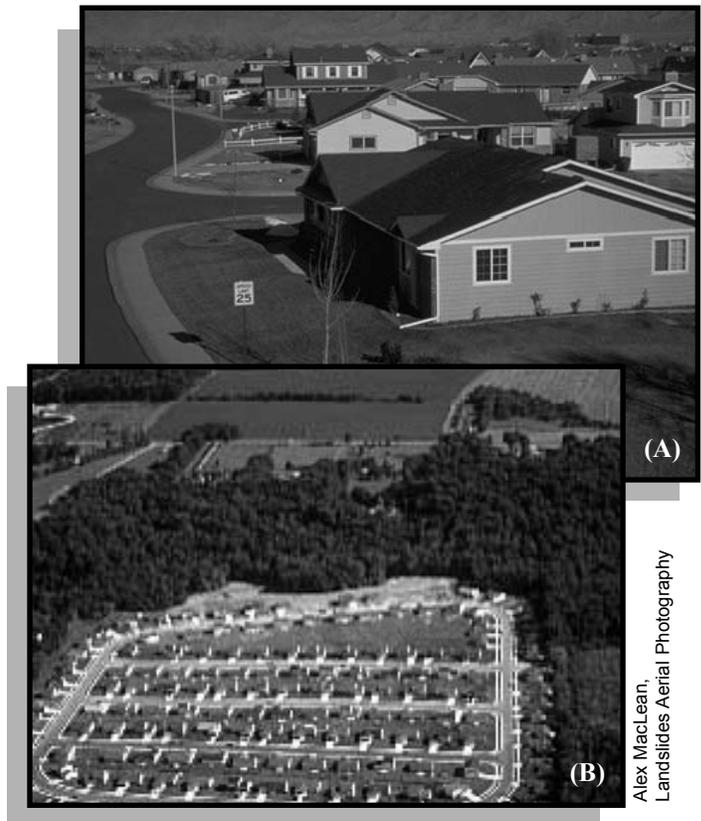
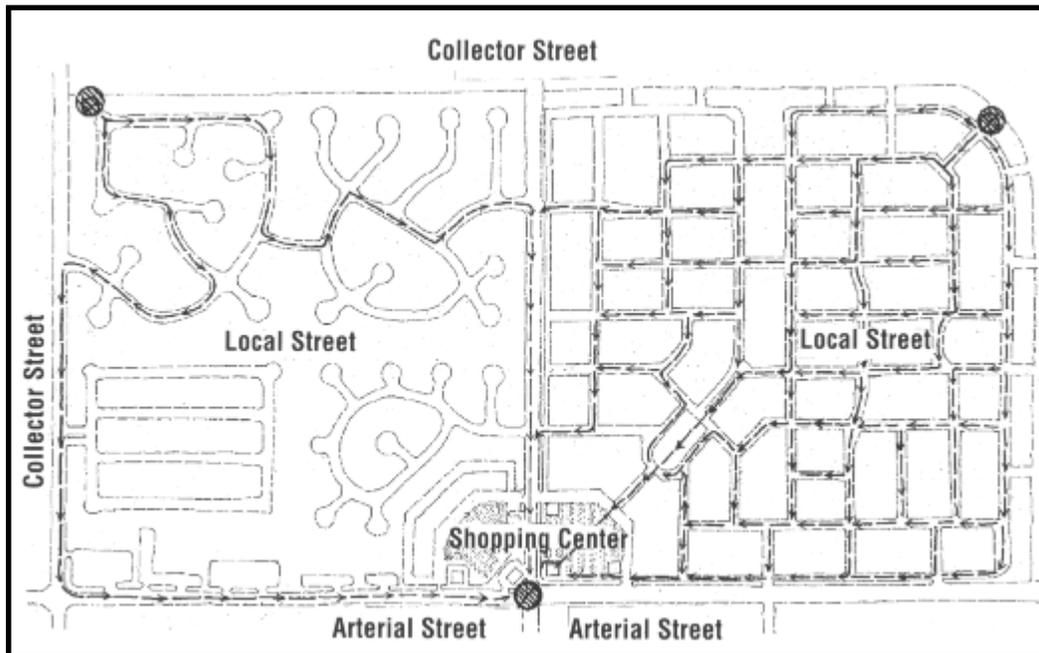


Figure 1. Above (A), a conventional subdivision with single-use, low-density development and high-speed street designs lead to a reliance on the automobile for the simplest of tasks and erodes a community's "sense of place." Such development also leads to increased encroachment on farmland and other open spaces (above B) and the continued 'stripping' of commercial development (below C).



Until TND guidelines are incorporated into the *Unified Development Ordinance* (UDO) for Forsyth County and its municipalities, this document will only serve as a guide to demonstrate one type of development alternative. The TND guidelines should serve two (2) important purposes: First, it will demonstrate consensus about what type of requirements should be incorporated into the UDO for TND projects; and second, it will provide guidance to developers about the types of features that should

be included in future TND projects (some of which could possibly be incorporated into current development proposals). Please note that only a few of the ideas presented in this guide can be used until the UDO revisions have been adopted. These TND Guidelines will eventually be codified as a parallel code to serve as an alternative form of development to conventional subdivisions and commercial development.



Duany Plater-Zyberk & Company, *The Lexicon of New Urbanism*, Version 2.1, June 12, 2000.

Figure 2. *Culs-de-sac that leave few route options in conventional subdivisions (left) promote clogged thoroughfares while connecting streets in TNDs (right) decrease congestion by providing a variety of route choices.*

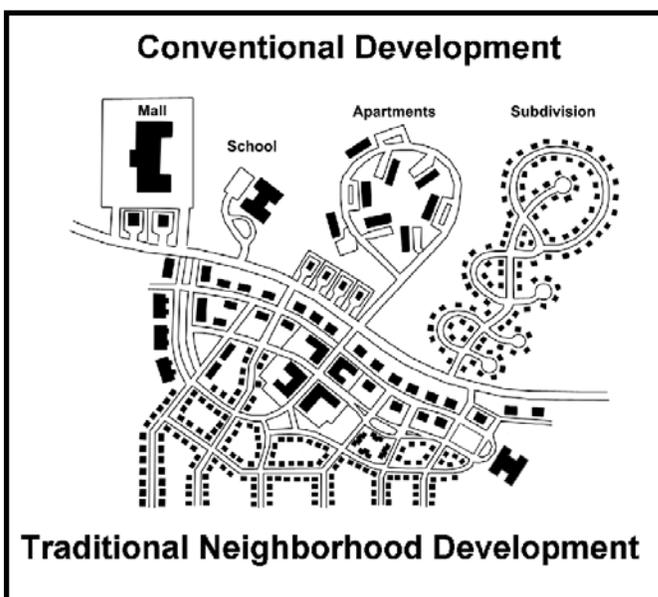


Figure 3. *Conventional developments shown in the upper half of this diagram make residents reliant on automobiles to overcome the segregation of uses. On the other hand, the TND project shown in the lower half of this diagram contains the same mixture of uses and density but packages the development in a way that makes walking the priority instead of the automobile.*

American Planning Association (APA), *The Principles of Smart Development*. PAS No. 479; September 1998.

Purpose



Figure 4. TNDs use a significant portion of the land “saved” to permanently preserve squares, parks, plazas and natural areas where the public can gather.

The *Legacy Comprehensive Plan* for Forsyth County highlights the need to address the issues of transportation, affordable housing, open space preservation and overall urban design in a coordinated and long-range manner. The purpose of this document is to provide a general set of design guidelines for Traditional Neighborhood Developments, which may serve as a basis for some future amendments to the *Unified Development Ordinances* (UDO). It should be noted that the Traditional Neighborhood Development concept is just one of several types of development recommended in *Legacy* to achieve these objectives.

One benefit of the *Traditional Neighborhood Development Design Guidelines* is that it encourages developers and residents to think of the relationships between the use made of property, transportation needs, the natural environment and the overall community character. Developments should be seen as “communities” and “neighborhoods” where various individuals can interact in common locations (**Figure 4**). These locations may include a corner store, a post office, a park or green, or possibly even a front porch. This is in contrast to the segregation of uses associated with the automobile-dependent patterns of development common today.

By implementing the ideas contained in this document, both developers and future residents should benefit. These benefits may include, but may not be limited to, the following:

Developers:

- Alternative form to current development and zoning patterns
- Mixed-use development potential (potential for higher return on investment)
- Some reduced parking standards through shared parking arrangements and on-street parking
- Less buffering between and among uses
- Potential for higher residential densities
- Less infrastructure costs (reduced street widths, compact development form, etc.)
- Broader marketing potential to a wider segment of the population
- Increased likelihood of support from Planning staff, Planning Board and elected officials
- Possibility of reduced application fees, density bonuses and other incentives (tax incentives for commercial businesses locating in TNDs, etc.)

Residents:

- Creation and preservation of usable park and open space areas
- Comprehensive network of sidewalks and trails that connect to nearby shops, offices, civic facilities and recreation opportunities
- Convenient availability of goods and services within the neighborhood
- Greater mix of housing types and costs, serving diverse socioeconomic groups and special populations
- Opportunity for social interaction on sidewalks, front porches and neighborhood gathering places
- Establishment of an environment that promotes physical activity, such as walking, jogging, biking, etc.
- Improved transportation system with more transportation choices, safer street patterns, slower design speeds for streets, fewer required daily trips per household, etc.

In order to incorporate all of the development principles into a TND, a fairly large parcel of land that meets several suitability requirements is necessary. Due to the fragmented nature of our current development pattern, much of today's development activity does not fit conveniently into this category (larger lots). As a result, only larger parcels meeting the recommended guidelines will be able to realize the full potential of the TND model.

Smaller parcels proposed for infill and/or redevelopment are still encouraged to utilize the principles of Traditional Neighborhood Development in their design. Many TND design elements such as building orientation, street trees, sidewalks and on-street parking can still be beneficial when used in smaller projects and in retrofitting existing developments with a new, more urban pattern of development. The City-County Planning Board will create separate "infill" guidelines to assist with the creation of such infill projects.

The size of a parcel is not the only suitability factor in determining the location of Traditional Neighborhood Developments. The location of a property will also determine whether a TND is appropriate. TNDs are ideal within the existing "Municipal Services" and "Future Growth Areas" shown on the *Forsyth County Growth Management Plan Map* (Figure 17) on **page 20**. TNDs should not be located in the "Rural Areas" shown on the same map.

Through following the TND design principles proposed in this Guide, everyone in Forsyth County and its municipalities should benefit. Developers should benefit from the mixed-use development potential of the project, residents should benefit through a greater sense of place and ease of access to the various components of the development, and the residents of Forsyth County and the rest of North Carolina should benefit from the protection of vital natural resources and wise land use decisions.

The Interaction of Different Land Uses And Features In TNDs

Successful TNDs rely on arranging residential and non-residential uses so that they are pedestrian-friendly, compatibly-scaled, mixed-use developments (**Figure 5**). Such an arrangement provides many opportunities for walking and biking between and among uses, accommodating the automobile as little as possible. The overall TND site should be divided into neighborhoods, each walkable from the Neighborhood Center. All lots should be as small as possible to create an urban village while still allowing for a mixture of housing types and styles. Commercial and office uses should be as centrally located within the TND as possible and should be easily accessible from all residential areas by walkways, bicycle paths and through streets. This central area, referred to as the Neighborhood Center, should be the main terminus of most roads within the TND and should contain a "town square" or a "main street" as a focal point. An alternative arrangement for the commercial and office area would be along an existing major thoroughfare. In such an arrangement, the commercial and office area should still be internalized and be designed to foster pedestrian and bicycle activities and de-emphasize vehicular traffic.

Higher-density residential units, such as live-work units, townhomes and apartments, should be located on the periphery of or directly adjacent to the Neighborhood Center (**Figure 6**). This arrangement provides a transition between commercial and lower-density residential uses. Both the Neighborhood Center and the higher-density residential areas should have central greens or pocket parks for civic uses and passive and active recreation opportunities. Lower-density residential areas should surround the compact Neighborhood Center and higher-density residential areas. Each separate area of lower-density residential development should also have its own park or green which serves as a civic use and/or focal point, as well. Both the Neighborhood Center and residential areas should be arranged in a pattern of small blocks with interconnecting streets and alleys that are defined by buildings, street furniture and landscaping. This type of development pattern forms distinct public places that can be shared equally by pedestrians and cars and promotes easy travel between and among the various parts of the TND.

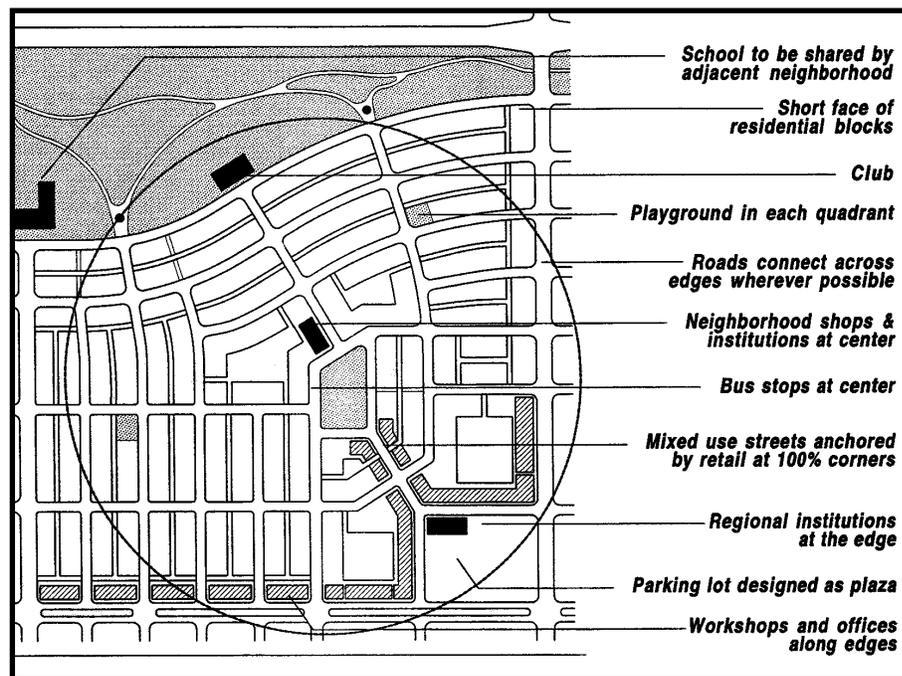


Figure 5. The layout above depicts a TND with a variety of commercial uses near the Neighborhood Center and with differing types of residential development and densities surrounding the center.

Duany Plater-Zyberk & Company.
The Lexicon of New Urbanism, Version 2.1, June 12, 2000.

A TND project should use a substantial amount of the land "saved" from the reduced lot sizes to provide passive and active recreation areas and other civic uses. Environmentally sensitive areas, such as wetlands, lakes, streams, hardwood forests, steep slopes and other similar natural amenities, should be preserved, maintained and celebrated. These environmentally sensitive areas should be identified on a constraints map and shown for preservation on all plan sheets. These significant natural amenities should be partially fronted by public spaces and streets rather than privatized behind structures. The preserved natural areas should serve as a portion of the open space for the development. The open space areas should be connected, or have the potential to be connected, to other open space areas in nearby developments.

There should be active recreation areas scattered throughout a TND project. Some of these recreation areas should be large fields for either specific or general play while other recreation areas should consist of small playgrounds near the greens or plazas.

In addition to the passive and active recreation areas, all TND projects should provide ample opportunity for civic facilities and uses in a prominent location near the

Neighborhood Center or recreational areas. These uses may consist of schools, libraries, museums, meeting areas, squares, greens, etc. If there is a recognized need for a particular civic use per an adopted public facilities plan (schools, libraries, parks, post offices, public safety facilities, etc.), property should be reserved for five (5) years. During this time, the property taxes should be deferred and if it is not used for civic purposes after the specified period of time, the deferred taxes should be paid and the property would be eligible for its alternate use. Smaller TND projects (those between 10-39 acres) should provide the opportunity for civic facilities and uses in a manner similar to what is described above but should not be required to reserve the site for the five (5) year period.

All of the elements briefly explained above will be discussed in greater detail throughout the remainder of this guide. Each element is crucial to the overall success of the TND. While a successful development may not contain all of the elements discussed in this section, a project that hopes to realize all of the benefits of the TND design must strive to provide a sufficient number of elements from each category.

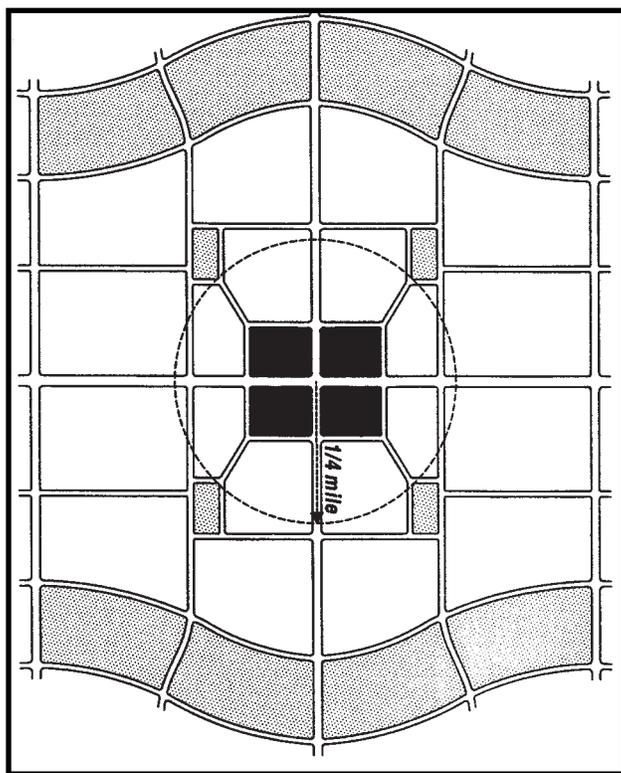


Figure 6. This diagram shows a quarter-mile radius around the Neighborhood Center, where the highest residential densities should be located. Shifting this quarter-mile radius to any of the other quadrants results in a majority of all residents living within a walkable distance of the Neighborhood Center.

Duany Plater-Zyberk & Company,
The Lexicon of New Urbanism, Version 2.1, June 12, 2000.

General Development Guidelines

The central feature of TND design that distinguishes it from conventional subdivision design and development is the emphasis and attention given to the public realm and the mixture of uses. Narrow streets with sidewalks, public open spaces (e.g., plazas, parks, playgrounds, greens, natural areas) and semipublic spaces (e.g., small front yards, wide front porches) define the public realm and provide a transition between public and private spaces. Most of these design elements are missing from conventional subdivision design and development. TNDs are best described with the following characteristics and implement the following design principles:

SIZE/ACREAGE

TNDs typically contain between 40 and 200 contiguous acres and work best with sewerable properties such as those found in Municipal Service Areas and Future Growth Areas (see **Figure 17, Growth Management Plan Map, page 20**). However, these guidelines can also accommodate parcels with as few as ten (10) acres.

Since smaller TNDs (10-39 acres) are typically infill developments located within walking distance of existing commercial, office and civic facilities, they can generally support a higher percentage of residential units compared to the other recommended land uses. Larger TNDs (40+ acres) are typically located on suburban parcels where there are no shopping and recreational opportunities located within walking distance of the development; therefore, they may need a higher percentage of the commercial, office and/or civic facilities included within the development.

EXISTING SITE RESOURCES MAP

Sites proposed for TND projects should submit a context/existing site resources map identifying the subject property in context with surrounding features and patterns that cross property lines. The existing site resources map helps to understand the site in relation to what is occurring on surrounding properties and helps identify features for preservation. An existing site resources map should include such natural features as streams, floodplains, ridge lines, mature woodlands or significant individual trees, existing vegetative patterns, ridge lines, wetlands, steep slopes (slopes 35% or greater), prime soils, etc., and such cultural, historic or human-made features as historical buildings, trails and greenways, active farmlands, rock walls or outcroppings, archeological sites, utility easements, etc. Disclosure of these features should not preclude the future development of such areas (unless specifically regulated in the UDO [i.e., floodways, wetlands, etc.]) but rather will provide staff and the developer the opportunity to view the site in the context of a larger area and possibly provide appropriate linkages to similarly situated features on adjacent properties.

INTERACTION WITH EXISTING USES

If applicable, TNDs should be compatible with surrounding development, especially along its edges and borders. To help TND projects mesh with existing surrounding development, they should provide some transitional treatments, such as buffering and graduated setbacks along the edges. Standard setbacks at the edge should transition to fully reduced setbacks as you move to the interior of the TND project. It is not likely that these treatments will be needed in the more rural, outlying areas where TNDs may locate.

RESIDENTIAL COMPONENT

TNDs contain compact residential areas where people with a wide range of ages and incomes can thrive in attached, detached and accessory dwellings. All residential units should be accessed by alleys where possible.

Examples of housing styles in TNDs include single-family homes, apartment buildings, townhomes, duplexes, cottages, live/work units, combined-use apartments and garage apartments. All residential lots are typically smaller and narrower than conventional subdivisions. TNDs use much of the land area saved from reduced lot sizes to focus on public areas. Multifamily residential buildings are typically blended around the Neighborhood Center (see description below). Similar land uses generally face across the streets while dissimilar uses abut along alleys or rear property lines. See: **Table 1. Recommended Residential, Commercial/Office And Civic/Recreational Mixtures for TNDs, page 10**, for the suggested percentage of residential uses.

NEIGHBORHOOD CENTER COMPONENT

TNDs have at least one defined Neighborhood Center. These centers typically feature a compact urban core with a mixture of commercial, office, civic and residential uses. Commercial and office uses are primarily designed to serve residents of the TND and are located internal to the development. The commercial area (the Neighborhood Center) may be located along the periphery and/or along an existing road: (1) if the TND project is an infill development with a limited amount of new residential units; (2) if the TND project is centered on an existing road and the existing road is modified to TND street standards (street trees, on-street parking, crosswalks, underground utilities, etc.); or, (3) if the TND project is so small (less than 500 dwelling units) that there will not be enough density to sustain the commercial uses.

The Neighborhood Center is designed to encourage people to walk within its perimeter and should be serviced

by a combination of on- and off-street parking. Development in this area typically reflects traditional "main street" or "town square" designs (**Figures 7 and 8**). Buildings are located on an internal street in the development. Similar land uses generally face across the street while dissimilar uses abut along alleys or rear property lines.

A day care center and corner store are often included within the Neighborhood Center. (Both should be considered necessities if the development has at least 500 residences.) Automobile-oriented uses, transmission towers, and businesses/industries that spread noise, vibration and objectionable odors beyond their lots are discouraged in TNDs. Drive-through businesses are also discouraged. The Neighborhood Center should contain buildings with a diverse mixture of uses. Offices, retail space and residences should be located within the same building in the Neighborhood Center. See: **Table 1. Recommended Residential, Commercial/Office And Civic/Recreational Mixtures for TNDs, page 10**, for the suggested percentage of commercial use areas.

CIVIC AND RECREATION COMPONENT

TNDs use less land area than typical subdivision developments. The amount of land saved in TNDs is generally focused on the public realm. In essence, developers provide public space and preserve open space by exchanging development rights in certain areas for more intense development and higher densities in other areas. See: **Table 1. Recommended Residential, Commercial/Office And Civic/Recreational Mixtures for TNDs, page 10**, for the suggested percentage of civic and recreation use areas. The following design considerations should be considered for the civic and recreation components of TND projects:

Civic Facilities and Uses:

- Provide good transitions between public and private spaces and between commercial and residential areas
- Generally consist of libraries, churches, schools, museums, recreation centers, etc.
- Accessories, such as fountains, monuments and public art, help define civic spaces (**Figure 9**)
- A green, plaza or square should be located within each development area or pod

Recreational Uses:

- Active recreation areas are cleared of underbrush
- Open space areas serve as natural preserves and corridors and are not located to the rear of private lots. Open space areas should be available for all to see and enjoy
- Tot lots are located within three (3) blocks of all residential lots
- Golf courses are discouraged, but not prohibited, in TNDs
- All areas are typically owned and maintained by a Homeowners Association (HOA)



Figure 7. A village green or square is shown above. Higher density townhomes and apartments surround central parks and greens, transit stops and commercial Neighborhood Centers. A high level of use and density is needed in the core for a successful TND.



Figure 8. These images depict what a "main street" in the Neighborhood Center of a TND development may look like. TNDs include a variety of commercial and office buildings that reflect traditional "main street" designs.



Figure 9. *A square or passive open space/green area can be a gathering spot for a quiet conversation. Successful TND projects use accessories, such as fountains, monuments and public art to provide focal features for public gathering areas.*

PERMITTED USES

TNDs encourage a wide range of uses contained within a walkable arrangement. Such a mixture of uses provides the opportunity to obtain goods and services without resorting to a vehicular trip to an outside destination. The following uses are appropriate in TNDs (Please see the UDO for definitions):

Residential Uses:

Accessory Dwelling
 Combined Use Building
 Duplex and Twin Home
 Home Occupation
 Live/Work Unit
 Multifamily Residential
 Single-Family Residential
 Townhouse

Commercial Uses:

Arts and Crafts Studio
 Bed and Breakfast
 Banking/Financial Service
 (No Drive-Through)
 Food or Drug Store
 General Merchandise Store
 Hotel or Motel
 Indoor Recreation Service
 Indoor Theater
 Car Repair/Maintenance
 Nurseries/Lawn & Garden
 Supply Store
 Personal Service
 Restaurant
 (w/o drive-through)
 Retail, Specialty or Misc.

Institutional/Public Uses:

Adult Day Care Center
 Adult Day Care Home
 Child Day Care Center
 Child Day Care,
 Large Home
 Child Day Care,
 Small Home
 Club or Lodge
 Museum or Art Gallery
 Nbhd. Church/Religious
 Neighborhood Org. Office
 Nursing Care Institution
 Park and Shuttle Lot
 Police or Fire Station
 Post Office
 Private School
 Public Library
 Public Recreation Facility
 Public School

Office Uses:

Government Office
 Medical & Surgical Office
 Professional Office
 Veterinary Service

**TABLE 1.
RECOMMENDED RESIDENTIAL, COMMERCIAL/OFFICE
AND CIVIC/RECREATIONAL MIXTURES FOR TND¹**

TYPE OF USE	RECOMMENDED AREA (% of total project area)
Residential Uses - All types, including single-family, duplex, twin home, townhouse, multifamily, combined use, etc.	50%-70% (projects should use at least three (3) different types of residential uses)
Commercial & Office Uses and Civic Buildings	10%-30%
Active & Passive Recreation Areas and Civic Uses/Areas ²	20%-25%
Accessory Dwellings - To be regulated differently than current UDO standards.	Allowed at 1:1 ratio with detached houses (if meet size restrictions)
Combined Use Apartments	Allowed above Commercial and Office Uses in Neighborhood Center at no density charge (if meet size restrictions)

1. TNDs need flexibility and creativity in assembling the various components and mixtures of uses. As a result, the percentages recommend in Table 1 are general targets. Projects will be reviewed on their own merit and individual locational situations to determine if the mixture of uses and configuration is compatible with surrounding conditions. If TND projects are located within close proximity (typically, no further than ½ mile) to existing facilities that can be integrated into the project through walkability and design, the developer/designer may be able to receive credit for such uses/facilities.

2. The target percentage for passive and active recreation areas and civic uses/areas should be considered an absolute minimum. Through creative design and concentrating density in the appropriate areas, considerably more passive recreational areas and open space can be maintained.

ARCHITECTURAL COMPATIBILITY

TND sites should blend with existing surrounding development and add to the character of the area, if applicable. Within TNDs, residential and commercial structures should have compatible architecture. Structures adjacent to and across the street from each other should be similar in terms of the following (see **Figure 10** for illustrations):

Scale/Height. Structures should be similar in terms of building bulk and height. Nothing precludes placing one-story buildings between two-story buildings, so long as they have similar designs, roof pitches, etc.

Rhythm. Structures should use recurring patterns of lines, shapes and forms. Solid walls and blank exteriors are discouraged. Commercial buildings should strive to maximize window and door openings along the front facade and exposed sides of buildings.

Shape and Design. Principal elements and shapes used on front facades should be compatible. Facades should enhance the pedestrian environment by use of features such as porches, columns, doors, windows and cornices.

Spacing. Setbacks should be shallow and consistent with dominant patterns within the same block.

Orientation. Main entrances to all residential, commercial and civic buildings (excluding

accessory dwellings), should be along the street frontage, unless situated in a courtyard with an entrance off of the street frontage.

ENCLOSURE

The physical relationship of buildings, trees and streets can create a sense of enclosure that can significantly reduce driving speeds and adds to the pedestrian comfort of a street (**Figure 11**). The targeted goal for the enclosure ratio (building height to street opening) is between 1:3 and 1:5. Where street frontage consists of open space, street trees can substitute for front building walls to maintain this sense of enclosure. Additionally, where landscaped medians are used in an urban boulevard or parkway scenario, the large trees in the median are to be used to create this sense of enclosure.

VISTAS

The entryway into the community should have an important vista termination to provide a sense of place arrival. TNDs can also feature vista terminations at other locations such as important buildings, parks, greens, civic features, carefully sited dwellings, a curve in the road, distant objects/scenery and other features as deemed appropriate.

ENVIRONMENTAL PROTECTION

In the developed areas of TND projects, extensive clearing and grading may be necessary. Designs should be sensitive to topography to minimize grading and maximize the preservation of high-quality trees and signifi-



Figure 10a.
The configuration of each roof varies, yet they are united by similar pitch and scale.

Figure 10b.
The spacing and rhythm of this row is established by the spacing of the street facades.



Figure 10c.
Windows, doorways, bays, and pediments of these homes share similar proportions that link the buildings although each is composed differently.



Figure 10d.
Each entryway is raised, featuring a stairway framed by bold balustrades leading to a deeply recessed entry or porch.



Figure 10e.
At first glance, this row appears to be of uniform height, but some buildings are a full floor higher than others. The differences are masked by the configuration of the building form. The similarity of height plays an important role in linking these buildings even though it is not rigidly applied.



Figure 10f.
The efficient, modern-looking structure fails to relate to the surrounding buildings. It is out of scale and proportion to other buildings, interrupts the streets rhythm and has an awkward orientation. Such interruptions should be discouraged.



Hedman, Richard and Andrew Jaszewski, *Fundamentals of Urban Design*, Planners Press of the American Planning Association, Chicago, IL, 1984.

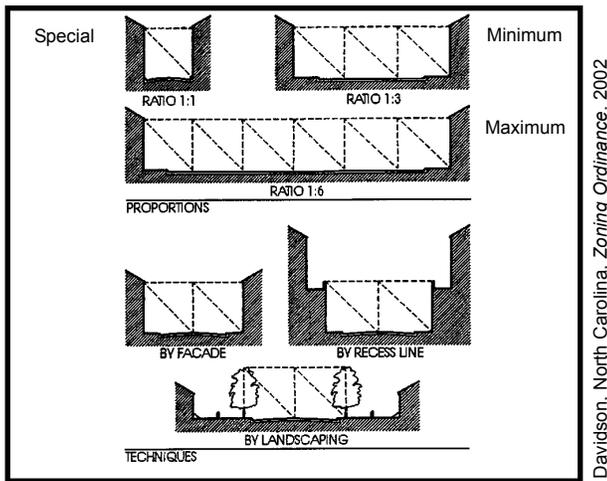


Figure 11. *Narrow streets, buildings pulled up close to the street, and street trees create an “enclosure,” calming traffic and helping to create a pedestrian-friendly setting.*

cant groups of trees in the no-disturb, open space areas. Mature trees and other landscape features, such as sloping terrains (average slope of 35% or greater), should remain intact and undisturbed whenever possible. Existing trees meeting tree preservation standards in the UDO, Section 3-4.2(H), may count toward all tree requirements. Natural or pre-existing, human-made water features should be retained, protected and maintained as a community asset. Further, recycling facilities (i.e., recycling bins and containers) should be provided in all commercial and multifamily residential areas of all TND projects.

PHASING OF REQUIRED COMPONENTS

A projected phasing schedule must be provided and approved as part of the Traditional Neighborhood Development review and approval process. There should be a balance between the timing of the development, construction and occupancy of the residential, commercial and recreation/civic components of the TND. The purpose and intent of this provision is to ensure that the approval process for a TND is not used, intentionally or unintentionally, to create nonresidential uses in areas generally surrounded by residential uses, or vice versa.

TRANSIT STOPS AND PARK & SHUTTLE LOTS

In Suburban Neighborhood and Future Growth Areas (see Figure 17, *Growth Management Plan*, page 20), developers may need to provide at least one park & shuttle lot. Park & shuttle lots should be located on the periphery of TNDs in a manner so that they do not dominate entrance vistas. Generally, parking spaces in these lots are considered independent of other parking space calculations. However, civic buildings, such as churches, that attract the majority of their users during non-business hours (i.e., all day on weekends and on weekdays from 6 p.m. to 8 a.m.) may count park & shuttle spaces within close proximity of their site towards the parking space requirements. If the Winston-Salem

Transit Authority services the area, at least one sheltered transit stop should be provided. The shelter should be designed to reflect the architecture of the neighborhood. Bike racks should be provided in all park & shuttle lots and at all transit stops.

TRANSIT COMPATIBILITY

In order to provide sustainable public transportation (buses, light rail, etc.), all transit corridors must have higher densities. Ideally, transit corridors should have an overall residential density of at least eight (8) units/acre along the corridor. TND projects should be encouraged along designated transit corridors and should provide a minimum density of 8 units/acre.

STREET SYSTEM

TNDs should use a street system that provides for both internal and external connectivity. The development should have multiple external connections while the internal connections should create a web of alleys, lanes, streets, main streets and avenues. Both the internal and external connections should form: (1) a street network that helps disperse and slow traffic; and (2) a discernable neighborhood structure. All streets within the TND should either be faced by building fronts or by public open space. This eliminates collector streets with no other purpose besides handling traffic.

Main streets and avenues should form the spine of the network, connecting Neighborhood Centers to arterial streets and serving as a gateway to the TND. Lanes, streets and alleys should complete the street system, serving as internal roadways. Each street should be interconnected to create an informal network. Blocks generally should not exceed 500-800 feet in length and generally should be no more than 2500-3200 feet around the perimeter.

Streets within the development should be interconnected and have a minimum of two access points to arterial streets. Streets should be narrow, shaded by rows of trees and connected to adjacent developments. Paving should only be as wide as necessary to accommodate travel and, where applicable, on-street parking. Paving can be a little wider on main streets and avenues to accommodate bicycle traffic, however, separate striped lanes are not required. **Table 2. Minimum Guidelines for Street Design, page 14**, provides minimum street design guidelines. Other street components include:

Alleys

Alleys can provide garage access at the rear of the lot. Alleys are preferred, especially for lots fifty (50) feet wide or less, because driveway access at the front of the lot can diminish the public realm. On lots wider than 50 feet, alternate, less preferred methods of permitted garage access include (in descending preference):

- (i) a front driveway accessing a garage behind the house or near the back of lot;
- (ii) turning the garage so that it does not face the front (garage must be behind front building line);

- (iii) setting the garage at least ten (10) feet behind the front of the house; or
- (iv) providing special architectural treatment to the house to visually de-emphasize a garage at the front.

Alleys should provide one-lane access to accessory dwellings, garages and workshops and are not intended to accommodate through traffic. They usually service residential areas and, where feasible, commercial areas. Where alleys are infeasible, shared driveways or Hollywood-style driveways to single-family homes can be used to create an aesthetic and functional alternative to individual driveways. Alleys should be delineated with fences or masonry walls to better define the space.

Lanes

Lanes typically provide access to single-family homes. Except for larger lot residential tracts located on the perimeter of the TND, they include one lane of on-street parking, where possible.

Streets

Streets should provide access to multifamily and single-family housing. They include one lane of on-street parking.

Main Streets

Main streets provide low-speed access to commercial and high-density residential areas. They usually include two lanes of on-street parking.

Avenues

Avenues are short-distance, medium-speed connectors between neighborhoods and core areas. They include two lanes of on-street parking and a planted median.

Streetscape

The streetscape should be created by providing vegetation and furniture in a cohesive design that promotes and protects the pedestrian and helps form a sense of enclosure for vehicles and a sense of place for citizens. Curbside planting easements should be at least five (5) feet wide and located on both sides of all streets. Street trees should generally be deciduous, installed in curbside planting easements at no more than fifty (50) feet intervals and a minimum of ten (10) feet in height at the time of planting. The same variety of street trees should be planted on both sides of the street in any one block. Tree diversity, if desired, should not be achieved within a single block or street.

Exceptions:

- (1) In commercial areas, sidewalks may extend to the curb with street trees planted in grates or other sufficiently-sized planting spaces. Also, trees may be placed at irregular intervals to accommodate store fronts and entryways.
- (2) Rather than use planting strips in larger lot residential areas located along the perimeter of

the TND, developers may plant tree clusters with multiple species in each front yard.

Trees should be of a species type that will create a "tall" tree canopy (one whose limbs are at least fifteen (15) feet from the street surface). Taller tree canopies allow delivery vehicles, emergency vehicles and service vehicles to use the street system without damaging their equipment or the trees.

Decorative benches, trash receptacles and street lamps are encouraged on both sides of all avenues and main streets. Pedestrian lights are encouraged on all public streets.

Site Distance

Sight triangle easements should be sized as small as possible to allow for street tree plantings while still providing adequate site distance.

Curb Cuts

Curb cuts should be minimized by allowing a maximum of one entry to through streets per business, although shared driveways and parking is encouraged. Driveway widths generally should not exceed twenty-four (24) feet for two-way traffic or sixteen (16) feet for one-way traffic.

Traffic Calming

Streets and lanes should be constructed at 20-25 mph design speeds while main streets and avenues can use design speeds of up to 35 mph. For design speeds of 20 mph, the curb radius at intersections should be fifteen (15) feet. Intersections on wider roads may require curb radii of up to twenty-five (25) feet. Where possible, streets should narrow at intersections and mid-block cross walks. With larger curb radii, sidewalks may need to be set back six to ten (6 to 10) feet from curbs and on-street parking may be restricted thirty (30) feet from the intersection on each street. Other traffic calming techniques, such as traffic circles, chicanes, bulb-outs and raised cross-walks, should be incorporated into street designs, as necessary.

Miscellaneous

Culs-de-sac are to be used only if topography dictates. Gated streets should be prohibited except in rare circumstances (e.g., a few secluded lots on a dead-end street or access easement). Highways should either be located along an exterior border of the TND or, if one does pass through the TND, it should be constructed or reconstructed with a maximum design speed of 25 mph through the project limits.

GRADING

Streets should be adapted as much as possible to the existing topography to minimize the amount of grading necessary to achieve a viable street network. (See ***Environmental Protection, page 10, in this section.***)

STREET GRADE

To facilitate the design of the street network, TND developers may use the North Carolina Department of Transportation (NCDOT) standards for hilly roads. These standards allow higher street grades, which reduces grading and allows development to more closely follow the existing contours.

SERVICE AREAS AND UTILITIES

Utilities should be co-located when possible and placed underground. Transformers, utility meters, HVAC equipment and other machinery should be located in alleys. Larger equipment should be hidden with landscaping or fence screening. Streets and alleys should be designed for rear service delivery. Fire hydrants are located on the fronting street, ideally situated in planting strips near intersections.

SIDEWALKS AND TRAILS

TNDs are walkable communities in the fullest sense. They should contain a network of sidewalks and off-road walking/biking trails that meet three (3) standards: safety, comfort and interest (**Figure 12**). Trails should be separated from vehicular traffic and provide a safe connection between commercial areas on the site. They should meet or exceed the Americans with Disabilities Act (ADA) standards and be constructed of concrete, asphalt or other all-weather surface. TNDs should provide sidewalks at a ratio of one and one-half (1½) linear feet of sidewalk per linear centerline foot of public street when considering the TND as a whole. Alleys and private driveways are exempt from the linear foot calculations. Sidewalks should be located in the right-of-way adjacent to curbside planting areas.

Sidewalks along all streets should measure at least five (5) feet in width, except within the Neighborhood Center, where they should be a minimum of ten (10) feet in width. Greenways should be at least eight (8) feet wide. However, if proposed greenways are located along a future greenway corridor identified in the *Greenway Master Plan*, developers should build trails ten to twelve (10 to 12) feet wide, depending on proposed widths for that site, to accommodate bicycles and higher pedestrian traffic. **See Table 2. Minimum Guidelines for Street Design** for minimum sidewalk design guidelines.

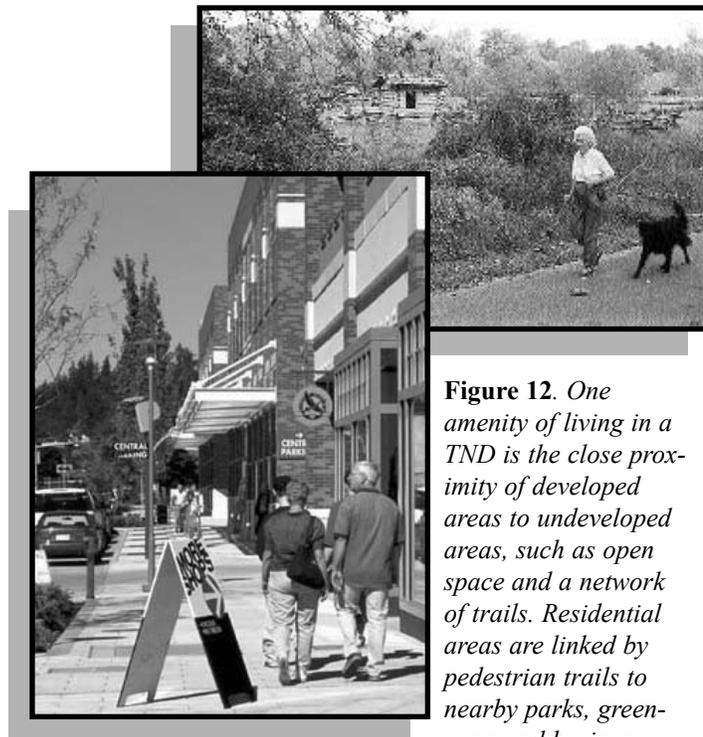


Figure 12. One amenity of living in a TND is the close proximity of developed areas to undeveloped areas, such as open space and a network of trails. Residential areas are linked by pedestrian trails to nearby parks, greenways and business opportunities.

Table 2.
Minimum Guidelines for Street Design
(see note for Right-of-Way Widths¹)

Type of Street	Design Speed	Paved Lanes	Parking	Gutter ²	Median	Median Gutter ³	Planting Easement ⁴	Sidewalk Easement	Maximum Curb Radii
Resid. Alley	n/a	1 @ 12 ⁵	n/a	n/a	n/a	n/a	n/a	n/a	8'
Comm. Alley	n/a	2 @ 10'	n/a	n/a	n/a	n/a	n/a	n/a	10'
Lane	15-25 mph	2 @ 9'	1 @ 6'	2 @ 2'	n/a	n/a	5' - 8'	up to 2 @ 5'	10'
Street	20-25 mph	2 @ 9'	1 @ 6'	2 @ 2'	n/a	n/a	5' - 8'	up to 2 @ 5'	20'
Main Street	20-35 mph	2 @ 10'	2 @ 6'	2 @ 2'	n/a	n/a	5' - 8'	up to 2 @ 10'	30'
Avenue	20-35 mph	2 @ 15'	2 @ 6'	2 @ 2'	18'	2 @ 1'	5' - 8'	up to 2 @ 10'	30'

NOTES and FOOTNOTES:

1. Right-of-way width is dependent upon the needed cross-section for all street design elements, but should be no wider than the area needed for all elements;

2. In larger lot residential areas along the perimeter of a project, developers may apply the following alternative streetscape standards: (1) replace guttering with swales and (2) replacing curbside planting easements with tree clusters in each front yard.

3. Median gutters use vertical design.

4. The City of Winston-Salem *Standards and Specifications Regulating Activities Which Impact City Trees* defines minimum planting strips as five (5) feet for trees between 15 feet and 39 feet in height at maturity and eight (8) feet for trees over 40 feet in height at maturity.

5. Residential alleys that are private may use gravel in place of other forms of paving/surfacing.

Specific Residential Guidelines

The residential portion of a TND should consist of a wide variety of housing densities and types and should be widely distributed throughout the developed area. Encouraging different housing options within the same neighborhood is important in providing continuity throughout the life of an individual or a family. As a family changes, there should be housing options available within the neighborhood. These options should allow individuals and families to stay within the same neighborhood for most, if not all, of their lives. The various residential options and designs should include the integration of some structures that comply with the American with Disabilities Act (ADA). All of the residential areas within a TND should adhere to the following design guidelines:

DENSITY

Residential density generally increases from the TND edge to center with higher densities located around transit stops, recreation areas and the Neighborhood Center. Larger lot residential tracts may be located along the outside perimeter of the TND. The goal for a TND is to have a gross residential density of six to ten (6-10) units/acre. Through the combination of detached homes, garage & loft apartments, townhomes, live/work units, condominiums, apartments and other potential residential uses, a TND provides many different housing styles and densities.

PARKING

Parking for the residential areas within TNDs should adhere to the following:

On-Site

Garages, carports and parking pads should be located to the rear of homes. However, where feasible, developers may use other alternate designs. (See the **garage hierarchy in the Alleys section under General Design Guidelines on page 12 for the suggested alternate designs.**)

On-Street

Except for larger lot residential areas located along the perimeter of the TND, on-street parking is encouraged, especially in areas with attached homes. On-street parking adjacent to the building may count toward the parking guidelines. On streets and lanes, developers may alternate placement of on-street parking from one side of the street to the other.

Off-Street

Generally, one-half (½) off-street parking spaces per bedroom in multifamily buildings should be provided.

Bicycle

For multifamily buildings, bicycle parking is generally provided at a minimum rate of 1 space per fifteen (15) off-street spaces on the same lot and should be located near entrances (spaces to be provided in a bike rack). There is no recommended standard for bicycle parking in single-family residential areas.

BUILDING DESIGN

TNDs are designed to provide linkages between private areas and public areas while protecting private spaces (**Figure 13**). Detached homes should include covered porches that are large enough for porch furniture, sitting and circulation. Where possible, multifamily buildings should provide sitting porches or front stoops. If privacy inside the dwelling is a concern, porches can be elevated above the grade of the sidewalk so residents overlook the street rather than vice versa. Use of hedges, walls, fences, stoops, colonnades, multiple gables, dormers, stairs and canopies are encouraged along building fronts. Fences and walls should have a maximum height of three (3) feet within the front yard. Hedges should use planting material with a maximum height of three (3) feet or should be pruned to such height within the front yard. Individual units should maintain a building scale that is similar to adjacent units. Housing units on corner lots should face the larger residential street. All residential dwellings serviced by alleys are encouraged to have a hedge, fence or wall of between three (3) and six (6) feet in height along all property lines in the rear yard.

ACCESSORY DWELLINGS

One accessory dwelling per detached home should be allowed by right. These buildings are encouraged to be used as garage apartments. Accessory dwellings should be located in the backyard and be compatibly designed with the primary building. The living area within the accessory dwelling should not exceed 700 square feet. Accessory dwellings should not count toward gross residential density calculations. Likewise, loft apartments above commercial areas that are less than 700 square feet in size should be exempt from the density provisions for the project.

LIVE/WORK UNITS

Single-family houses may be designed to accommodate both living and working spaces for services found in the UDO, Section 2-6.4(D)(2)(a)(i) through (iii) (baking, photography, accounting, interior decorating, etc.). These units should meet the following additional rules:

Location

Live/work units should be located on streets, main streets or avenues where they can serve as quasi-commercial uses.

Use Conditions

Live/work units should meet the conditions found in the UDO, Section 2-6.4(D)(3)(a), (b), (c), (h) and (j) pertaining to home occupations.

Outdoor Storage

Live/work units should have no outdoor storage.

Parking and Signs

Live/work units should follow the sign and parking guidelines found in the **Specific Neighborhood Center Guidelines, page 17**, section with the exception that the sign area for units outside of the Neighborhood Center should not exceed six (6)

square feet.

HOME OCCUPATIONS

Home occupations not located in the Live/Work Unit areas should meet all of the UDO requirements found in Section 2-6.4 (D) pertaining to home occupations.

LOTS

Lots should not be combined for a single building which is out of scale and proportion to surrounding buildings.

GENERAL DIMENSIONS

Please see **Table 3. General Dimensions for Residential Lots** for a guide to the dimensional criteria for the



Figure 13. A series of homes with shallow setbacks (above and above right) create a sense of enclosure, decreasing vehicular speeds and increasing the amount of interaction among neighbors and pedestrians. The use of short walls, fences, hedges, etc. (right and below right) allow for the separation of public and private spaces while still promoting interaction. Porches and other gathering spaces on both single-family and multifamily buildings provide areas for interaction and add to the developments “sense of place.”



Specific Neighborhood Center Guidelines

The commercial portion of a TND should consist of a wide variety of uses, including retail, office, institutional and residential. The commercial area, called the Neighborhood Center, should cater to the needs of the TND residents. The Neighborhood Center should be located so that it is easily accessible to the residents of the development. A prominent site for a civic building or use should be reserved in the Neighborhood Center. All uses in the Neighborhood Center should implement "good neighbor" strategies to ensure that there are minimal impacts to adjacent residential uses. All businesses located within the Neighborhood Center should adhere to the following design guidelines:

PARKING

Except where noted below, proposed parking areas should meet the requirements in the UDO, Section 3-3, pertaining to parking.

On-Street

Either parallel or angled on-street parking should be provided and marked on both sides of the street in the Neighborhood Center.

Off-Street

Since TNDs are compactly designed to encourage non-vehicular travel, parking requirements are less stringent and more flexible than standard commercial developments.

Space Calculation. The Neighborhood Center should have a minimum of one (1) off-street parking space per 500 square feet of gross floor area. These spaces should be located in

common parking lots or structures and should be designed so that pedestrians can easily access sidewalks. It is encouraged that all projects attempt to limit the overall number of parking spaces. There should be no more than five (5) parking spaces per 1000 square feet of gross floor area. See the *Combined Use Buildings* section below for additional parking requirements.

Location. Parking spaces may be: (1) located on-site, (2) provided or purchased through common parking lots in the commercial center, or (3) distributed among a mix of on-site and common parking lots. When using on-site parking, at least 75% should be located to the rear of the building and up to 25% may be located to the side. Where possible, adjacent parking lots should connect and should be broken into smaller areas with landscaping or other techniques (**Figure 14**).

**Table 3.
General Dimensions for Residential Lots**

Dimensional Category	Attached Townhomes	Detached Homes
Maximum Street Frontage ¹	75% of lots should have no more than 40' of frontage	75% of lots should have no more than 65' frontage
Front Setback (ft) ¹	Min: 5' Max: 15'	Min: 5' Max: 25' ²
Rear Setback (ft) ¹	Min: 20' ³	Min: 20' ³
Side Setback (ft) ¹	Min: 0' (corner lots: 10')	Standard: 8' (2 sides) Zero Lot Line: 0' and 10' (2 sides)
Maximum Lot Coverage (%)	70%	65%
Height	Min: 2 stories Max: 3 stories	Min: 1 story ⁴ Max: 3 stories

NOTES:

Apartments and other multifamily products have no suggested dimensional restrictions to allow for greater flexibility in design and placement. It is suggested that such products be placed close to the street, have off-street parking in the rear and attempt to blend in with surrounding uses.

1. All setback measurements are from the property line.

2. To define the streetscape, dwellings set back from the front property line more than 15' should provide a wooden, cast iron or masonry fence between 24" and 36" in height along the frontage and/or a shrubbery hedge. Security type fencing should not be used.

3. Accessory buildings may have a 0' setback.

4. All 1 story buildings should have gable roofs that give the appearance of additional height to blend in with the surrounding buildings.

Reserve Parking. If parking space guidelines are substantially larger than the number anticipated by the developer, reserve parking may be used to avoid unnecessary paving (see Overflow Standards in the UDO, Section 3-3.3(c)(3)).

Landscaping. Parking areas adjacent to the street should be de-emphasized with landscaping as viewed from the street. Parking lots should include one (1) shade tree per ten (10) parking spaces (rounded up). Each shade tree should be planted in an area sized and shaped to enable healthy growth (**Figure 14**).

Bicycle

Bicycle parking is provided at a minimum rate of one (1) space per twenty (20) off-street spaces. The bicycle parking should be located on the same lot as close to the building entrance as the closest parking space (spaces to be provided in a bike rack).

BUILDING DESIGN

Awnings, covered walkways, recessed entrances and display windows should be included on commercial and office buildings. Use of sidewalk dining, fences, porches, stoops, colonnades, stairs and canopies is encouraged, provided they do not interfere with Americans with Disabilities Act (ADA) requirements. Rooftop equipment should be hidden. Buildings should use the zero (0) feet side setback to create a "main street" feel (**Figure 15**). Side walls of buildings on corner lots should have windows similar to the front facade. At least 50% of the first floor exterior side or front walls that face a street or pedestrian way should consist of either glass windows or doorways. Windows should not be reflective. Buildings on a corner lot should face the primary street.

COMBINED-USE BUILDINGS

Loft-style apartments are encouraged above commercial and office uses (**Figure 16**). These facilities have the same amenities (hot water, kitchen facilities, heat, light, ventilation, electrical power and sound transmission control between units) that residential codes require. In some cases, such as restaurants, the primary commercial use may require additional ventilation, electrical power and other utility requirements for the accessory apartment. Parking for combined-use buildings is not included in the previous space calculations and should be provided at a minimum rate of one (1) on-site or on-street space per apartment. Loft apartments above commercial areas that are less than 700 square feet in size should be exempt from the density provisions for the project under future possible UDO amendments for TNDs.



Figure 14. Parking within a TND project is provided using both on-street and off-street arrangements (shown above). Any off-street parking areas should be located to the rear or side of the commercial areas and/or screened from the street. Regardless of the location, the parking area should be heavily landscaped.



Figure 15. TND projects require a higher density of both businesses and residents in the Neighborhood Center. To accomplish this density and to create a traditional "main street" or "town square" feel, commercial and office buildings require no side or rear setback areas.

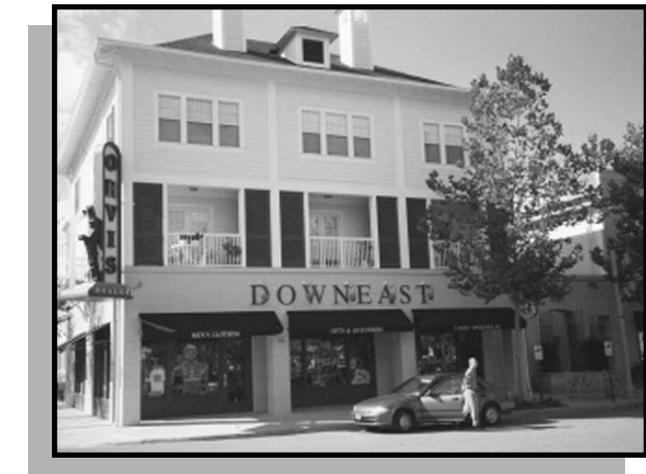


Figure 16. This building provides retail space on the bottom floor with residential opportunities on the upper floors. Such combined-use buildings provide a key element for success to a TND project: density within the Neighborhood Center.

SIGNS

Only one roof, wall or projecting sign should be used per exposed wall, per building front. Awning signs and sandwich boards may be used to supplement roof, wall or projecting signs but should not be illuminated. Signs within the TND should generally be compatible in terms of materials and scale. For general size, placement and other restrictions, see the UDO, Section 3-2. All signage is intended to be pedestrian scaled and in proportion to the surrounding buildings/signs. It is recognized that building configuration and individual tenant spaces may dictate more or less signage for a given property.

Illumination

Since TNDs locate commercial and office uses close to residential areas, caution should be taken to avoid excessive lighting. Therefore, internally illuminated signs should be strongly discouraged. If lighting is necessary, lights may be attached to sign exteriors to project light downward.

Miscellaneous

Off-premises and ground signs should not be used within the TND except in situations where the commercial portion of a TND project is located on the periphery.

OUTDOOR LIGHTING

Exterior lighting (excluding street lights) should not cast direct light upon adjacent properties. Additionally, exterior lighting fixtures should be downward-directed, cut-off style lights designed to limit excessive light pollution.

OPERATION LIMITATIONS

Commercial and office uses should have no outdoor storage. Commercial businesses should restrict their hours of operation to the hours of 6 a.m. to midnight in situations where the commercial portion of a TND abuts existing, established residential neighborhoods.

LOTS

Lots should not be combined for a single building which is out of scale/proportion to surrounding buildings.

GENERAL DIMENSIONS

Please see **Table 4. General Dimensions for Neighborhood Center Lots** for a guide to the dimensional criteria for the Neighborhood Center.

**Table 4.
General Dimensions for Neighborhood Center Lots**

Dimensional Category	Neighborhood Center Lots
Front Setback (ft)	Min: 0' Max: 5'
Rear Setback (ft)¹	Min: 0'
Side Setback (ft)² (allocated to 1 side)	Min: 0'
Maximum Lot Coverage (%)	75%
Height	Min: 2 stories Max: 4 stories

1. Parking should be provided in the rear of the commercial core. As a result, either a shared parking area should be designated or each business should provide parking on its lot in the rear.
2. Buildings should be configured to allow for pedestrian access from the rear through mid-block alleys.

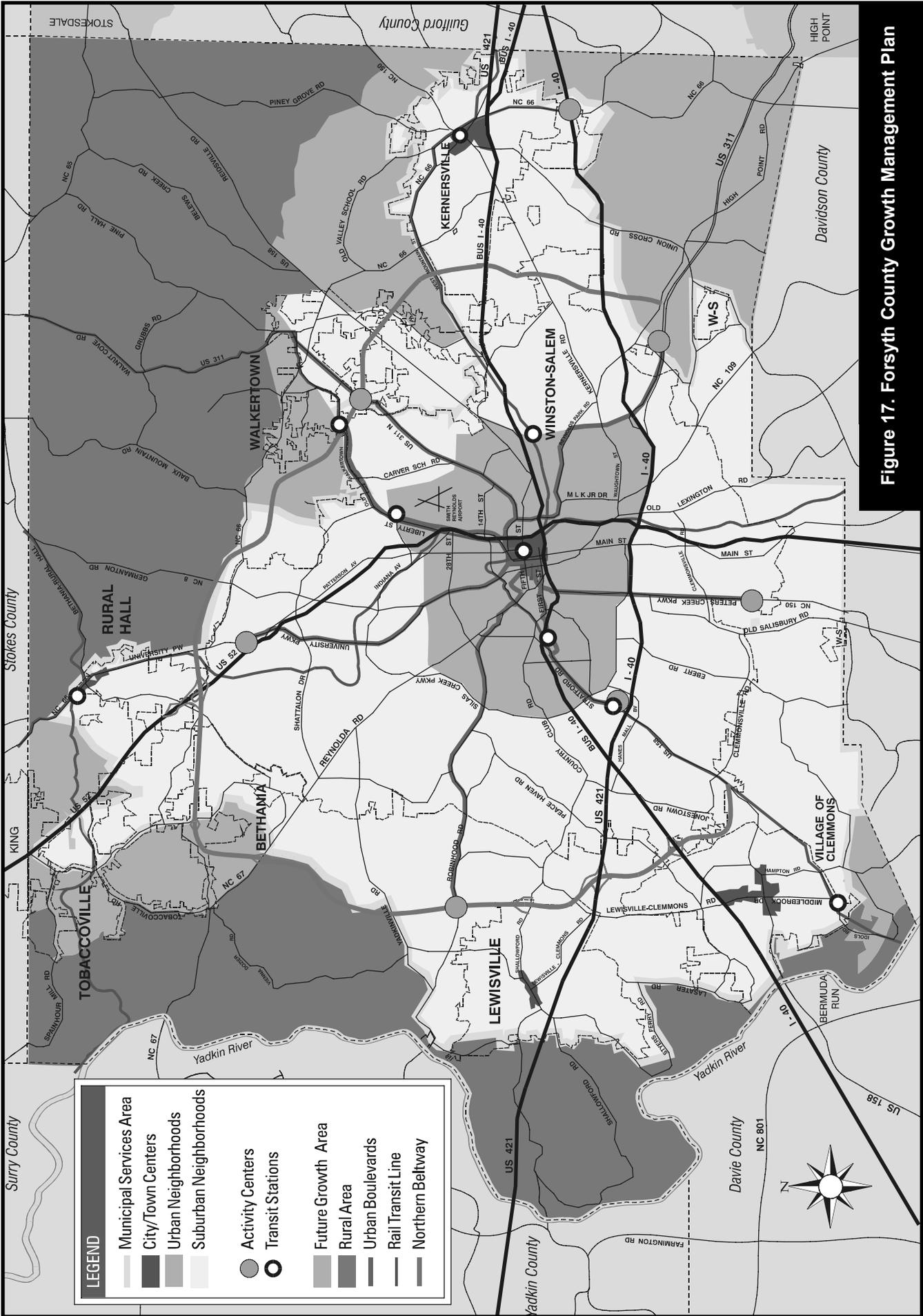


Figure 17. Forsyth County Growth Management Plan

Specific Recreational And Civic Guidelines

The recreational and civic portions of a TND should provide the residents of the neighborhood sufficient space to play, congregate and learn. Such activities are vital to the health of the individuals of the neighborhood and the neighborhood itself. All of the recreational and civic portions of the project should adhere to the following:

PARKING

Except where noted below, proposed parking areas should meet the requirements in the UDO, Section 3-3, pertaining to parking.

On-Street

Either parallel or angled on-street parking should be provided on both sides of the street. On-street parking adjacent to the building counts toward parking space calculations.

Off-Street

Since TNDs are compactly designed to encourage non-vehicular travel, parking requirements are less stringent than standard civic and recreation developments.

Space Calculations. Given the wide range of possible civic and recreational uses possible, there are no recommended parking requirements. The parking standards of the UDO should be used as a guide but the inclusion of an excessive number of parking spaces is discouraged. Parks, squares and/or greens may be served by on-street parking and require no off-street parking spaces (**Figure 18**).

Location. Parking spaces for civic uses may be: (1) located on-site, (2) provided or purchased through common parking lots in the commercial center, or (3) distributed



Figure 18. Parks, squares and greens are located throughout TND projects. They are served by on-street parking and usually require no off-street parking spaces.

among a mix of on-site and common parking lots. When using on-site parking, at least 75% should be located to the rear of the building and up to 25% may be located to the side. Where possible, adjacent parking lots should connect. Large parking lots should be broken into smaller areas by using landscaping and other techniques.

Reserve Parking. If parking space guidelines are substantially larger than the number anticipated by the developer, reserve parking may be used to avoid unnecessary paving [see *the Overflow Standards in the UDO, Section 3-3.3(c)(3)*].

Landscaping. Parking areas adjacent to the street should be de-emphasized with landscaping as viewed from the street. Parking lots should include one (1) shade tree per ten (10) parking spaces. Each shade tree should be planted in an area sized and shaped to enable healthy growth.

Bicycle

Bicycle parking is provided at a minimum rate of one (1) space per twenty (20) off-street spaces. The bicycle parking should be located on the same lot as close to the building entrance as the closest parking space (spaces to be provided in a bike rack).

BUILDING DESIGN

Awnings, covered walkways, recessed entrances and display windows should be included on all buildings. The use of walls, fences, porches, stoops, colonnades, stairs and canopies is encouraged.

SIGNS

Only one roof, wall or projecting sign should be allowed per exposed wall, per building front. Awning signs and sandwich boards may be used to supplement roof, wall or projecting signs but may not be illuminated. Signs within the TND should generally be compatible in terms of materials and scale. For general size, placement and other restrictions, see the UDO, Section 3-2. All signage is intended to be pedestrian scaled and in proportion to surrounding signs and buildings. It is recognized that building configuration and individual tenant spaces may dictate more or less signs for a given property.

Illumination

Since TNDs locate civic and recreational uses close to residential areas, caution should be taken to avoid excessive lighting and glare. Therefore,

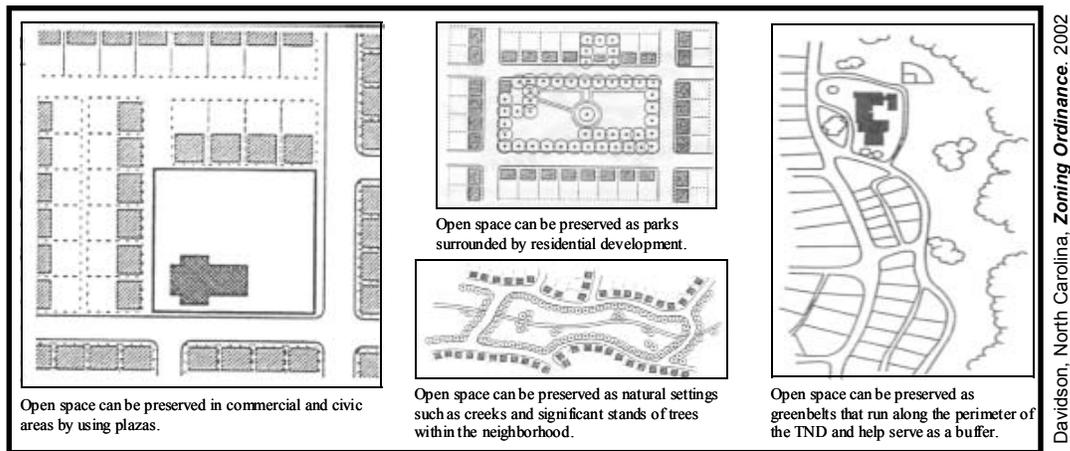


Figure 19. Open space within a TND project can take many forms and serve many functions. Whether the open space is used to preserve interesting natural or cultural features or used to provide a gathering place for residents of the project, they are vital for the overall health of the neighborhood and the community as a whole. Several examples of open space configuration are depicted above.

internally illuminated signs should be strongly discouraged. If lighting is necessary, lights may be attached to sign exteriors to project light downward.

Miscellaneous

Off-premises and ground signs should not be used within the TND except in situations where the commercial portion of a TND project is located on the periphery.

OUTDOOR LIGHTING

Exterior lighting (excluding street lights) should not cast direct light upon adjacent residential properties.

LOCATION AND CONFIGURATION OF OPEN SPACE

Open space should be located throughout the TND project and be configured to serve many different purposes. Large areas of open space should be arranged to protect sensitive natural features and serve as an area for passive recreation. Linear corridors of open space should be

provided adjacent to streams and floodplain areas. Land close to the developed portions of the TND should be preserved for central parks, greens or squares (**Figure 19**).

LOCATION AND CONFIGURATION OF ACTIVE RECREATION AREAS

Active recreation areas should be evenly dispersed throughout the TND. Tot lots should generally be located no more than three (3) blocks away from each residence while larger parks should generally be no further than ½ mile away from each residence.

LOCATION AND CONFIGURATION OF CIVIC BUILDINGS

At least one prominent site in the Neighborhood Center should be reserved for a civic building (school, museum, library, etc.) or civic use (square, plaza, green, etc.).

GENERAL DIMENSIONS

See **Table 5. General Dimensions for Civic and Recreational Lots** for a guide to the dimensional criteria for the civic and recreation areas.

Table 5. General Dimensions for Civic Building Lots

Dimensional Category	Civic Buildings ¹
Front Setback (ft)	Min: 0' Max: 35' ²
Rear Setback (ft)	Min: 0'
Side Setback (ft) (allocated to 1 side)	Min: 0'
Maximum Lot Coverage (%)	75%
Maximum Height	4 stories

1. Civic buildings should be in scale and proportion to surrounding buildings.
 2. The maximum setback for civic buildings is greater to allow common outdoor spaces and meeting areas to be incorporated into the building design. No parking should be allowed in this area and this area should not be provided if a courtyard, green or other type of gathering space is not included in the design.

Definitions

Accessory Feature. Any large object, such as a fountain, monument or work of art that supplements an outdoor area and provides a focal point.

Accessory Dwelling. A dwelling unit located within a structure that is detached from the principal building on the lot.

Active Recreation Space. Defined areas/spaces within a development that are available for structured recreation. These areas are designed for the common use or enjoyment of the residents of the development but are not located on individually owned lots. Examples include soccer fields, swimming pools, play fields and playgrounds.

Alley/Rear Access Lane. A vehicular passage that provides one-lane access to accessory dwellings and garages but does not accommodate through traffic.

Attached Home. A residential building that contains three or more dwelling units and occupies one lot.

Building Height. The vertical distance measured from the average elevation of the finished grade of all sides of a building measured at the midpoint of each side, to the topmost elevation of the roof or to the topmost projection of the building above any roof, including parapet walls. Enclosed penthouses/equipment rooms are considered part of the building and are included as part of the building height.

Bulb Outs. (also called neckdowns) Curb extensions at intersections that reduce roadway width curb-to-curb and act as a traffic-calming technique.

Chicanes. Curb extensions or islands that alternate from one side of the street to the other, forming S-shaped curves and act as a traffic-calming technique.

Combined Use Building. A building that is designed to blend commercial and/or office uses with residential dwellings.

Corner Store. A retail establishment offering food products, household items and/or other goods commonly used by people during a normal day.

Cottages. See *Detached Home*.

Detached Home. A residential building that contains one dwelling unit and occupies one lot.

Duplex. A residential building that contains two dwelling units and occupies one lot.

Enfront. To face or be opposite across streets.

Freestanding Building. A commercial or office building that contains one occupation and occupies one lot.

Garage Apartment. See *Accessory Dwelling*.

Green. An open area with an average slope of no more than five percent (5%) that is designed for pedestrian enjoyment and passive recreation.

Greenway. A linear open space along a natural or constructed corridor which may be used for pedestrian or bicycle passage. Greenways often link activity centers to populated areas, civic properties and/or parks.

Hollywood Driveway. A driveway that consists of two narrow, parallel driving strips. Hollywood driveways can be made of surfaces such as asphalt, concrete or brick. Since there is less impervious surface, they manage stormwater better than regular driveways.

Home Occupation. The use of a dwelling unit or accessory building on the same zoning lot for commercial activities that are clearly subordinate to the principal use of the dwelling unit for residential purposes.

Internally Illuminated Sign. A sign that shines light directly through translucent materials.

Live/Work Unit. A residential building that is specifically designed to accommodate work-at-home occupations.

Lot Coverage. The portion of the lot area, expressed as a percent, that is covered by impervious surface cover.

Motor Vehicle Repair and Maintenance. An establishment located in the Neighborhood Center that provides mechanical automotive maintenance and repair, such as engine repair, exhaust system replacement, transmission repair, and/or other related services, such as upholstery or glass replacement. This use does not include body work or painting. Storage and service of automobiles must be retained within or behind the primary building.

Multi-Tenant Building. A commercial or office building that contains more than one occupation and occupies one zoning lot.

Net Residential Density. The number of dwellings within the buildable area of a site.

Passive Recreation Space. Open space within a development that is available for unstructured recreation. The area is designed for the common use and enjoyment of the residents of the development. Examples include natural areas, greens and plazas.

Pedestrian Lights. Lights that are designed to illuminate pedestrian areas such as sidewalks and trails. Pedestrian lights are typically situated low to the ground, measuring twelve (12) feet in height or less.

Public Area. Areas such as streets, sidewalks, parks, natural areas and civic facilities that are open to the public and owned by public or semi-public organizations.

Raised Crosswalk. A flat-topped speed hump, often constructed with brick or other textured materials, that is outfitted with crosswalk markings and signage. This type of crosswalk is used to channelize pedestrian crossings at key locations, serve as a warning to motorists and act as a traffic calming technique.

Reserve Parking. An area of required parking that may be set aside and left unpaved if parking space guidelines are substantially larger than the number anticipated by the developer.

Row House. See *Townhouse*.

Sprawl. A dispersed land use pattern characterized by the separation of low-density uses and general lack of civic or public space.

Street Opening Width. The distance from building front to building front as measured across the street/sidewalk/front-yard area.

Tot Lot. A playground area for young children that usually includes equipment such as swings, slides, clutter bridges and sand boxes.

Townhouse. A residential building that contains three or more dwelling units and each unit occupies one zoning lot.

Traffic Calming. Changes in street alignment and the installation of barriers and other physical measures to reduce traffic speeds and/or cut-through traffic volumes. These measures are used in order to enhance street safety and livability and for other public purposes.

Traffic Circles. Islands placed in intersections around which traffic circulates; used as a traffic calming technique.

Twin Home. See *Duplex*.

Unified Development Ordinances (UDO). The compilation of regulations that affect land use throughout Forsyth County.

Urban Residential Building. A residential building that contains two or more dwelling units and is located within Center City Winston-Salem. All land within the project site shall be in single, multiple or joint ownership and if dwelling units are for sale, all land in common open space on the property shall be owned by a nonprofit corporation in which all owners within the building or property have automatic membership rights and assessment obligations of maintenance of these areas.

Vista. A lot, building or monument site generally located at an intersection of two or more streets that is prominently visible from one or more streets or active pedestrian ways that approach the intersection.

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