Place Type Summary Document

Section B - Place Type Palette



place type palette was created for Imagine 2040 to identify and describe different development patterns, types, and intensities prevalent in the region. Other place types were added to the palette to represent emerging development themes or concepts popular in the region (e.g., transit-oriented development, traditional neighborhood development, or new village centers).

The intent of the palette was to include enough diversity between place types so that participants would have sufficient means to describe their vision and plans for the region. The palette is not intended as an exhaustive list of every potential place type, and efforts were made to minimize the number of categories to allow for a meaningful comparison between development scenarios.

Place types created for Imagine 2040 include:

- parks and open space
- working farm
- rural living

- mobile home park
- large-lot residential neighborhood
- shade tree residential neighborhood
- small-lot residential neighborhood
- multi-family residential neighborhood
- mixed-density residential neighborhood
- urban neighborhood
- high-rise residential
- rural cross roads
- · neighborhood commercial center
- suburban commercial center
- suburban hotel
- · suburban office center
- regional employment center
- light industrial center
- heavy industrial center
- mixed-use neighborhood
- mixed-use center
- town center
- transit-oriented development
- metropolitan center
- airport
- civic and institutional
- health care campus
- university campus

Detailed descriptions for all twenty-eight place types are provided on the following pages.

Parks and Open Space (POS)

Parks and open space include active and passive land dedicated for conservation. These areas are typically undisturbed or undeveloped and have been protected from development by local, state, and federal agencies or by public, private, and nonprofit organizations. In the region,

these areas include state parks, permanent conservation areas, park land, athletic fields, cemeteries, and dedicated open space within residential neighborhoods.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- state park / wildlife refuge area
- natural area
- wildlife corridor
- greenway
- stormwater retention / detention area
- community park
- athletic fields

Secondary Land Uses

- cemetery
- water dependent, recreation activities
- community park

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	N/A
Typical Lot Coverage	N/A
Residential Density	N/A
Non-Residential Intensity	N/A
Prevailing Building Height	N/A
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	N/A
Transportation Choices	Auto, Bicycle, Walking
Typical Block Length	N/A
Setback or Build-To Line	N/A
Open Space Elements	Natural Areas, Greenways
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	N/A
Typical Street Cross Section	Rural/Suburban
General Water Usage	N/A
General Sewer Usage	N/A

See section F of this document for more information on the variables included in the form and pattern table.





There are locations throughout the Triangle Region identified as parks and open space. These areas protect the region's natural terrain and water features, serve as buffers between incompatible land uses, and provide areas for active recreation. Notable sites include: Homestead State Park, Eno River State Park, Lake Crabtree County Park, Blue Jay Point County Park, Hemlock Bluffs, and Falls Lake Trail.

There are also properties throughout the region held in conservation easements or owned outright with the expressed purpose of preservation.



Working Farm (WF)

Working farms are actively being used for agriculture or forestry activities, including cultivated farmland, timber harvest, livestock, or woodlands. These areas also support the

primary residence of the property owner and any out-buildings associated with activities on the working farm.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- · cultivated farmland
- timber harvest
- livestock
- woodlands

Secondary Land Uses

- single-family detached home
- warehouse/storage
- light industrial (ancillary to farm activities)

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	99%
Typical Lot Coverage	1-5%
Residential Density	0.05-0.10 D.U.'s²/Acre
Non-Residential Intensity	0.05-0.10 FAR ³
Prevailing Building Height	I Story
Average Dwelling Unit Size	1,500-2,000 SF⁴
Average Non-Residential Buil	ding Size N/A
Transportation Choices	Auto
Typical Block Length	N/A
Setback or Build-To Line	Setback Requirements
Open Space Elements	Cultivated Farmland, Woodlands
Street Pattern	N/A
Street Connectivity	Low
Parking Provisions	N/A
Typical Street Cross Section	Rural
General Water Usage (per SF) Varies
General Sewer Usage (per SF) Varies

See section F of this document for more information on the variables included in the form and pattern table.

²(D.U.) - Dwelling Unit ³(FAR) - Floor Area Ratio ⁴(S.F.) - Square Feet





Working farms are typically located in areas with fertile soils and good drainage. Large and small farms are scattered throughout the region; however, their frequency decreases as proximity to urban centers increases. This is a direct result of land prices and demand for other uses in urban areas.

Working farms prevalent in the region produce hogs, poultry, tobacco, soybean, strawberries, cotton, peanuts, and small grains.



Imagine 2040

Rural Living (RL)

Rural living areas are characterized by large lots, abundant open space, pastoral views, and a high degree of separation between buildings. Residential homes and hobby farms are scattered throughout the countryside and often integrated into the natural landscape. The lot size and separation between buildings decreases approaching areas with greater development densities.

Buildings at the edges of most rural areas are generally oriented toward highways and have direct access to the adjacent highway through a private driveway.

More dense development in the place type may take the form of conservation-based subdivisions (a.k.a. cluster development), which leave larger areas for permanent open space and uninterrupted views of the surrounding countryside.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- · single-family detached home
- mobile home
- hobby farm

Secondary Land Uses

- church
- natural areas

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	99%
Typical Lot Coverage	5-10%
Residential Density	0.05-0.33 D.U.'s ² /Acre
Non-Residential Intensity	N/A
Prevailing Building Height	I Story
Average Dwelling Unit Size	1,500-2,000 SF ³
Average Non-Residential Buil	ding Size 1,000-1,500 SF ³
Transportation Choices	Auto
Typical Block Length	2,500-5,000 LF ⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Cultivated Farmland, Woodlands
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Private Driveways
Typical Street Cross Section	Rural
General Water Usage (per un	it) 250 GPD
General Sewer Usage (per un	it) 250 GPD

See section F of this document for more information on the variables included in the form and pattern table.

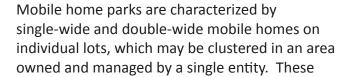


Rural living areas are present throughout the region. Many people choose to live in these places as a result of their connection to agriculture, proximity to natural areas or scenic views, or the enjoyment of living in a natural setting.





Mobile Home Community (MHP)



neighborhoods are found throughout the region and often provide an affordable housing option for residents.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- single-wide mobile home
- double-wide mobile home
- modular home

Secondary Land Uses

- · community center
- pool and amenities

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	90-95%
Typical Lot Coverage	50-65%
Residential Density	6-12 D.U.'s ² /Acre
Non-Residential Intensity	N/A
Prevailing Building Height	I Story
Average Dwelling Unit Size	500-1,000 SF3
Average Non-Residential Building Si	ze N/A
Transportation Choices	Auto
Typical Block Length	400-800 LF4
Setback or Build-To Line	Setback Requirements
Open Space Elements	Greenways, Natural Areas
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Private Driveway
Typical Street Cross Section	Rural/Suburban
General Water Usage (per unit)	200 GPD
General Sewer Usage (per unit)	200 GPD

¹ See section F of this document for more information on the variables included in the form and pattern table.



Mobile home parks are scattered throughout the region. Some local governments restrict them to designated areas or districts. It is common for mobile home communities to be located in both rural or suburban areas of the region.





Imagine 2040

Large-Lot, Residential Neighborhood (LLRN)



Large-Lot residential neighborhoods are generally formed as subdivisions and consist almost entirely of single-family detached homes. Buildings are oriented interior to the site and are typically buffered from surrounding development by transitional uses, topography, or vegetative areas.

Many neighborhoods 'borrow' open space from adjacent rural or natural settings.

Blocks are typically large and streets rural or suburban in character. In some cases, the neighborhood is served by only one long cul-desac.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

single-family detached home

Secondary Land Uses

- church
- school
- community center
- pool and amenities
- natural areas
- horse stable

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

Separated Uses
85-95%
30-65%
0.33-1.00 D.U.'s ² /Acre
N/A
I-3 Stories
2,500-7,000 SF ³
N/A
Auto
800-1,500 LF⁴
Setback Requirements
Greenways, Natural Areas
Curvilinear
Low
Private Driveway
Rural or Suburban
250 GPD
200 GPD

See section F of this document for more information on the variables included in the form and pattern table.



Large-lot, residential neighborhoods are generally found on the fringes of rural or suburban living areas. They are traditionally auto-dependent, with low street connectivity and an abundance of cul-de-sacs.



ShadeTree, Residential Neighborhood (STRN)



Shade tree, residential neighborhoods include homes built in the post-WWII era on streets now with mature trees. They are found in close proximity to traditional urban centers, and provide the rooftops necessary to support nearby commercial and employment areas. Home architecture, building setbacks, and lot size and

width may vary within the same neighborhood. Lakes, parkland, and community buildings (e.g., schools, churches, or community centers) are prevalent features in the neighborhood. Large blocks and curvilinear streets make shadetree, residential neighborhoods typically autodependent.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

single-family detached home

Secondary Land Uses

- duplex
- mobile hoome
- church
- school
- community center
- park or playground
- natural areas

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	25-65%
Residential Density	I-4 D.U.'s ² /Acre
Non-Residential Intensity	N/A
Prevailing Building Height	I-2 Stories
Average Dwelling Unit Size	1,500-2,500 SF ³
Average Non-Residential Building Siz	ze N/A
Transportation Choices	Auto
Typical Block Length	800-1,500 LF⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Greenways, Natural Areas
Street Pattern	Modified Grid
Street Connectivity	Medium
Parking Provisions	Private Driveway
Typical Street Cross Section	Suburban
General Water Usage (per unit)	250 GPD
General Sewer Usage (per unit)	200 GPD

¹ See section F of this document for more information on the variables included in the form and pattern table.

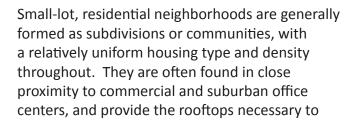


Shade tree, residential neighborhoods in the Triangle-Region were generally developed between the 1950s and 1970s in places like Apex, Cary, and Morrisville.





Small-Lot, Residential Neighborhood (SLRN)



support the centers. Homes are oriented interior to the neighborhood and are typically buffered from surrounding development by transitional uses or landscaped areas.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- single-family detached home
- townhome
- duplex

Secondary Land Uses

- church
- school
- community center
- pool and amenities
- natural areas

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	25-65%
Residential Density	I-5 D.U.'s ² /Acre
Non-Residential Intensity	N/A
Prevailing Building Height	I-2 Stories
Average Dwelling Unit Size	1,500-3,500 SF ³
Average Non-Residential Building Siz	e N/A
Transportation Choices	Auto
Typical Block Length	600-1,200 LF ⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Greenways, Natural Areas
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Private Driveway
Typical Street Cross Section	Rural or Suburban
General Water Usage (per unit)	250 GPD
General Sewer Usage (per unit)	200 GPD

See section F of this document for more information on the variables included in the form and pattern table.



Small-lot, residential neighborhoods are found near suburban commercial and office centers. They often locate near schools or parks and tend to have reasonable access to major commuter corridors. Ideally, these neighborhoods are marketed as having better than average commute times.





Multi-Family Residential Neighborhood (MFRN)

Multi-family residential neighborhoods are generally formed as complexes or communities, with a relatively uniform housing type and density throughout. They support the highest residential density in the suburban landscape, and may contain one of the following housing types: condominiums, townhomes, senior housing, or apartments.

Multi-family suburban neighborhoods are found in close proximity to suburban commercial and office centers, and provide the rooftops necessary to support various suburban commercial and office uses within the centers. Buildings are oriented interior to the site and are typically buffered from surrounding development by transitional uses or landscaped areas. Large parking lots and low street connectivity are common in multi-family suburban neighborhoods.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- apartment
- townhome
- condominium
- · senior housing

Secondary Land Uses

- church
- community center
- pool and amenities
- natural areas

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	90-95%
Typical Lot Coverage	30-60%
Residential Density	6.0-16.0 D.U.'s ² /Acre
Non-Residential Intensity	N/A
Prevailing Building Height	I-4 Stories
Average Dwelling Unit Size	800-1,500 SF ³
Average Non-Residential Build	ing Size N/A
Transportation Choices	Auto
Typical Block Length	600-1,200 LF⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Greenways, Neighborhood Park
Street Pattern	Modified Grid
Street Connectivity	Medium
Parking Provisions	Surface Lot / On-Street Parking
Typical Street Cross Section	Suburban
General Water Usage (per unit	220 GPD
General Sewer Usage (per unit	t) 180 GPD

See section F of this document for more information on the variables included in the form and pattern table.



Multi-family residential neighborhoods are often found near various suburban commercial and office centers. They are found throughout the region; often on or near major commuter corridors or near highway interchanges that offer better than average commute times.





Mixed-Density Residential Neighborhood (MRN)

Mixed-density residential neighborhoods are characterized by a variety of housing types and residential densities organized in a cohesive, well-connected community. Neighborhoods are generally designed to promote a wide range of housing choices in the region. Homes are oriented interior to the site and are typically buffered from surrounding development by

transition uses or landscaped areas. Small blocks and a modified grid of streets support multiple modes of transportation.

Mixed-density residential neighborhoods are found in close proximity to suburban commercial and suburban office centers, and provide the rooftops necessary to support commercial and office uses within the centers.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- · single-family detached home
- townhome
- condominium
- apartment
- duplex

Secondary Land Uses

- natural areas
- community center
- pool and amenities
- school
- church

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Patte	rn Mix of Housing Types
Site Efficiency Factor	85-90%
Typical Lot Coverage	0-40%
Residential Density	4-12 D.U.'s ² /Acre
Non-Residential Intensity	N/A
Prevailing Building Height	I-3 Stories
Average Dwelling Unit Size	1,500-2,000 SF ³
Average Non-Residential Bu	ilding Size NA
Transportation Choices	Auto, Walking
Typical Block Length	400-1,200 LF ⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Neighborhood Parks/ Greenways/
	Storm Corridors
Street Pattern	Modified Grid
Street Connectivity	High
Parking Provisions	Private Driveway, Surface Lot
Typical Street Cross Section	N/A
General Water Usage (per ı	unit) 225 GPD
General Sewer Usage (per u	unit) 200 GPD

See section F of this document for more information on the variables included in the form and pattern table.



Mixed-density residential neighborhoods are found near suburban commercial and office centers. They often locate near schools or parks and tend to have reasonable access to major commuter corridors. Ideally, these neighborhoods are better than average commute times.





Urban Neighborhood (UN)

Urban neighborhoods support a mix of moderate- to high-density housing options. These neighborhoods are relatively compact, and may contain one or more of the following housing types: small lot, single family detached, townhomes, condominiums, or apartments. Buildings are generally oriented toward the street.

The design and scale of development in an urban neighborhood encourages active living with a complete and comprehensive network of walkable streets. Cul-de-sacs are restricted to areas where topography, environment, or existing development makes other street connections prohibitive.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- single-family detached home
- townhome
- duplex
- apartment
- condominium

Secondary Land Uses

- church
- school
- pocket parks

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

Mix of Uses
80-90%
30-65%
6-10 D.U.'s²/Acre
N/A
I-3 Stories
1,000-2,000 SF ³
ng Size N/A
Auto
300-600 LF⁴
Setback Requirements
Greenways, Neighborhood Park
Grid
High
Surface Lot, Private Driveway
Urban
225-250 GPD
180-200 GPD

See section F of this document for more information on the variables included in the form and pattern table.



Urban neighborhoods are traditionally located near the edge of urban centers or downtowns. They often represent the first tier of residential development around a central city, town, or courthouse area and are well served by a series of streets connecting the central city and post WWII era suburbs.





Imagine 2040

High-Rise Residential (HRR)

High-rise residential areas support the highest residential densities in the region outside of metropolitan centers. They generally include one building surrounded by surface parking, which can

easily be seen for some distance from the site. Some high-rise residential buildings may include parking decks. Apartments and condominiums occupy high-rise residential towers in the region.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- apartment
- condominium

Secondary Land Uses

- senior housing
- ground floor retail
- pocket park

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Patter	Mix of Uses
Site Efficiency Factor	90-95%
Typical Lot Coverage	85-95%
Residential Density	28-100 D.U.'s ² /Acre
Non-Residential Intensity	N/A
Prevailing Building Height	10-25 Stories
Average Dwelling Unit Size	800-2,000 SF ³
Average Non-Residential Building Siz	e N/A
Transportation Choices	Auto, Walking, Transit
Typical Block Length	N/A
Setback or Build-To Line	Build to Line Requirements
Open Space Elements	Pocket Parks, Public Plazas
Street Pattern	N/A
Street Connectivity	N/A
Parking Provisions	Surface Lot/Parking Deck
Typical Street Cross Section	Urban
General Water Usage (per unit)	180 GPD
General Sewer Usage (per unit)	I50 GPD

¹ See section F of this document for more information on the variables included in the form and pattern table.

²(D.U.) - Dwelling Unit ³(S.F.) - Square Feet



High-rise residential areas outside metropolitan centers are limited in the Triangle Region. Existing developments include ______, _____, and ______.





Rural Cross Roads (RCR)

Rural cross roads represent the small nodes of commercial activity along rural highways. Small-scale businesses, such as gas stations, convenience stores, or restaurants, serve some daily needs of the surrounding rural population. Employment and other commercial needs for rural residents are provided for in other suburban commercial and suburban office centers.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- gas station
- sit down restaurant
- convenience store
- hardware store

Secondary Land Uses

- fire station
- post office
- general government center

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	90-95%
Typical Lot Coverage	10-25%
Residential Density	N/A
Non-Residential Intensity	0.10-0.20 FAR ²
Prevailing Building Height	I Story
Average Dwelling Unit Size	N/A
Average Non-Residential Build	ing Size 1,000-2,000 SF ³
Transportation Choices	Auto
Typical Block Length	N/A
Setback or Build-To Line	Setback Requirements
Open Space Elements	Natural Areas, Stream Corridors
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Surface Parking Lot
Typical Street Cross Section	Rural
General Water Usage (per SF)	0.039 GPD
General Sewer Usage (per SF)	0.034 GPD

¹ See section F of this document for more information on the variables included in the form and pattern table.

²(FAR) - Floor Area Ratio ³(S.F.) - Square Feet



Rural cross roads are generally located near the intersection of two farm-to-market roads (i.e., rural highways) where small-scale commercial uses are often clustered.





Neighborhood Commercial Center (NCC)

Small scale, neighborhood commercial centers provide goods and services to surrounding neighborhoods. Their proximity to neighborhoods requires that operations be low-intensity, unobtrusive, and at a scale and design compatible with nearby residential development. The design of neighborhood commercial centers transitions effectively between residential and non-residential

uses, and includes safe and convenient pedestrian and bicycle access for nearby residents. While this is primarily a commercial category, some neighborhood commercial centers may include upper story residential. Sites also effectively minimize the impact of cut through traffic on nearby neighborhood streets by orienting vehicle access, circulation, etc. toward away from the neighborhood.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- sit down restaurant
- community-serving retail
- small supermarket
- convenience store
- dry cleaner
- bank
- barber shop

Secondary Land Uses

- farmers market
- pocket park

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Patter	Mix of Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	25-35%
Residential Density	10-15 D.U.'s ² /Acre
Non-Residential Intensity	0.50-1.00 FAR ³
Prevailing Building Height	I-2 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building	Size 5,000-20,000 SF ⁴
Transportation Choices	Auto, Walking, Bicycle, Bus
Typical Block Length	400-1,000 LF ⁵
Setback or Build-To Line	Build to Line Requirements
Open Space Elements	Pocket Parks, Public Plazas
Street Pattern	Modified Grid
Street Connectivity	High
Parking Provisions	Surface Lot/On-Street Parking
Typical Street Cross Section	Urban
General Water Usage (per SF)	0.039 GPD
General Sewer Usage (per SF)	0.034 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 $^2(\text{D.U.})$ - Dwelling Unit $\,^3(\text{FAR})$ - Floor Area Ratio $\,^4(\text{S.F.})$ - Square Feet $\,^5(\text{L.F.})$ - Linear Feet

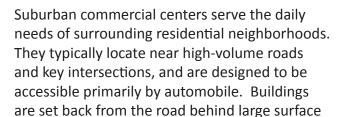


Neighborhood commercial centers are generally located adjacent to residential neighborhoods near major street intersections. Existing village centers in the region include ______, _____, and ______.





Suburban Commercial Center (SCC)



parking lots, with little or no connectivity between adjacent businesses. Common types of suburban centers in the region include multitenant strip centers, big box stores, and large shopping malls.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- general commercial services
- · sit down or fast food restaurant
- multi-tenant commercial
- big box commercial
- bank
- hotel
- professional office

Secondary Land Uses

- church
- fire station
- police station

Form & Pattern

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	20-40%
Residential Density	N/A
Non-Residential Intensity	0.15-0.25 FAR ²
Prevailing Building Height	I-2 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	10,000-300,000 SF ³
Transportation Choices	Auto
Typical Block Length	N/A
Setback or Build-To Line	Setback Requirements
Open Space Elements	Natural Areas
Street Pattern	N/A
Street Connectivity	N/A
Parking Provisions	Surface Lot
Typical Street Cross Section	Suburban
General Water Usage (per SF)	0.039 GPD
General Sewer Usage (per SF)	0.034 GPD

See section F of this document for more information on the variables included in the form and pattern table.

²(FAR) - Floor Area Ratio ³(S.F.) - Square Feet



Suburban commercial centers typically locate near high-volume roads, key intersections, and highway interchanges. They are often surrounded by residential development and other suburban commercial uses, and most sites are chosen to maximize vehicular access.





Suburban Hotel (SH)

Suburban hotels provide short term lodging to the general public, and may include one or more buildings surrounded by surface parking lots. The buildings are generally oriented interior to the site and can be seen for some distance. They tend to locate near high-volume roads and key intersections, and are designed to be accessible primarily by automobile. Common types of hotels in the region include: business hotel, motel, and extended-stay hotel. Several hotels also include one or more ancillary uses such as conference centers, sit-down restaurants, or night clubs.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- hotel
- motel

Secondary Land Uses

- sit-down restaurant
- fast-food restaurant
- fitness club
- small scale retail
- gas station

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separate Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	30-50%
Residential Density	N/A
Non-Residential Intensity	0.2-1.00 FAR ²
Prevailing Building Height	2-8 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	e 15,000-125,000 SF ³
Transportation Choices	Auto
Typical Block Length	N/A
Setback or Build-To Line	Setback Requirements
Open Space Elements	Natural Areas
Street Pattern	N/A
Street Connectivity	N/A
Parking Provisions	Surface Lot, Parking Deck
Typical Street Cross Section	Suburban
General Water Usage (per SF)	0.039 GPD
General Sewer Usage (per SF)	0.034 GPD

See section F of this document for more information on the variables included in the form and pattern table.

²(FAR) - Floor Area Ratio ³(S.F.) - Square Feet



Hotel and lodging areas are present throughout the region, mostly along major thoroughfares and at interstate interchanges. Hotels and motels along Airport Boulevard immediately south of Raleigh-Durham International Airport and Interstate 40 provide some examples for the region.





Imagine 2040

Suburban Office Center (SOC)



Suburban office centers provide opportunities to concentrate employment in the region on normal workdays. They include both large-scale isolated buildings with numerous employees as well as areas containing multiple businesses

that support and serve one another. They are typically buffered from surrounding development by transitional uses or landscaped areas and are often located in close proximity to major highways or thoroughfares.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- · multi-tenant professional office
- medical office
- corporate office
- · call center
- research and development

Secondary Land Uses

- bank
- copy and printing services
- · sit down or fast food restaurant
- flex space
- general government services

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	25-65%
Residential Density	N/A
Non-Residential Intensity	0.20-1.00 FAR ²
Prevailing Building Height	I-3 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Buildi	ing Size 10,000-100,000 SF ³
Transportation Choices	Auto
Typical Block Length	800-1,200 LF ⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Pocket Parks/Landscape Buffers
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Surface Lot
Typical Street Cross Section	Suburban
General Water Usage (per SF)	0.074 GPD
General Sewer Usage (per SF)	0.064 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 2 (FAR) - Floor Area Ratio 3 (S.F.) - Square Feet 4 (L.F.) - Linear Feet



Suburban office centers are typically located near major thoroughfares or suburban commercial uses. Accessibility to urban centers, employment service populations, and access to regional transportation (i.e., interstates and intrastate highways, and airports) are often site selection criteria for suburban office uses.





Regional Employment Center (REC)



A regional employment center draws people from throughout the region (and beyond) for employment activities. The large-scale development, which includes a hierarchy of streets, large sites for a building or group of buildings, and supporting amenities and dedicated open space. Centers tend to locate near major transportation corridors and often

at the intersection of two major highways or an interstate exit. Uses in a regional employment center vary greatly; however, most complement each other in some manner for increased learning, production, or other economies of scale.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- professional office
- corporate campus
- research and development
- government buildings

Secondary Land Uses

- small retail uses
- restaurants

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separate Uses
Site Efficiency Factor	70-85%
Typical Lot Coverage	25-65%
Residential Density	N/A
Non-Residential Intensity	0.10-0.50 FAR ³
Prevailing Building Height	I-10 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	e 50,000-500,000 SF⁴
Transportation Choices	Auto, Walking, Transit
Typical Block Length	800-3,000 LF ⁵
Setback or Build-To Line	Setback Requirements
Open Space Elements	Pocket Parks, Greenways
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Surface Lot, Parking Deck
Typical Street Cross Section	Suburban/Rural
General Water Usage (per SF)	0.074 GPD
General Sewer Usage (per SF)	0.064 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 $^2(\mbox{D.U.})$ - Dwelling Unit $\,^3(\mbox{FAR})$ - Floor Area Ratio $\,^4(\mbox{S.F.})$ - Square Feet $\,^5(\mbox{L.F.})$ - Linear Feet



Regional employment centers represent large tracts of land with good access to major thoroughfares, interstates, or railroad facilities. The Research Triangle Park is an example of a very large regional employment center in the Triangle Region.





Imagine 2040

Light Industrial Center (LI)

Light Industrial centers provide opportunities to concentrate employment in the region on normal workdays. Each center generally supports manufacturing and production uses, including warehousing, light manufacturing, medical research, and assembly operations. These areas are found in close proximity to major transportation corridors (i.e., highway or rail)

and are generally buffered from surrounding development by transitional uses or landscaped areas that shield the view of structures, loading docks, or outdoor storage from adjacent properties. Clusters of uses that support or serve one another are often encouraged to locate in the same light industrial center.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- light manufacturing and assembly
- processing facilities
- laboratory
- warehouse
- distribution

Secondary Land Uses

- small scale commercial uses
- natural areas

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	15-65%
Residential Density	N/A
Non-Residential Intensity	0.10-0.20 FAR ²
Prevailing Building Height	I-2 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	10,000-50,000 SF ³
Transportation Choices	Auto, Trucks
Typical Block Length	800-1,200 LF ⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Landscape Buffers
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Surface Lot
Typical Street Cross Section	Suburban
General Water Usage (per SF)	0.079 GPD
General Sewer Usage	0.069 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 2 (FAR) - Floor Area Ratio 3 (S.F.) - Square Feet 4 (L.F.) - Linear Feet





Light industrial centers are found near major transportation corridors (i.e., highways or rail) and in locations where water and sewer service is available. They tend to locate away from residential areas but within a reasonable commuting distance of employees.

Light industrial uses also are prevalent near airports and commercial centers and along designated trucking routes.



Heavy Industrial Center (HI)

Heavy industrial centers support large-scale manufacturing and production uses, including assembly and processing, regional warehousing and distribution, bulk storage, and utilities. These areas are found in close proximity to major transportation corridors (e.g., highways or railroads) and are generally buffered from surrounding development by transitional uses or landscaped areas that increase in size

as development intensity increases. Heavy industrial centers may require larger sites because activities are not confined entirely to buildings. Conveyer belts, holding tanks, smoke stacks, or outdoor storage all may be present in a heavy industrial center. Clusters of uses that support or serve heavy industrial centers generally locate in close proximity.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- factory
- heavy assembly plant
- construction contractor
- regional warehouse
- regional distribution and trucking
- landfill

Secondary Land Uses

- · small scale commercial uses
- natural areas

Form & Pattern

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separated Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	10-40%
Residential Density	N/A
Non-Residential Intensity	0.10-0.20 FAR ²
Prevailing Building Height	I-2 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	20,000-300,000 SF ³
Transportation Choices	Auto, Trucks
Typical Block Length	800-1,200 LF⁴
Setback or Build-To Line	Setback Requirements
Open Space Elements	Landscape Buffers
Street Pattern	Curvilinear
Street Connectivity	Low
Parking Provisions	Surface Lot
Typical Street Cross Section	Suburban
General Water Usage (per SF)	0.079 GPD
General Sewer Usage (Per SF)	0.069 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 2 (FAR) - Floor Area Ratio 3 (S.F.) - Square Feet 4 (L.F.) - Linear Feet



Heavy industrial centers tend to require efficient access to trucking routes and regional transportation facilities. They locate near major transportation corridors (e.g., highways, interstates and/or railroads). They are generally located away from residential neighborhoods and often are found near other industrial uses.





Imagine 2040

Mixed - Use Neighborhood (MUN)

A mixed-use neighborhood offers residents the ability to live, shop, work, and play in one community. These neighborhoods include a mixture of housing types and residential densities integrated with goods and services in a walkable community that residents visit on a daily basis.

The design and scale of the development encourages active living through a comprehensive and interconnected network of walkable streets. Mixed-use neighborhoods support multiple modes of transportation.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- single-family detached home
- condominium
- apartment
- townhome
- sit down restaurant
- · neighborhood-serving commercial
- professional office
- · government building

Secondary Land Uses

- church
- school
- pocket park
- community park
- natural areas

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

	<u> </u>	,
General Development	Pattern	Mix of Uses
Site Efficiency Factor		80-90%
Typical Lot Coverage		35-60%
Residential Density		4-12 D.U.'s ² /Acre
Non-Residential Intens	ity	0.50-1.50 FAR ³
Prevailing Building Heig	ght	I-4 Stories
Average Dwelling Unit	Size	1,000-3,000 SF ⁴
Average Non-Resident	ial Building Size	8,000-50,000 SF ⁴
Transportation Choice	s Auto,Walk	ing, Bicycle, Transit (Bus)
Typical Block Length		300-1,200 LF ⁵
Setback or Build-To Lir	ne Bu	ild to Line Requirement
Open Space Elements	Pocket Parks, Pu	ublic Plazas,Amphitheater
Street Pattern		Grid
Street Connectivity		High
Parking Provisions	Surface Lot/Fo	rmal On-Street Parking/
	Sha	red Parking Agreements
Typical Street Cross Se	ection	Suburban/Urban
General Water Usage (per unit/SF)	225/0.039 GPD
General Sewer Usage (per unit/SF)	200/0.034 GPD

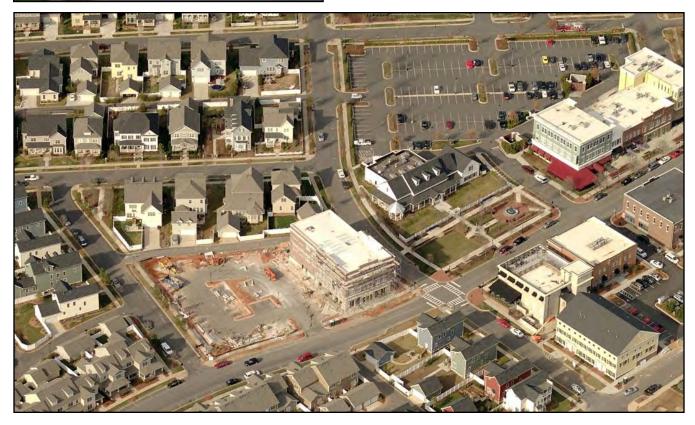
See section F of this document for more information on the variables included in the form and pattern table.

 $^2(\text{D.U.})$ - Dwelling Unit $\,^3(\text{FAR})$ - Floor Area Ratio $\,^4(\text{S.F.})$ - Square Feet $\,^5(\text{L.F.})$ - Linear Feet





Mixed-use neighborhoods can be found near suburban and urban neighborhoods, commercial centers, and suburban office centers. They often locate near schools or parks and tend to have reasonable access to major commuter corridors. Ideally these neighborhoods are marketed as having better than average commute times with multiple transportation choices, including access to transit. The uses within the development's center are accessible to local populations by car, walking, and bicycling. Existing mixeduse neighborhoods in the region include Meadowmont (Chapel Hill), Carpenter VIllage (Morrisville), and Southern VIllage (Chapel Hill).



Imagine 2040

Mixed-Use Center (MUC)

Mixed-use centers serve broader economic, entertainment, and community activities as compared to mixed-use neighborhoods. Uses and buildings are located on small blocks with streets designed to encourage pedestrian activities. Buildings in the core of the mixed-use center may stand three or more stories. Residential units or office space may be found

above storefronts. Parking is satisfied using onstreet parking structured parking, and shared rear-lot parking strategies.

A large-scale mixed use center is may be surrounded by one or more neighborhoods that encourage active living, with a comprehensive and interconnected network of walkable streets.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- sit down restaurant
- community-serving retail
- professional office
- live/work/shop units
- townhome
- condominium
- apartment
- public plaza
- movie theater

Secondary Land Uses

- · farmers market
- pocket park
- day care
- dry cleaners

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Patter	Mix of Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	50-75%
Residential Density	10-30 D.U.'s ² /Acre
Non-Residential Intensity	0.50-2.00 FAR ³
Prevailing Building Height	I-5 Stories
Average Dwelling Unit Size	800-1,500 SF ⁴
Average Non-Residential Building	Size 10,000-50,000 SF ⁴
Transportation Choices	Auto, Walking, Bicycle, Bus
Typical Block Length	400-1,000 LF ⁵
Setback or Build-To Line	Build to Line Requirements
Open Space Elements	Neighborhood Parks/
	Pocket Parks/ Public Plazas
Street Pattern	Modified Grid
Street Connectivity	High
Parking Provisions	Surface Lot/Structured Parking
Typical Street Cross Section	Urban
General Water Usage (per unit/SF	F) 180/0.039 GPD
General Sewer Usage (per unit/SF	F) 150/0.034 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 $^2(\text{D.U.})$ - Dwelling Unit $\,^3(\text{FAR})$ - Floor Area Ratio $\,^4(\text{S.F.})$ - Square Feet $\,^5(\text{L.F.})$ - Linear Feet



Village centers are concentrated, mixed-use developments that serve one or more surrounding neighborhoods. Existing village centers in the region include North Hills (Raleigh), and proposed plans for the Arboretum (Cary).





Town Center (TC)



Town centers are locally-serving areas of economic, entertainment, and community activity. Uses and buildings are located on small blocks with streets designed to encourage pedestrian activity. Buildings typically stand two or more stories in height with residential units above storefronts. The compact, walkable environment and mix of residential and non-

residential uses in a town center often support multiple modes of transportation.

Town centers often represent the traditional downtown or courthouse area of historic towns and communities found throughout the Triangle Region.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- townhome
- apartment
- senior housing
- · sit down restaurant
- community-serving commercial
- professional office
- live/work/shop units
- post office
- community facilities

Secondary Land Uses

- day care
- farmers market
- pocket park

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Mix of Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	90-100%
Residential Density	6-10 D.U.'s ² /Acre
Non-Residential Intensity	0.50-1.50 FAR ³
Prevailing Building Height	I-4 Stories
Average Dwelling Unit Size	800-1,500 SF ⁴
Average Non-Residential Building	Size 5,000-25,000 SF ⁴
Transportation Choices Auto,	Walking, Bicycle, Transit (Bus)
Typical Block Length	300-1,200 LF ⁵
Setback or Build-To Line	Build to Line Requirement
Open Space Elements	Pocket Parks, Public Plazas
Street Pattern	Grid
Street Connectivity	High
Parking Provisions Surface L	ot/Formal On-Street Parking/
	Shared Parking Agreements
Typical Street Cross Section	Urban
General Water Usage (per unit/SF) 225/0.039 GPD
General Sewer Usage (per unit/SF) 200/0.034 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 $^2(\text{D.U.})$ - Dwelling Unit $\,^3(\text{FAR})$ - Floor Area Ratio $\,^4(\text{S.F.})$ - Square Feet $\,^5(\text{L.F.})$ - Linear Feet





Town centers represent the historic center of large and small towns in the region. They are often located at the cross-roads of two historical arterial roadways or along a railroad. They are surrounded by residential neighborhoods and/or agricultural uses. Historically, town centers were established near mills, high points, along transportation corridors, or at the confluence of rivers and streams.

Post offices, town halls, and churches are notable features in town centers as well as neighborhood-oriented service and commercial uses.



Transit - Oriented Development (TOD)



Transit-oriented development (TOD) represents the concentration of mixed-use, dense development around a transit center. Uses and buildings are located on small blocks with streets designed to encourage bicycle and pedestrian activity. High density development is located primarily within ¼-mile of the transit station, with progressively lower densities

spreading out into neighborhoods surrounding the center.

TOD is credited with relieving traffic congestion on the surrounding street network by shifting automobile trips to transit trips and by capturing some trips on-site between complementary residential and non-residential uses.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- condominium
- apartment
- townhome
- sit down restaurant
- general commercial
- professional office
- live/work/shop units
- · government building

Secondary Land Uses

- church
- school
- public plaza
- pocket park
- parking structure

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Mix of Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	90-100%
Residential Density	8-15 D.U.'s ² /Acre
Non-Residential Intensity	0.50-1.50 FAR ³
Prevailing Building Height	2-6 Stories
Average Dwelling Unit Size	800-1,500 SF ⁴
Average Non-Residential Building Size	5,000-25,000 SF ⁴
Transportation Choices Auto, Wa	lking, Bicycle, Transit (Bus,
	Light Rail, Heavy Rail)
Typical Block Length	300-1,200 LF ⁵
Setback or Build-To Line	Build to Line Requirement
Open Space Elements	Pocket Parks/Public Plazas
Street Pattern	Grid
Street Connectivity	High
Parking Provisions Surface Lot/F	ormal On-Street Parking/
Sha	ared Parking Agreements/
	Parking Deck
Typical Street Cross Section	Urban
General Water Usage (per unit / SF)	180/0.039 GPD
General Sewer Usage (per unit / SF)	150/0.034 GPD

See section F of this document for more information on the variables included in the form and pattern table.

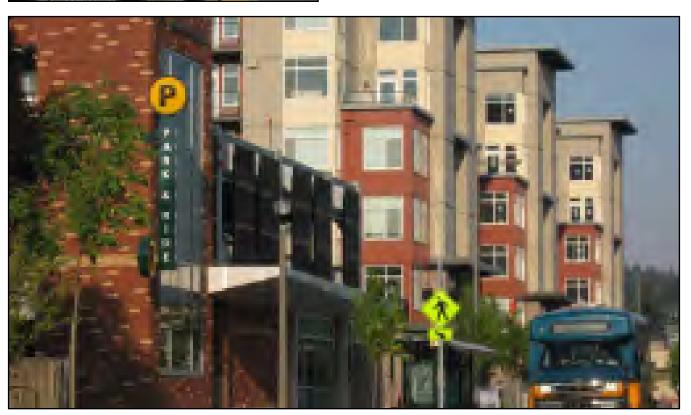
 2 (D.U.) - Dwelling Unit 3 (FAR) - Floor Area Ratio 4 (S.F.) - Square Feet 5 (L.F.) - Linear Feet





Transit-oriented development (TOD) is located exclusively along high frequency transit routes (i.e., bus rapid transit, express bus service, commuter rail, or light rail). Successful TOD developments seek to capture transit ridership through high density development located within ¼-mile of the transit station.

TOD is not prevalent in the region today; however, Triangle Transit and local governments are moving forward with several station area plans that advocate for transit-oriented development around future commuter rail or light rail stations in the region.



Metropolitan Center (MC)

A metropolitan center is the focal point of the region. It is the hub of employment, entertainment, civic, and cultural activities, with a mix of housing types and common open space for active living. As a magnet to surrounding towns and neighborhoods, the metropolitan center becomes the iconic symbol of the region, starting with very tall buildings and a traditional grid street network. The compact, walkable environment and mix of residential and non-residential uses in a metropolitan center support multiple modes of transportation.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- condominium
- apartment
- townhome
- corporate headquarters
- sit down restaurant
- · community-serving commercial
- professional office
- live/work/shop units
- museum
- library
- arena/conference center
- regional transportation hub
- government buildings

Secondary Land Uses

- church
- school
- public plaza
- pocket park
- parking deck

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

	<u> </u>
General Development Pattern	Mix of Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	90-100%
Residential Density	10-100 D.U.'s ² /Acre
Non-Residential Intensity	1.0-30.0 FAR ³
Prevailing Building Height	I-30 Stories
Average Dwelling Unit Size	800-2,000 SF ⁴
Average Non-Residential Building Siz	ze 10,000-200,000 SF ⁴
Transportation Choices Auto, W	alking, Bicycle, Transit (Bus)
Typical Block Length	300-600 LF ⁵
Setback or Build-To Line	Build to Line Requirement
Open Space Elements	Pocket Parks/Public Plazas/
Street Pattern	Grid
Street Connectivity	High
Parking Provisions Surface Lot	Formal On-Street Parking/
\$	Shared Parking Agreements
Typical Street Cross Section	Urban
General Water Usage (per unit / SF)	180/0.039 GPD
General Sewer Usage (per unit / SF)	150/0.034 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 $^2(\text{D.U.})$ - Dwelling Unit $\,^3(\text{FAR})$ - Floor Area Ratio $\,^4(\text{S.F.})$ - Square Feet $\,^5(\text{L.F.})$ - Linear Feet



Metropolitan centers are located at strategic and historic locations with superior access to regional transportation facilities (i.e., highways, rail or airports). They are typically the employment center of a region. Downtown Durham and Downtown Raleigh are the only metropolitan centers identified for the Triangle Region.





Airport (AIR)

An airport supports commercial or general aviation air traffic into and out of the Triangle Region. Each may include one or more runways, a terminal, taxiways, jet fuel and storage facilities, or paved aircraft parking areas. Complimentary uses (e.g., rental car facilities, hotels, restaurants, long-term parking lots) may surround an airport. Restrictions on use, placement, and height for

some forms of development are followed in designated runway airspace protection areas.

Commercial or private aircraft in the Triangle Region are served by Raleigh-Durham International Airport, Triangle North Executive Airport, Horace Williams Airport, Raleigh East Airport, and Triple W Airport.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- airport activities (eg., commercial terminal, control tower, freight facilities, etc.)
- flight school
- warehouse
- aviation-related maintenance and repair
- shipping

Secondary Land Uses

- light industrial
- heavy industrial
- professional office
- hotel
- general commercial
- · parking decks
- surface parking lots

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Separate Uses
Site Efficiency Factor	70-80%
Typical Lot Coverage	10-15%
Residential Density	10-30 D.U.'s ² /Acre
Non-Residential Intensity	0.05-0.10 FAR ³
Prevailing Building Height	I-30 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	10,000-1,000,000 SF ⁴
Transportation Choices	Auto, Airplanes
Typical Block Length	300-600 LF ⁵
Setback or Build-To Line	Setback Requirements
Open Space Elements	Natural Areas
Street Pattern	Grid
Street Connectivity	High
Parking Provisions	Surface Lot
Typical Street Cross Section	N/A
General Water Usage (per SF)	0.058 GPD
General Sewer Usage (per SF)	0.050 GPD

See section F of this document for more information on the variables included in the form and pattern table.

 $^2(\mbox{D.U.})$ - Dwelling Unit $\,^3(\mbox{FAR})$ - Floor Area Ratio $\,^4(\mbox{S.F.})$ - Square Feet $\,^5(\mbox{L.F.})$ - Linear Feet



Commercial and general aviation airports are located with flight paths in mind as well as proximity to adjacent airspace. They are often located away from residential areas in locations with access to local highways and interstates.

There are five major airports within the Triangle Region: Raleigh-Durham International Airport, Triangle North Exectutive Airport, Horace Williams Airport, Raleigh East Airport, and Triple W Airport.





Imagine 2040

Civic & Institutional Facilities (CIV)



Civic and institutional facilities are focal points in the region. They typically include a building or complex of buildings that serve public purpose, including a library, school, public works complex,

or town government. Visual qualities of the building and its surrounding grounds often make civic and institutional facilities a landmark within the region.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- government buildings
- library
- school
- prison

Secondary Land Uses

- public works building
- church
- · community center
- water or wastewater treatment plant

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

= '	
General Development Pattern	Separate Uses
Site Efficiency Factor*	85-90%
Typical Lot Coverage*	30-50%
Residential Density	10-30 D.U.'s ² /Acre
Non-Residential Intensity	0.05-0.10 FAR ³
Prevailing Building Height	I-3 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building	Size 10,000-50,000 SF ⁴
Transportation Choices	Auto, Walking
Typical Block Length	N/A
Setback or Build-To Line	Setback Requirements
Open Space Elements	Natural Areas/Pocket Parks/
	Landscaped Buffers
Street Pattern	Grid
Street Connectivity	Varies
Parking Provisions	Surface Lot
Typical Street Cross Section	N/A
General Water Usage (per SF)	0.058 GPD
General Sewer Usage (per SF)	0.050 GPD

See section F of this document for more information on the variables included in the form and pattern table.

²(D.U.) - Dwelling Unit ³(FAR) - Floor Area Ratio ⁴(S.F.) - Square Feet



Civic and institutional buildings are located throughout the region; including government buildings, schools, and libraries.





Health Care Campus (HCC)

A health care campus includes various medical and medical-related uses, such as primary care, outpatient surgery, birthing centers, and other specialty services. They are relatively large in scale, and may include a hospital, teaching facilities, research and rehabilitation centers, and

private medical office buildings. Buildings are typically oriented in a campus-setting, with large buildings connected via walkways, structured parking, or an internal network of streets for circulation.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- primary care buildings
- emergency services
- research centers
- · birthing center
- rehabilitation center

Secondary Land Uses

- teaching facilities
- · private medical office buildings
- parking deck
- surface parking lot

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

General Development Pattern	Mixed Uses
Site Efficiency Factor	80-90%
Typical Lot Coverage	40-60%
Residential Density	N/A
Non-Residential Intensity	0.25-2.00 FAR ²
Prevailing Building Height	I-8 Stories
Average Dwelling Unit Size	N/A
Average Non-Residential Building Size	10,000-1,000,000 SF ³
Transportation Choices	Auto
Typical Block Length	N/A
Setback or Build-To Line	Setback Requirements
Open Space Elements Neighborho	ood Parks/ Pocket Parks/
Plazas/ Green	ways/ Stream Corridors
Street Pattern	Grid
Street Connectivity	High
Parking Provisions S	urface Lot/Parking Deck
Typical Street Cross Section	Suburban/Urban
General Water Usage (per SF)	0.058 GPD
General Sewer Usage (per SF)	0.050 GPD

¹ See section F of this document for more information on the variables included in the form and pattern table.

²(FAR) - Floor Area Ratio ³(S.F.) - Square Feet



Major health care facilities are located throughout the Triangle Region; including those operated by the Franklin Regional Medical Center / Novant Health Care, Raleigh Community Hospital / Duke University Health System, Rex Hospital / UNC Health Care, and WakeMed Health and Hospitals.





University Campus (UC)

A university campus includes all of the academic buildings, residence halls, athletic facilities, equipment, or other ancillary needed to support an institution for higher education. Buildings are often oriented around a highly-walkable network of internal streets and pedestrian pathways, which support several modes of transportation for reaching the campus (i.e., bicycle, transit, or automobile). Structured parking or large

surface lots, dedicated areas for public gathering, and distinctive architecture also represent a typical university campus. Building uses and intensities on campus vary widely based on the school's mission and available space, topography, etc. Complementary uses near a university may include student housing, residential neighborhoods, downtown, or private research and development buildings.

Land Use Considerations

Primary and secondary land uses listed for the place type represent typical development in the category. They are not meant to be an exhaustive list of all permitted or conditional uses that would be allowed in the place type.

Primary Land Uses

- · academic buildings
- athletic buildings
- · resident halls
- recreation center
- open space / public plazas

Secondary Land Uses

- · private research and development buildings
- supporting retail & restaurants supporting retail & restaurants
- · residential neighborhood
- parking deck
- surface parking lot

Form & Pattern¹

The form and pattern table inventories generalized development characteristics associated with the place type. Working together, these elements reinforce a sense of place and community brand important to distinguishing development in this category from others in the region.

	, -
General Development Pattern	Separate Uses
Site Efficiency Factor*	75-85%
Typical Lot Coverage*	40-70%
Residential Density	25-100 D.U.'s ² /Acre
Non-Residential Intensity	0.50-3.00 FAR ³
Prevailing Building Height	I-I5 Stories
Average Dwelling Unit Size	800-1,500 SF⁴
Average Non-Residential Building Size	10,000-50,000 SF⁴
Transportation Choices	Auto, Walking, Transit
Typical Block Length	N/A
Setback or Build-To Line	Setback Requirements
Open Space Elements Natural Areas/ F	Plazas/Recreation Fields/

Greenways/

	Stream Corridors
Street Pattern	Grid
Street Connectivity	High
Parking Provisions	Surface Lot
Typical Street Cross Section	N/A
General Water Usage (per unit/SF)	180/0.058 GPD
General Sewer Usage (per unit/SF)	150/0.050 GPD

See section F of this document for more information on the variables included in the form and pattern table.

²(D.U.) - Dwelling Unit ³(FAR) - Floor Area Ratio ⁴(S.F.) - Square Feet



Nine major colleges or universities have a large campus in the Triangle Region; including Campbell University, Durham Technical Community College, Duke University, Meredith College, North Carolina Central University, North Carolina State University, Peace College, University of North Carolina at Chapel Hill, and Wake Technical Community College.





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