



CREATE WILMINGTON COMPREHENSIVE PLAN

Growth Factors Report

Executive Summary

Growth Strategies Maps

Policies

Foundations Report

Growth Factors Report

DRAFT
1/30/15

Welcome to the future of Wilmington.



How to Use the Comprehensive Plan

Five Components of the Box Set

1

Growth Factors Report

Maps, graphs, and charts that support the policies and growth strategies. Provided are maps of existing conditions and various factors related to Wilmington's growth.

Electronic readers click here to view or download this document.

2

Foundations Report

A summary of public input collected throughout the process and results from each tool, including the Neighborhood Planning Areas, Connect Wilmington, and Alternative Future Visions.

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3

Development Policies

Comprehensive policies address the themes/issues; policies are based on public input, best practices, the growth factors report, interlocal agency coordination and scenario planning results.

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4

Growth Strategies Maps

These maps illustrate desired areas for future growth, infill, and redevelopment based on public input and planning analysis. They are designed to work in conjunction with the development policies.

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5

Executive Summary

An "at a glance" reference for the entire box set.

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Find Your Way Around



Box Set Cross-Reference:
Name of Reference Provided

This symbol is used to point you to a different box set component.



Document Cross-Reference:
Name of Reference Provided

This symbol is used to point you to a different part of the document you are currently reading.



External Resource:
Name of Resource Provided

This symbol is used to point you to an external resource, such as a plan, report, or study not contained in the box set.

The color of the symbol indicates the type of reference. This is the location within the document



Cross-Reference Type
Name of Reference

The type of reference and its name is provided here.

Wilmington Comprehensive Plan Themes

The *Create Wilmington Comprehensive Plan* is developed around seven key themes for shaping Wilmington’s future:



Creating a Place for Everyone

Wilmingtonians want a diverse and inclusive community, full of family-friendly, vibrant, and creative environments. Citizens want a welcoming community that includes arts and culture, activities for youth, families, and seniors, and high-quality housing that is available to everyone.

Topics Covered:

- Affordable housing
- Arts & cultural resources
- Youth activities
- Seniors
- Family amenities
- Accessibility
- Parks and recreation
- Crime and safety
- Cultural diversity
- Job creation
- Education



Getting Around

Diverse modes of transportation are needed for an inclusive, connected community. Regional partnerships can link greenways and other amenities. Options for pedestrian and bicycle amenities, along with other modes of transportation, should be explored as valid alternatives to automobile transit, as well as other options for local and regional mass-transit.

Topics Covered:

- Interconnectivity
- Sidewalks
- Greenways
- Alternative transportation modes
- Mass-transit
- Traffic
- Regional cooperation
- Driver behavior
- Connecting land use and transportation



Regional Collaboration

Wilmington does not and cannot exist in a bubble. Collaboration with other local governments, including New Hanover and surrounding towns and counties, is critical to Wilmington’s and the region’s success. Cooperative relationships with UNCW and CFCC, as well as the public school system, state ports, and our utility providers will help us all flourish.

Topics Covered:

- Leadership/excellence in government
- Town and gown relationships
- Balancing needs and resources
- Common goals and collaborative policies



Changing Places, Revitalized Spaces

Development of vast open land is no longer an option in Wilmington; our future will include a significant level of infill and redevelopment. Envisioning suitable infill and redevelopment and optimizing existing development will be critical to our community’s well-being, not only downtown, but within neighborhoods across the city. Balancing the need for open space and a well-designed built environment will be a key to future development.

Topics Covered:

- Infill
- Redevelopment
- Densification
- Neighborhoods
- Historic Preservation
- Sustainability
- Placemaking



Unique Places, Captivating Spaces

The “built environment” encompasses places and spaces created or modified by people including buildings, parks, land use patterns, and transportation systems. Since the built environment has profound consequences for individual and community well-being, all elements of our built environment should enhance the character of our community, being not only functional, but aesthetically appropriate, enriching the lives of visitors and residents alike.

Topics Covered:

- Aesthetics
- Site design
- Architecture and building design
- Code and tech standards
- Greenspace
- Infill
- Redevelopment
- Connecting land use and transportation
- Placemaking



Nurturing our Community

Environmental sustainability is at the core of where we want to go in the future. Our natural resources are a major factor in attracting residents and visitors to the area; balancing retention of their accessibility and protection of these resources will be a challenge. How we manage our interaction with the natural habitat, from parks, water, and open spaces, to locally-grown agriculture, to protecting water quality to solid waste disposal will be critical to our future success.

Topics Covered:

- Natural resources
- Tourism
- Balancing built and natural environments
- Greenspace/open space
- Parks and recreation
- Access to local food
- Water quality
- Climate change



Opportunity and Prosperity

Fostering opportunities for economic growth and development that enhance the concepts of each of the other themes is critical to our future prosperity. Creating jobs, building a strong workforce, facilitating commerce, and promoting business vitality are necessary to the success of a healthy, well-balanced community.

Topics Covered:

- Economic development
- Jobs
- Technology
- Health care
- Placemaking
- Code and technical standards
- Leadership and excellence in government
- Regional cooperation
- Common goals
- Leveraging resources
- Public-private collaboration

CREATE WILMINGTON COMPREHENSIVE PLAN

Growth Factors Report

The Growth Factors Report is a snapshot of what Wilmington looks like today and tells the story of how the city has become what it is. The report provides an assessment of current demographics and social and economic conditions and also provides a review of physical conditions, including natural and constructed systems and the patterns found in the built environment. The purpose of this report is to provide a factual understanding of current conditions and how Wilmington has changed over time. This report provides the context, or ‘starting point,’ from which the community moves forward to create a shared vision for the future.

Comprehensive Plan Steering Committee

The steering committee was supported by staff from the City of Wilmington Planning, Development, and Transportation department, with assistance from every department within the city.

The Wilmington City Council appointed a 15-member citizen steering committee to assist in the public input process, provide guidance and leadership, and to represent the voice of the citizens in the overall process.

The members of the steering committee are:

- Robert Rosenberg, Chair
 - Howard Capps, Vice-chair
 - Carlos Braxton
 - Kemp Burdette
 - Deb Hays
- Elizabeth Hines
 - J. Clark Hipp
 - Paul Lawler
 - Bonnie Nelson
 - Linda Pearce
 - Tom Pollard
- Randy Reeves
 - Jennifer Rigby
 - Frank Smith
 - Kevin Smith

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“No urban area will prosper unless it attracts those who can choose to live wherever they wish.”

— Jonathon Barnett

Introduction

The following section categorizes most of the city into 22 pattern areas. Each pattern is based on a variety of factors, including: development era, street and block structure, dominant architectural styles, and the level of consistency, connectivity, and building mass. A general description, time period of development, and other cursory information is provided for each Community Pattern Area. This typological approach to organizing the urban fabric provides an ability to generalize about the city’s physical characteristics and basic structural relationships. Whereas this is useful for understanding urban form at a high level, it deliberately ignores the finer details of particular places and the specific physical conditions that can be found surrounding each potential development site. These patterns helped develop the Character Areas, as defined in the Growth Strategies Maps, and should be referenced when greater detail of the context of a particular area is needed as development occurs. These patterns will also inform the rewrite of the city’s Land Development Code.

Box Set Cross-Reference:
Growth Strategies Maps

External Resource:
Smart Growth Manual &
The Sprawl Repair Manual

Classification of Pattern Areas

Development Era
The years in which the pattern was developed is a primary driver of building industry technologies, the primary transportation modes of the day (which accommodated development patterns), availability of sidewalks, density, street patterns, building styles, and the manner in which the building is arranged on the lot. Note that this assessment may not correlate with designated historic districts.

Street Network and Block Pattern
The arrangement, frequency of intersections, length of roads, and the shape/size of blocks differ across the city.

Lot Pattern
The number of lots within a block, their shape and size, the level of consistency and how they are accessed. These can vary within the block and across the city.

Building Type and Arrangement
How the building is oriented towards or away from the street, how much of the building covers the lot, and how far it is set back from the lot edges are key factors. This pattern can vary along the street, within the block, within the lot, and across the city.

Void Space
Spaces that disrupt the urban fabric, such as surface parking lots or vacant sites, that do not contribute to the surroundings, or the users

Block
Lot
Building

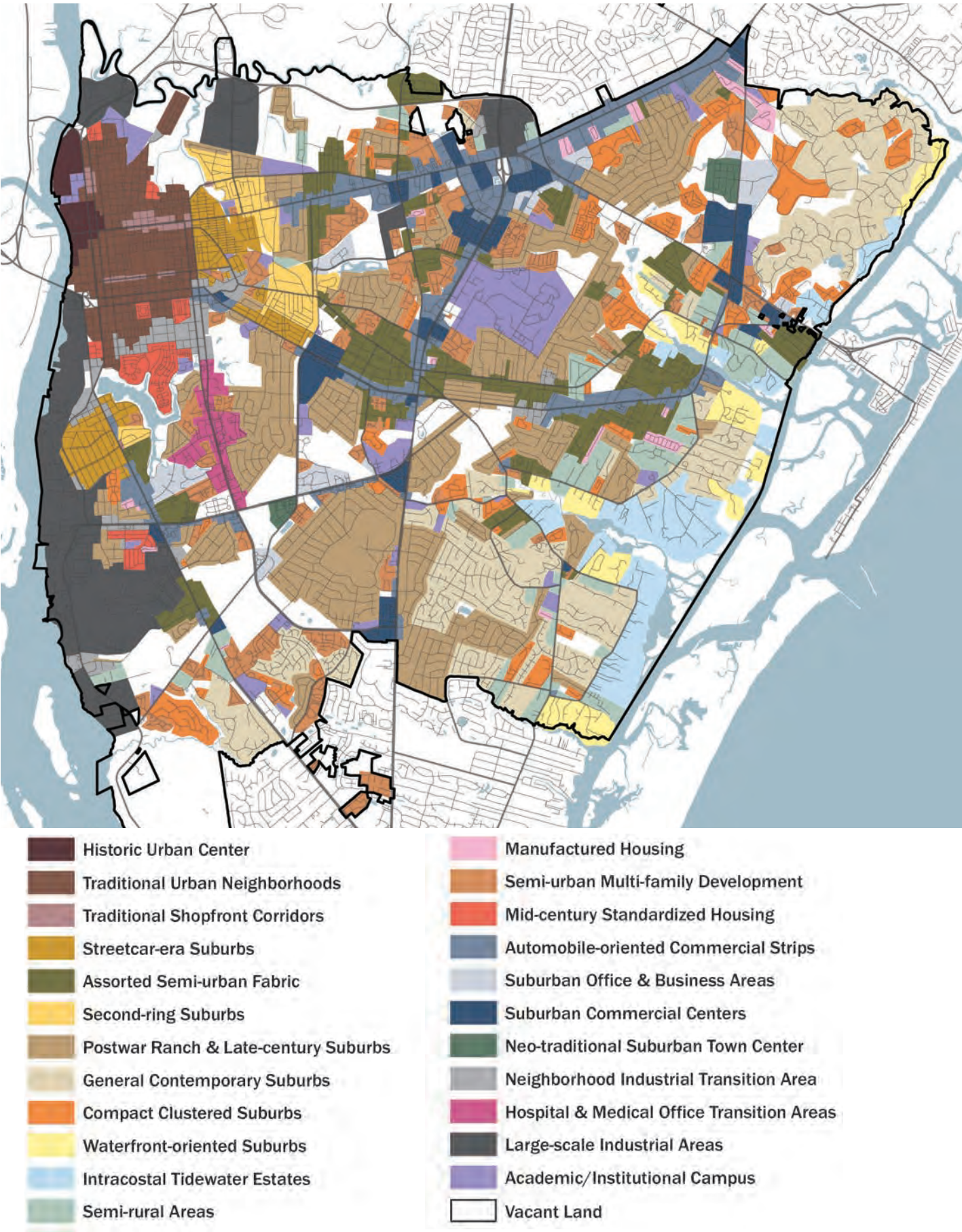
Architectural Style
This is a key factor of a place, but is discussed in general terms. Form is the primary focus of this analysis.

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

Urban-Suburban Qualities
The terms shown in the boxes above are widely used to describe the overall character, patterns, density, and other traits of the built environment. These are generalizations to demonstrate the variety found among Community Pattern Areas, especially since most of Wilmington can be classified as “urbanized” and the urban-suburban-rural qualities exist along a continuum.

Box Set Cross-Reference:
Urban Design & Placemaking Policies explain that Wilmington is more than “urban” and “suburban.”

Community Pattern Areas



8.1 Historic Urban Center

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

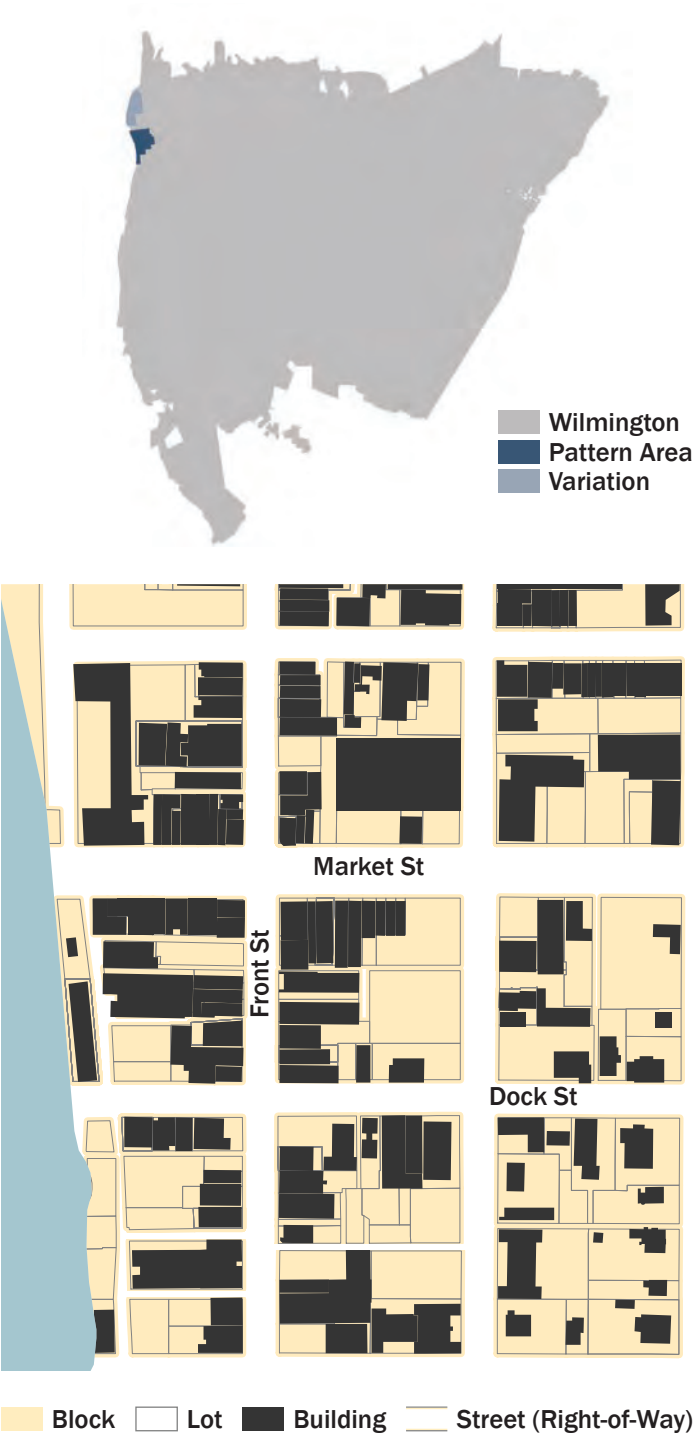
The historic urban center, commonly called “downtown,” is the European settlement origin and primary cultural and governmental center of the city. Urban development began at a strategic point along the Cape Fear River, the intersection of Market and Front Streets. People settled in close proximity to conduct commerce and engage in social activities. This is the densest and most well-connected part of the city.

Development Eras

Wilmington was laid out in 1733 and reached around 1,000 inhabitants by 1790. The general era of development for this pattern is considered to be from 1840 to 1910. Attempts at federally-funded urban renewal follow a period of disinvestment in the mid-1900s, resulting in removal of many historic buildings and numerous adaptations of the streetscape for the automobile. Historic preservation and downtown revitalization efforts have resulted in building renovation, streetscape improvements, and context-sensitive infill development.

Block and Street Patterns

This pattern has a strong hierarchy of well-connected streets and pathways. A very rigid rectilinear grid structure provides maximum connectivity and porosity. Blocks are mostly 330 x 330 feet or 330 x 400 feet (with the long side running north-south). Many blocks have mid-block alleys used for service, pedestrian routes, or both. There is a clear hierarchy of north-south streets moving towards the Cape Fear River, giving a distinct form and character to the area. Whereas east-west streets are similar in structure, each meets the Cape Fear River in different ways.



NW corner of Princess and N. 2nd streets



Aerial view of N. 3rd Street at Market and Princess streets

Lot and Building Configuration

Lot dimensions vary widely within the block structure. Nearly all lots exhibit high building coverage and most have no setback from the public right-of-way. The building edges along Front Street and many east-west streets provide a continuous “street wall” and directly face the sidewalk with shopfronts. Buildings are generally two to three stories tall, but there are many exceptions. Tallest buildings in the city are found here. Many street edges are fully furnished with sidewalks, lamps, signage, and granite curbs. Some streets have monumental or European-like civic design features.

Architectural Styles

Signature historic buildings are individually and uniquely designed, constructed by merchants, architects, and craftsman alike. Many buildings are composed of brick masonry with wooden cross beams. They exhibit a great deal of glazing at the ground floor, and are well-articulated with wood and metal trim and other details. These ornate facades combined with narrow lots and a continuous street wall provide a fine-grained urban fabric. Modern-style interventions and contemporary infill projects may also define the streetscape.

Void Spaces & Redevelopment Areas

Much of the void space is represented by either surface parking lots (of various sizes) or single-story buildings. A single-story building in downtown represents an underutilized parcel. Likewise, there are many vacant storefronts and upper levels above occupied shops that could be filled. Development occurring north of Red Cross Street is producing a completely different pattern area than the historic urban core, especially as the block structure begins to dissolve and full-block sites are filled with large-scale civic and institutional uses. This is noted as variation and has tremendous redevelopment capacity.



City Hall

Community Pattern Characteristics

Street & Block System	
Street Network	Rectilinear Grid
Block Shape	Rectangular, Square
Block Size (Feet)	330 x 330, 330 x 390
Intersection Density	Very High
Use of Alleys	Frequent
Lots & Buildings	
Typical Lot Shape	Rectangular; Square
Avg. Lot Size (Sq. Ft.)	10,000
Lot Coverage	Very High
Front Setback	Abrupt, Very Shallow (0-5 Feet)
Lot Uniformity	High
Other	
Parking	Structured; On-street; Surface
Sidewalk Availability & Connectivity	Abundant, Very High
Dominant Land Uses	Mixed-use, Retail, Office, Civic
Supported Transportation Modes	



Pattern Variation: Northern Riverfront Redevelopment Area

The Northern Riverfront was once a thriving industrial area that included traditional urban neighborhoods. In the 1960s, the Urban Renewal program demolished much of the urban fabric. Recent planning and redevelopment call for the area to become a high-density, mixed-use district, an extension of the historic urban center, but using contemporary architecture and urban design.



Document Cross-Reference:
Downtown Framework Analysis



8.2 Traditional Urban Neighborhoods

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

Beyond the historic urban center lies the mostly-historic traditional urban neighborhoods. Most of this area constitutes the Greater Downtown; it was mostly platted prior to 1870 and is delineated mostly by the city’s 1945 corporate boundary. Some of this area falls within National Register of Historic Places districts. The pattern is defined by traditional-styled homes and some small commercial buildings built up to the street and aligned close together. Alleys and streets are used for parking.

Development Eras

These areas were mostly constructed between the mid- to late-1800’s and 1910, with additional build-out occurring at various points throughout the past century. As downtown revitalization continues, further reinvestment in traditional urban neighborhoods is resulting in renovation and reoccupancy of these older homes. New homes have been constructed on vacant lots in recent years.

Block and Street Patterns

A consistent, cohesive rectilinear grid structure of 330 x 390- foot blocks continues the historic urban core development pattern, with blocks north of Market Street measuring 330 x 330 feet. The rotation of the city’s grid at the corner of Chestnut and MacRae streets creates an interesting variation. Streets are very well-connected, providing a variety of options for navigation and easy walking distances. Nearly every street has sidewalks, curbs (often granite), curb ramps, mature vegetation, a planted street yard and on-street parking. Some blocks have mid-block alleys running north-south for rear access and services. Many streets are composed of clay bricks, which may be exposed, partially-exposed, or covered by asphalt in different places.



Grace Street



Block Lot Building Street (Right-of-Way)



Aerial view of S. 3rd Street at Castle Street

Lot and Building Configuration

Whereas the traditional urban neighborhoods have a highly consistent block structure, the lots within these blocks are varied in size (with many being rectangularly shaped) from 3,000-14,000 square feet within the same block. Lots in the center of the block are typically narrow (28-60 feet wide) and deep (160 feet); lots at the corners of the block are often more square (65 x 85 feet, for example). These areas also have a moderately consistent line of shallow front setbacks along streets, ranging from 2-25 feet. Some structures, including single-family homes, may have no setback from the sidewalk.

Architectural Styles

Close-in homes tend to be more high-style, where more modest vernacular, cottage and Arts & Crafts style homes exist moving away from downtown. Although single- and three-story buildings are common, most are two stories tall. Larger homes are located close-in and smaller, single-story homes located further away from downtown. Since building styles, materials, number of stories, and façade differ widely, the rhythm of the street can be slightly inconsistent in a way that creates visual interest, but changes from one building to another are not drastic enough to cause an uncomfortable disruption. Almost every residential building features a covered front porch and has a pitched roof.

Void Spaces & Redevelopment Areas

As the older parts of the city experienced various phases of growth and decline, a range of infill development configurations and styles have occurred. Vacant parcels and buildings are found throughout the pattern area, especially in distressed neighborhoods. Additional issues include:

- Redevelopment of sites beyond the local historic district may be out of place with traditional architecture.
- Structures that have not been well preserved offer challenging renovation or redevelopment opportunities.
- Adaptive reuse of older buildings is possible.
- Division of large homes into multiple units is common, as are accessory dwelling units.
- Some mixed-use and commercial buildings are scattered throughout the pattern area, these may have the potential to grow as small activity nodes.

Community Pattern Characteristics

Street & Block System	
Street Network	Rectilinear Grid
Block Shape	Rectangular, Square
Block Size (Feet)	330 x 330, 330 x 390
Intersection Density	Very High
Use of Alleys	Common
Lots & Buildings	
Typical Lot Shape	Rectangular
Avg. Lot Size (Sq. Ft.)	6,000-14,000
Lot Coverage	High
Front Setback	Very Shallow (2-25 Feet)
Lot Uniformity	Moderate
Other	
Parking	On-street, Rear of Lots
Sidewalk Availability & Connectivity	Abundant, Very High
Dominant Land Uses	Residential, Retail, Religious
Supported Transportation Modes	



Traditional home in Northside



Traditional home in Southside

8.3 Traditional Shopfront Corridors

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

These are relatively short, linear areas composed of one- to three-story buildings. Many structures include ground-level retail and office or residential units above, as well as a very small setback (0-15 feet). These are typically mixed with small apartment buildings, churches, small industrial buildings, and some single-family homes built before 1945. Examples include North 4th Street, Castle Street, parts of Princess and Market streets, and some segments of Carolina Beach Road at Sunset Park.

Development Eras

These corridors were generally developed between 1915 and 1945, with some modern redevelopment occurring from the 1960s onward. Modern developments occurring between 1945 and 1980 tend to appear out of place, often having one or more of the following characteristics: deep setbacks with parking in front, massive floor plates with only one story (over 10,000 square feet), large blank walls along the street, and/or interior-facing buildings.

Block and Street Patterns

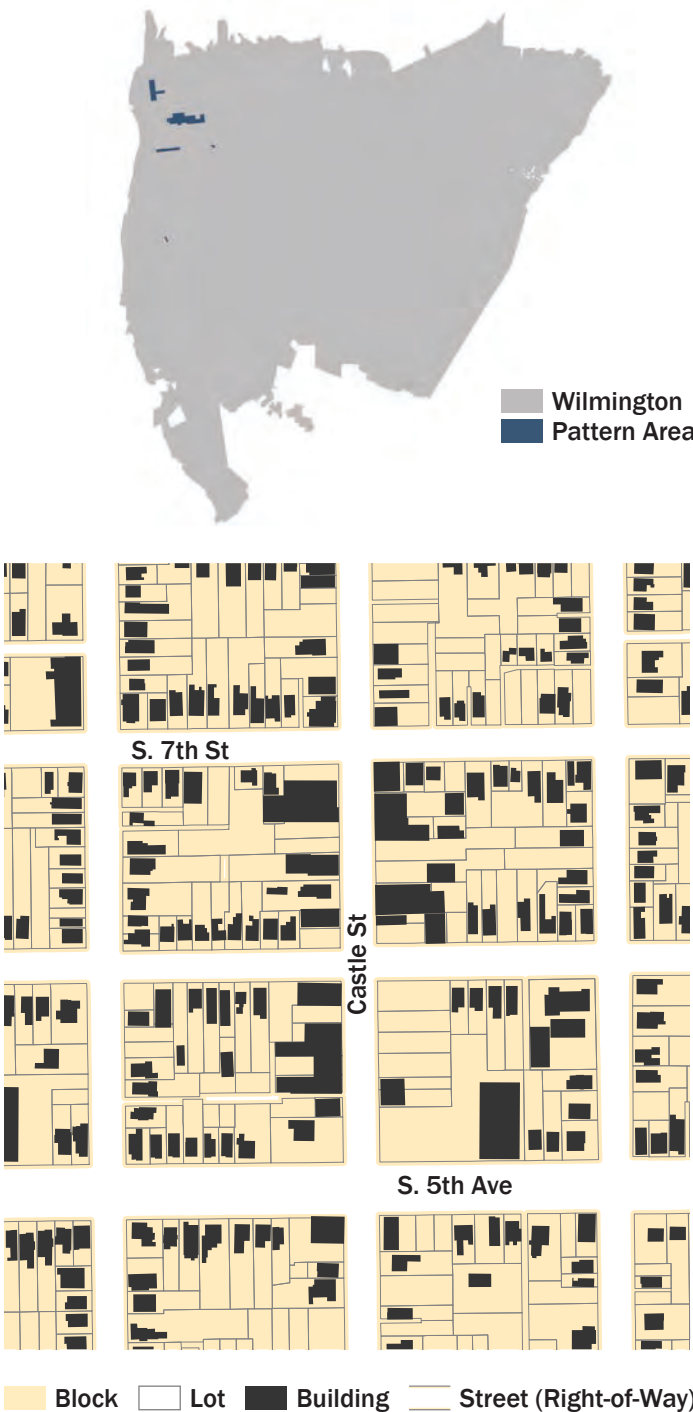
Primarily located among traditional urban neighborhood fabric, block faces usually measure 300-330' feet. Some of these corridors are served by mid-block alleys, allowing services to be located away from the building front. Streets might have more intricate edge and sidewalk conditions than nearby residential streets, perhaps having brick paving, unique street furniture, and/or street trees in hardscape and grates rather than grass landscape strips. On-street parking is very common, except where streets have been widened into thoroughfares.



Storefront on Castle Street



Aerial view of Castle Street between S. 5th Avenue and S. 7th Street



Lot and Building Configuration

Lots are primarily rectangular, varying in width from 20-60 feet. Lot coverage is very high, with some structures completely covering the parcel. Like the historic urban center, buildings fronting directly onto each side of the street (0-10 foot setbacks) create a pedestrian-scaled enclosure. This is enhanced by one- to three-story buildings with a moderately consistent street rhythm except where disrupted by vacant parcels or incompatible modern infill development. Such buildings often exist in clusters with shared side walls.

Architectural Styles

Building facades are well-articulated both vertically and horizontally. In other words, the building front is broken into distinct bays with a variety of materials, openings and architectural details. On multiple story buildings, the ground floor is distinct from upper floors (typically of a different use).

Void Spaces & Redevelopment Areas

The abundance of retail space currently in the marketplace and the age or condition of these structures often results in high vacancy rates, especially in multi-story and mixed-use buildings. Additional challenges for retailers may include parking and unpredictable expenses associated with building up-fits and maintenance. Buildings with architectural and structural integrity can be preserved, renovated and adapted for contemporary uses.

Vacant parcels often exist along these corridors, which are ideal candidates for high-density, context-sensitive infill development, especially the insertion of mixed uses with an active ground floor.



SW corner of Castle and S. 7th streets

Community Pattern Characteristics

Street & Block System	
Street Network	Rectilinear Grid
Block Shape	Rectangular
Block Size (Feet)	n/a
Intersection Density	High
Use of Alleys	Some
Lots & Buildings	
Typical Lot Shape	Rectangular
Avg. Lot Size (Sq. Ft.)	2,000-12,000
Lot Coverage	Very High
Front Setback	Abrupt, Very Shallow (0-5 Feet)
Lot Uniformity	High
Other	
Parking	On-street, Side & Rear of Lots
Sidewalk Availability & Connectivity	Abundant, Very High
Dominant Land Uses	Retail, Mixed-use, Residential
Supported Transportation Modes	



N. 4th Street



NW corner of Princess and N. 8th streets

8.4 Streetcar-era Suburbs

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

Located immediately outside of the 1945 Corporate Limits, the Streetcar-era Suburbs represent the first significant change in urban pattern from the traditional urban neighborhoods. They were platted in conjunction with the early twentieth-century streetcar system that initially ran from downtown to Wrightsville Beach and later served several first generation suburbs. The development of the streetcar allowed residents to escape the congestion of the city for tree-lined, picturesque suburbs, many separating their work from their living environment for the first time. This pattern is prevalent in Carolina Heights, Carolina Place, Sunset Park, Winoca Terrace and other areas along the former Wilmington Sea-Coast Railroad such as the former Delgado Mills Village and areas of Park Avenue.

Development Eras

Carolina Place was developed between 1906 and 1928, followed closely by Carolina Heights in 1907. Sunset Park was platted in 1912, with a subsequent construction boom in 1917 driven by shipbuilding for World War I. The outer edges of these neighborhoods have been redeveloped with modern-era uses with the advent of the automobile.

Block and Street Patterns

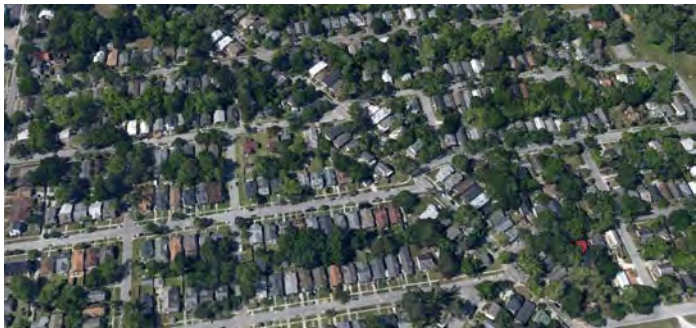
Parcels and homes are platted close together among generally rectangular blocks, most having mid-block alleys. These areas have a tightly connected block structure with only a few slightly curvilinear streets. It is common for the occasional slightly-curved street to break the grid. Much of the grid is a simple outward extension of the traditional urban neighborhood block structure, giving the pattern an urban quality compared to more outlying patterns. Street edge conditions include mature trees, sidewalks, curbs (often granite), wrought-iron fences, and street corners with tight/steep ramps.



Homes in Carolina Place



Block Lot Building Street (Right-of-Way)



Aerial view of Wrightsville Avenue at Ann Street

Lot and Building Configuration

Buildings are oriented towards narrow residential streets, with some large, mansion-like homes constructed along main streets. Lots in Sunset Park are platted at an average of 50 x 150 feet; those in Carolina Place are typically 40 x 120 feet. Building setbacks are very consistent at approximately 12-25 feet. Houses vary in size based on their location within the neighborhood.

Architectural Styles

Housing styles include: American Foursquare, Arts and Crafts, Georgian, Colonial Revival, Craftsman, bungalow and Neoclassical Revival. Many are large and small architect-designed houses or patterns from books. Wood and hand-crafted materials are very common.

Void Spaces & Redevelopment Areas

- Some vacant lots still exist, but are not common.
- In some neighborhoods, the “tight” urban fabric and small streets leave little under used space.
- Auto-oriented commercial development has taken place along corridors and neighborhood edges at various eras, eroding the character and traditional form. Many of these areas are ideal for architecturally compatible, higher-density mixed-use redevelopment.
- Some streetcar-era suburbs have been overtaken by subsequent development patterns, such as Delgado Mills Village and present day Audubon and Winter Park neighborhoods, these fall into the Assorted Semi-Urban pattern area.
- Carriage houses are often converted to accessory dwelling units.



Sunset Park postcard

Community Pattern Characteristics

Street & Block System	
Street Network	Modified Rectilinear Grid
Block Shape	Rectangular, Square
Block Size (Feet)	240-330 x 240-400
Intersection Density	High
Use of Alleys	Very Common
Lots & Buildings	
Typical Lot Shape	Rectangular
Avg. Lot Size (Sq. Ft.)	4,000-12,000
Lot Coverage	High
Front Setback	Shallow (12-25 Feet)
Lot Uniformity	Very High
Other	
Parking	On-street; Rear of Lots
Sidewalk Availability & Connectivity	Abundant, High
Dominant Land Uses	Residential, Religious
Supported Transportation Modes	



Home in Carolina Heights



Homes in Carolina Place

8.5 Assorted Semi-urban Fabric

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

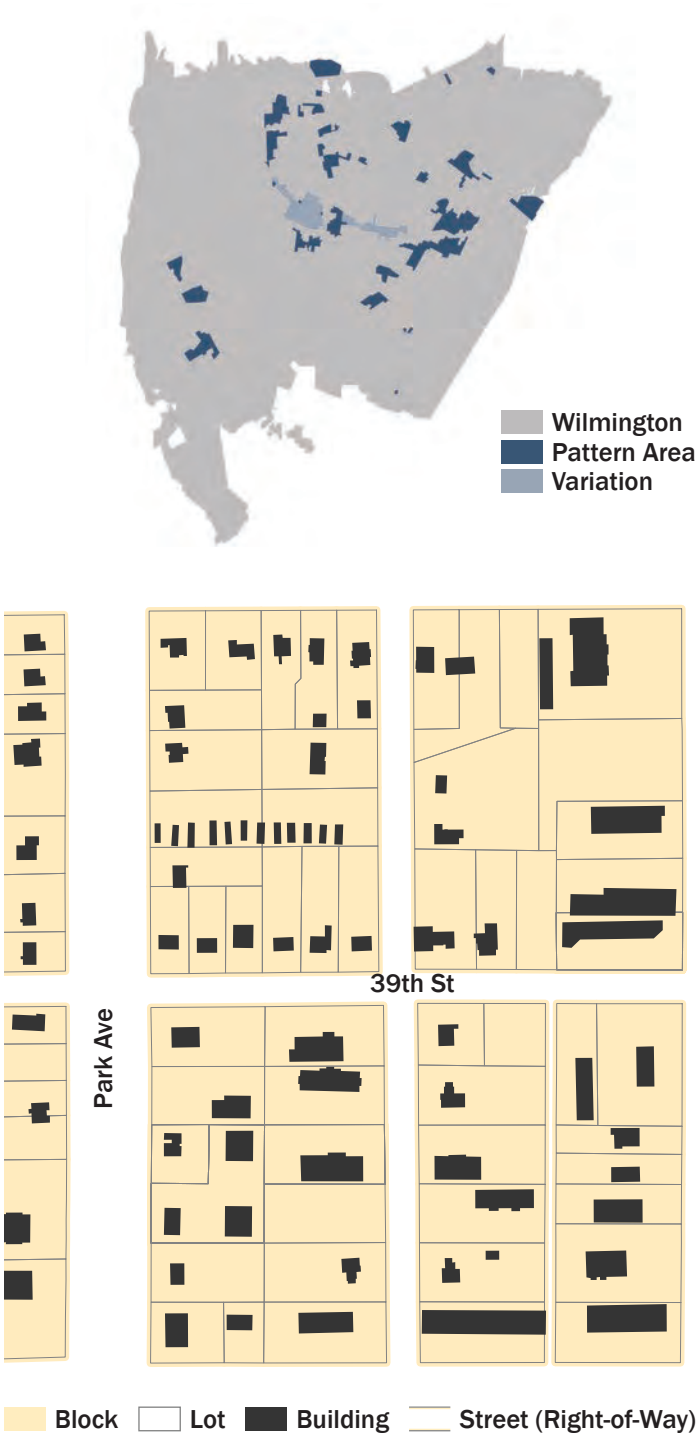
Much of Wilmington’s developed land cannot be easily categorized, especially in areas with a mix of building types, development eras, land uses, and block structures within a small area. The pattern includes residential areas with a high mix of housing types and inconsistent block shapes. Relocated roadways, shifts in land uses, site-specific, automobile-oriented development, and contemporary infill create heterogeneous semi-urban areas. These often occur in transitional areas, such as neighborhoods near a commercial corridor. This pattern is often generated by the assortment of land uses and uniquely configured redevelopment solutions based on irregularly-shaped lots.

Development Eras

Some of these areas have developed from streetcar-era origins. The wide range of development configurations have occurred incrementally for over a century. Homes from the 1920s can be found alongside office and commercial buildings from the 1990s.

Block and Street Patterns

Some areas have modified rectilinear block structures generated from their original platting, many of which are large (300 x 700 feet) or very long (250 x 1,300 feet). Other areas have blocks as large as 500 x 1000 feet. Some of the assorted form areas can be part of a development mega-block, having streets as long as 2,500 feet. In these instances, large swaths of land are penetrated by street segments to access land at the center, resulting in a variety of configurations. Streets themselves also vary widely from small, unimproved roadways, to fully-developed streetscapes, to major arterials. Many of these do not connect to



Lullwater Drive



Aerial view of Wrightsville Avenue at Wilshire Boulevard

one another to form a network; walking and driving distances can be unpredictable and long.

Lot and Building Configuration

As with other variables, the wide array of lot configurations and buildings placed upon them are difficult to generalize. The lack of uniformity in lots and their structures define the character for these neighborhoods. Buildings can be oriented towards one another, focused internally, face the street, and/or have a deep front setback. Small commercial buildings facing parking lots can be found next to residential front yards. Building setbacks and internal circulation vary from site to site, yielding high inconsistency in street rhythm.

Architectural Styles

Much of the residential fabric tends to be modestly-sized single-family homes, often interrupted along the street by small and moderate-sized business buildings, mobile home parks, storage facilities, warehouses, and small multifamily developments. Homes originally intended for families may now house small office or commercial uses and have a range of structural modifications as a result.

Void Spaces & Redevelopment Areas

Incremental redevelopment among variously shaped parcels can leave behind segments of unused land. Some parcels are completely inaccessible to the public street network. Infill development has taken many forms, most of which places an additional number of buildings onto the site or a single large building with surface parking. Transitions between adjacent pattern areas to residential zones are not smooth. Incongruences can be resolved through design standards and context-sensitive infill design.



Office building on Commonwealth Drive

Community Pattern Characteristics

Street & Block System	
Street Network	Varied
Block Shape	Varied
Block Size (Feet)	Varied
Intersection Density	Moderate to Low
Use of Alleys	Limited
Lots & Buildings	
Typical Lot Shape	Varied
Avg. Lot Size (Sq. Ft.)	Varied
Lot Coverage	Varied
Front Setback	Varied
Lot Uniformity	Inconsistent
Other	
Parking	Driveways, Surface
Sidewalk Availability & Connectivity	Low-to-Moderate, Very Low
Dominant Land Uses	Varied
Supported Transportation Modes	



Pattern Variation: Streetcar-era Outgrowths

A distinct variation of this pattern is generated by its origins as a streetcar suburb. These include areas with streetcar-era platting that have evolved beyond their original rectilinear block structure into more varied forms. Over time, these have been developed with a range of building types, oriented a variety of ways and filling the interior of the block. Surface parking lots and small clusters of garden apartments are common insertions alongside old single-family homes.



Aerial view of Peachtree and Park avenues at Floral Parkway

8.6 Second-ring Suburbs

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

The introduction of the Model-T automobile by Henry Ford in 1908 accelerated the suburban growth started by the streetcar. Single-family housing was developed on more spacious lots as land beyond the 1945 Corporate Limits was made accessible. The newest of these suburbs have a more curvilinear form, reflecting the American sentiment of the time for picturesque hamlets away from the industrial city. During this period, suburban housing began to shift from vernacular to a wide variety of house types popularized by pattern books, periodicals, mail order catalogs, and small-house architects. With at least three place-based variations, the Second-Ring Suburbs are found just beyond the Streetcar-era Suburbs. This pattern is found in the following neighborhoods:

- Princess Place
- Woodlawn
- Forest Hills
- Chestnut Heights
- Others

Development Eras

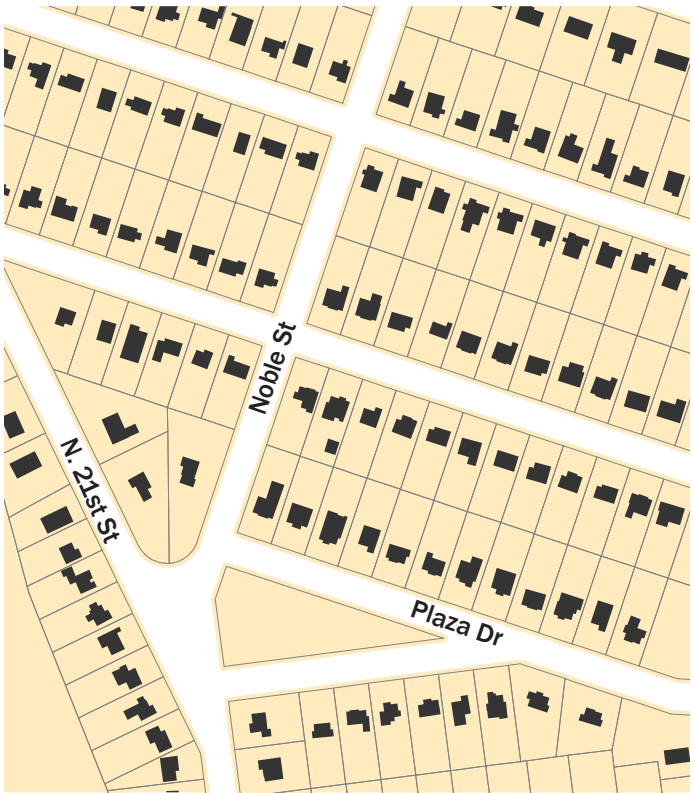
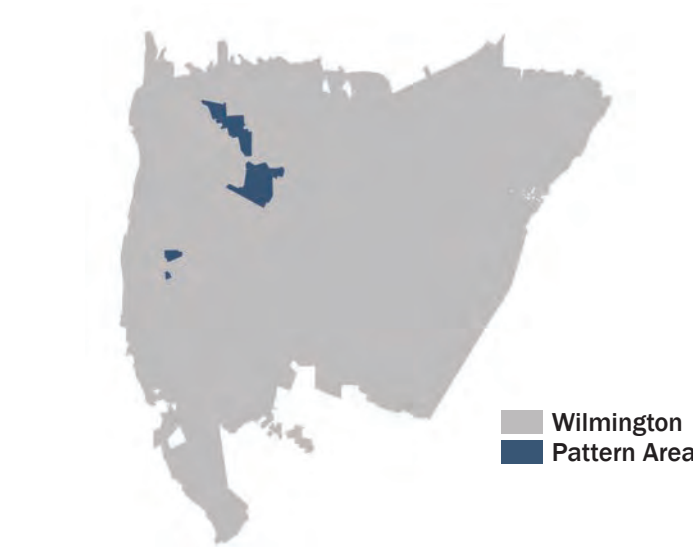
These suburbs were generally developed between 1915 and 1945, with little development occurring during the Great Depression (1930-38). The spatial dispersion represents a gradual transition from residential areas built around fixed-transportation to that of the automobile. Blocks can be tight and slightly curvilinear, having a rounded effect, or be large, rectilinear, and irregularly-shaped.

Block and Street Patterns

This pattern exhibits a high level of connectivity to collector streets. Internally, moderately curvilinear streets create blocks with rounded ends. Street edges consist of improved streetscape with aging concrete, short rounded curbing, and track-paved driveways.



Princess Place subdivision



Block Lot Building Street (Right-of-Way)



Aerial view of Woodlawn subdivision adjacent to Legion Stadium

Some development has occurred adjacent to regional street extensions (like Market and Chestnut streets) and takes the form of large blocks with large back yards and alleys. Block sizes in these areas can be as large as 1000 x 600 feet. This variation does not exhibit the curvilinear suburban pattern as shown on the previous page; rather long streets will be rectilinear or only slightly curved.

Lot and Building Configuration

Rectangular lots of consistent size exist uniformly within the same development tract (generally 50-60 feet wide by 160-200 feet deep). This applies to both block patterns previously discussed. Homes with simple, often square floor plates are consistently set back from the street about 40-60 feet.

Architectural Styles

There is a mix of small cottage houses and more ornate and custom-built homes on similarly-sized parcels. Homes are generally only one story, with the exception of Streetcar-era build-out and some other neighborhoods, which can have larger, more extravagant structures.

Void Spaces & Redevelopment Areas

- The cohesive, moderately curvilinear forms have very little room for development. As homes age, they may be replaced by larger structures.
- The large-block variation features relatively small structures given the massive block size. This results in large, underdeveloped areas in the center of the block. Some of these are back yard spaces, but some are “landlocked” parcels accessible only by alleys.
- Streetcar-era build-out continues in some areas of the city, much of which is considered to be in the assorted semi-urban neighborhoods pattern area.



Second-ring suburban home

Community Pattern Characteristics

Street & Block System	
Street Network	Connected Curvilinear, Enlarged Grid
Block Shape	Modified Rectangular
Block Size (Feet)	300-500 x 1,000-15,000
Intersection Density	Moderate-Low
Use of Alleys	Rare
Lots & Buildings	
Typical Lot Shape	Modified Rectangular
Avg. Lot Size (Sq. Ft.)	8,000-20,000
Lot Coverage	Moderate-Low
Front Setback	Deep (40-60 Feet)
Lot Uniformity	High
Other	
Parking	On-street, Driveway
Sidewalk Availability & Connectivity	Some, Moderate
Dominant Land Uses	Residential
Supported Transportation Modes	



Second-ring suburban home



Second-ring suburban home

8.7 Postwar Ranch & Late-century Suburbs

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

The end of World War II marks a distinct stage in the succession of suburban development types. The return of veterans, a rapidly growing economy, and the proliferation of automobiles combined with favorable-rate, federally-guaranteed mortgages and a decade-long shortage of housing created the biggest residential development boom in U.S. history. Large numbers of single-family homes were rapidly mass-produced, creating an almost seamless landscape of suburbanization. The development of highways made large tracts of outlying land available for settlement. This is one of the most common development patterns in Wilmington, representing approximately 20% of the city, and is found in many parts of town. This pattern is found in many neighborhoods, including:

- Lincoln Forest
- Glen Meade
- Audubon
- Hanover Heights
- Eastwind
- Pine Valley

Development Eras

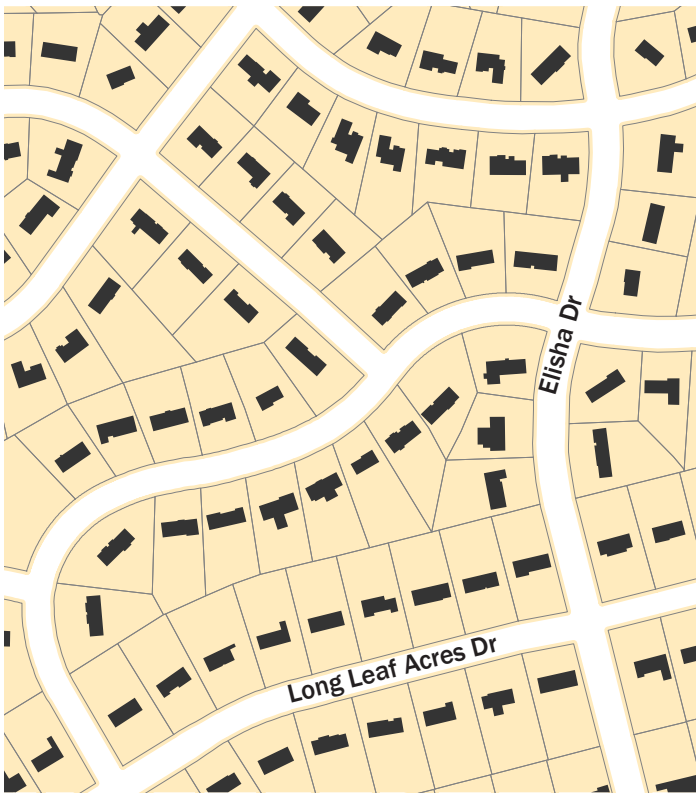
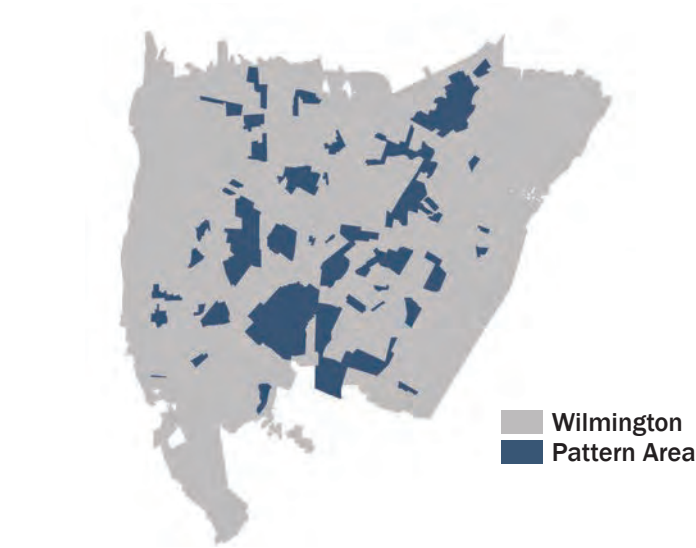
Though some of these patterns were constructed prior to 1945 due to Wilmington’s thriving wartime industry, the postwar suburban boom began in the mid-1940s and lasted through the 1960s. The Late-century version of this suburban pattern (1960-1980) represents a shift in housing style, but the urban structure remains largely the same.

Block and Street Patterns

Curvilinear streets are dominant generators of block structure, where early postwar suburbs exhibit more points of connection than their late-century successors. The curved street system yields blocks of various widths and lengths. Curvilinear streets are well connected and form



Typical ranch-style house



Block Lot Building Street (Right-of-Way)



Aerial view of Green Meadows subdivision

irregularly-shaped, semi-organic blocks. Other occurrences can be long, slightly curved streets that may or may not form a full block. The pattern area can also be highly linear, where rows of lots are placed along streets measuring up to three-quarters of a mile between intersections. Large areas may have from two to five connections to exterior streets, but still have a well-connected interior street system. This pattern introduces the cul-de-sac, a defining feature of suburban development to this day. The edge conditions in these neighborhoods vary, with about half having sidewalks and curbs and others have no improvements beyond a small ditch (thus exhibiting some rural characteristics).

Lot and Building Configuration

Rows of mostly brick ranch-style homes are placed consistently along the street. These have deep front setbacks and small side yards. Lots and buildings exhibit a high level of consistency in their placement. Lot widths are typically 100 feet, but vary in depth from 170 feet to almost 300 feet depending upon their location in the curvilinear block. A highly common lot dimension is 100 x 190-200 feet (nearly half of an acre), possibly due to the need to accommodate septic fields prior to installation of public water and sewer systems. Buildings are uniformly set back from the street at 60-70 feet and have a relatively small side yard at approximately 16 feet.

Architectural Styles

Buildings are almost exclusively single-family residential structures, which is an outcome of the further separation of uses facilitated by zoning in the automobile age. These homes are stylistically homogenous, typically low-profile brick Ranch and Prairie styles of one-story or split-level, with more recent housing being one- to two-stories. Homes often have long, hipped roofs and large windows. The garage or patio is almost always integrated into the floor plan and there are very few front porches.

Void Spaces & Redevelopment Areas

Much space exists in front and back yards for accessory dwelling units, now that infiltration fields for septic tanks are no longer needed. Small side yards make access to the rear yard for additional development a challenge, however. Improvements to roadways, such as, sidewalks and multiuse paths are possible; traffic calming measures are often needed, but difficult to implement. Encroachment of surrounding, higher-density development remains an issue for connectivity and compatibility.

Community Pattern Characteristics

Street & Block System	
Street Network	Connected Curvilinear
Block Shape	Organic
Block Size (Feet)	Varied
Intersection Density	Moderate
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Modified Rectangular, Pie
Avg. Lot Size (Sq. Ft.)	15,000-35,000
Lot Coverage	Moderate
Front Setback	Deep (60-70 Feet)
Lot Uniformity	Moderate
Other	
Parking	Driveway, Garage
Sidewalk Availability & Connectivity	Very Low, Very Low
Dominant Land Uses	Residential
Supported Transportation Modes	



Pine Valley



Pine Valley

8.8 General Contemporary Suburbs

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

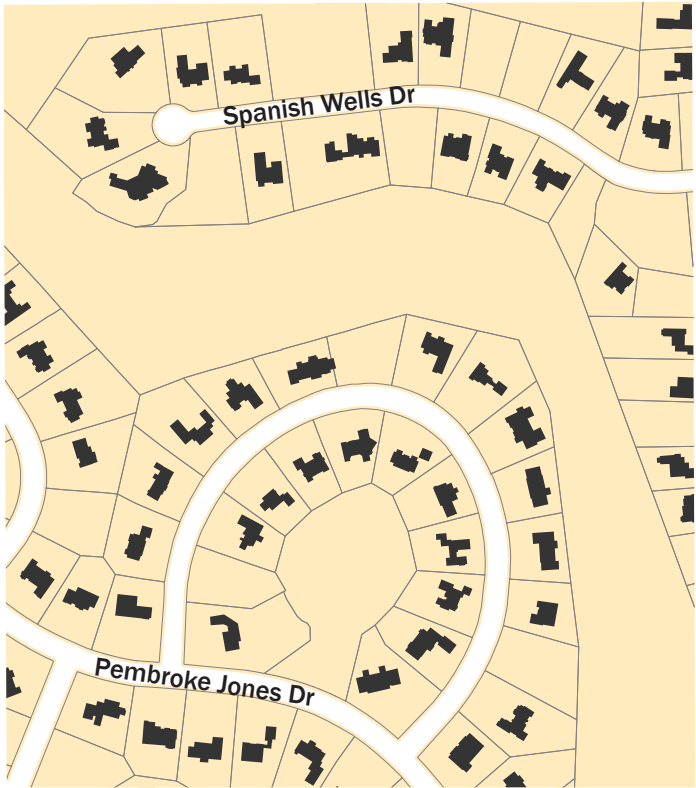
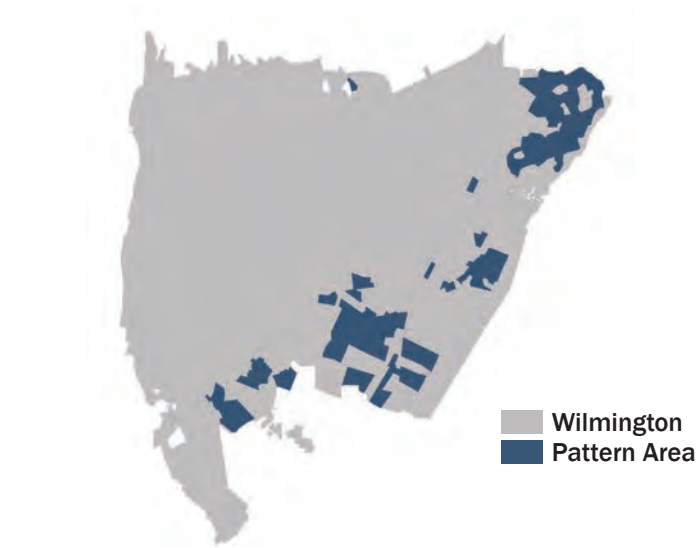
This pattern is used to account for general suburban residential development built over the past 25-35 years that is not in tightly packed clusters or oriented towards the waterfront. Contemporary suburbs follow a similar block structure as their postwar and late-century predecessors, but have more curvilinear streets and cul-de-sacs. Contemporary suburbs may have larger lot sizes and often have larger home sizes. They begin to break away from the one-story ranch style towards a variety of one-story patio homes and two-story contemporary homes, though never in the same neighborhood. Streetscapes are defined by large lawns, articulated facades, concrete driveways, and; most often, garage doors. This pattern is found in many neighborhoods, including: Lansdowne, Millbrook, Greenville Loop, Landfall and Echo Farms.

Development Eras

There is no clear break from the late-century suburbs to contemporary suburbs, since preferences for larger and more luxurious housing styles evolved over time. Large homes at the urban fringe emerged with the housing boom from 1990-2008. Many developed under County regulations prior to annexation.

Block and Street Patterns

Curvilinear streets are dominant generators of block structure. Contemporary suburbs exhibit fewer points of connection to collector streets and more single outlet streets and entire neighborhoods than earlier suburbs. The curved street system yields organically-shaped “blocks” of various widths and lengths. The pattern area can also be linear, as generated by elongated tracts of residential land.



Contemporary single-family home



Aerial view of Millbrook subdivision

This pattern makes high use of the cul-de-sac, a strong defining cultural feature of suburban development, which may contribute to traffic congestion, due to their funneling effect. The edge conditions in these areas vary, many of these areas have no improvements beyond a perimeter ditch (thus exhibiting some rural characteristics).

Lot and Building Configuration

Similarly-massed homes are situated consistently on rows of large lots. On average, lots are 15,000-25,000 square feet, highly consistent in width and placement along the street, and somewhat rectangular except when platted along a curve or cul-de-sac. Buildings are usually oriented toward the street, but may be turned sideways and oriented toward their driveway instead. Setbacks are also highly consistent: 40-60 feet in front, 15-40 feet along the sides, and 50-90 feet along the rear. When these factors are combined with a relatively consistent vertical building mass, a steady street rhythm is created.

Architectural Styles

It is common for homes to be of various materials, styles, and articulation. Buildings are often two-stories. Common styles include Neo-eclectic, Neoclassical Revival, Neo-mediterranean, American Vernacular Revival, and Styled Ranch. Home sizes range from simple three-bedrooms to large five-bedrooms with multiple accessory rooms (sometimes called “Millennium Mansions”). These homes are commonly adorned with detailed windows, steeply pitched roofs, tall columns, small front porches and other details. More modest houses will have fewer architectural details and will most commonly be defined at the street by a protruding garage door, associated with “efficient” floor plans, and shorter driveways.

Void Spaces & Redevelopment Areas

A great deal of land is used for streets and front yards, and in some instances, wider, if not longer driveways. Accessory dwelling units (i.e. the modern “carriage house”) may be possible in certain lot-building configurations. Distances to retail, employment, schools, and services from a contemporary suburban development are usually too far for pedestrians. Opportunities may exist for infill mixed-use development that addresses these needs.

Community Pattern Characteristics

Street & Block System	
Street Network	Curvilinear, Cul-de-sac
Block Shape	n/a
Block Size (Feet)	n/a
Intersection Density	Very Low
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Pie, Irregular
Avg. Lot Size (Sq. Ft.)	15,000-25,000
Lot Coverage	Moderate
Front Setback	Deep (50-60 Feet)
Lot Uniformity	Very High
Other	
Parking	Driveway, Garage
Sidewalk Availability & Connectivity	Very Rare, Very Rare
Dominant Land Uses	Residential
Supported Transportation Modes	



Contemporary single-family home



Contemporary single-family home

8.9 Compact Clustered Suburbs

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

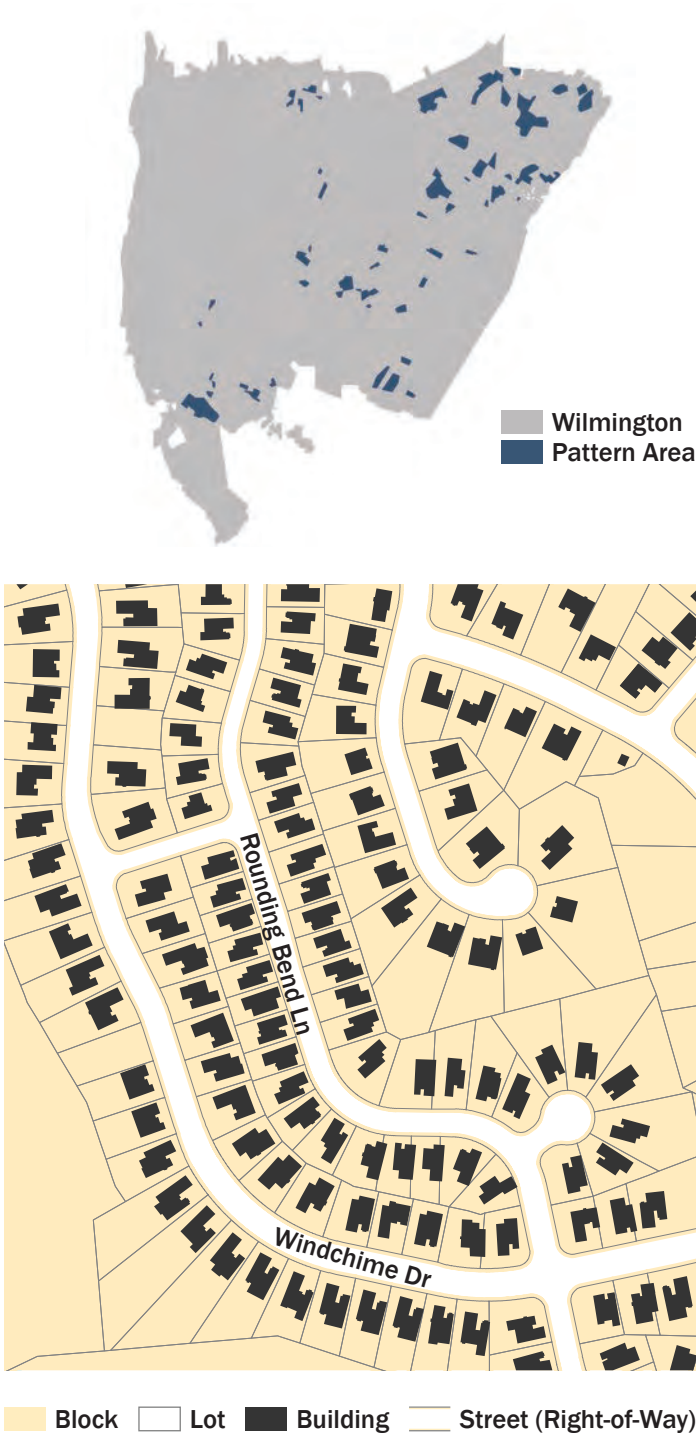
Most commonly found in the eastern parts of the city, this suburban pattern consists of grouping of small homes very close together around streets with cul-de-sacs. This pattern is compressed version of the contemporary suburban communities pattern. These “clusters” are made distinct from their surrounding fabric by their tight grouping, small-to-moderate building forms, and lot sizes, strictly homogenous architectural style, and minimal connectivity. Quite often, these developments have well-defined street edges with sidewalks, short concrete driveways, and landscaping. Building frontages are commonly dominated by garage doors that extrude into the front beyond the front porch.

Development Eras

This type of development began in the early 1980s and continues through today. Like other contemporary suburbs, these patterns were developed under county regulations prior to city annexation. Land developers were especially successful in marketing homes in tightly clustered subdivisions leading up to the Great Recession of 2008.

Block and Street Patterns

Highly curvilinear streets have a distinct fork, loop, line, or knob pattern driven by the shape and size of the development tract.



Village at Summerset



Aerial view of Lucia Point on Military Cutoff Road

Lot and Building Configuration

Lot sizes are highly consistent within each occurrence of the pattern area, with any variation due to the lot placement along the curved street or cul-de-sac. The most common parcel sizes range from 6,000 to 10,000 square feet (less than a quarter of an acre). Lot widths are highly consistent within each occurrence, as are building setbacks, which can range from 5-25 feet. Lot coverage can range from 25-40 percent. Buildings are placed very close together (8-20 feet) and have a highly consistent street rhythm.

Architectural Styles

Homes are commonly one- to two-story vinyl and wood frame construction. The garage is most often the dominant feature of the building façade, followed by a small front porch or landing. Contemporary versions of the ranch house may have hipped roofs, but contemporary country-style with pitched roofs or narrow-lot house plans are most common. Vinyl siding is the most common exterior material used.

Void Spaces & Redevelopment Areas

This pattern area is already dense. The highly-compact nature of this pattern area leaves little available space for additional or infill development. Some developments remain uncompleted since the 2008 recession, and may provide opportunity for alternative building forms or even mixed-use development. Connectivity and pedestrian access to adjacent neighborhoods, retail, and other services is often limited by the frequent use of cul-de-sacs and large subdivisions placed away from services.



Windtree subdivision on Holly Tree Road

Community Pattern Characteristics

Street & Block System	
Street Network	Cul-de-sac
Block Shape	n/a
Block Size (Feet)	n/a
Intersection Density	Low-Moderate
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Pie, Irregular
Avg. Lot Size (Sq. Ft.)	6,000-10,000
Lot Coverage	Moderate-High
Front Setback	Moderate (5-20 Feet)
Lot Uniformity	Very High
Other	
Parking	On-Street, Driveway, Garage
Sidewalk Availability & Connectivity	Moderate, Low
Dominant Land Uses	Residential
Supported Transportation Modes	



Neo-traditional Development Example

A few instances of the compact cluster use neo-traditional design principles (also called “New Urbanism”) to create compact developments that are walkable. These employ features found in the traditional urban neighborhoods, such as alleys, front porches, varied building designs, and a robust sidewalk network. Alleys help to keep garages off the street, creating a more hospitable and comfortable neighborhood appearance. Other features may include the use of pocket parks, brick and other textured paving in the streets, and multiple access points to surrounding areas.



Parkside at Mayfaire

8.10 Waterfront-oriented Suburbs

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

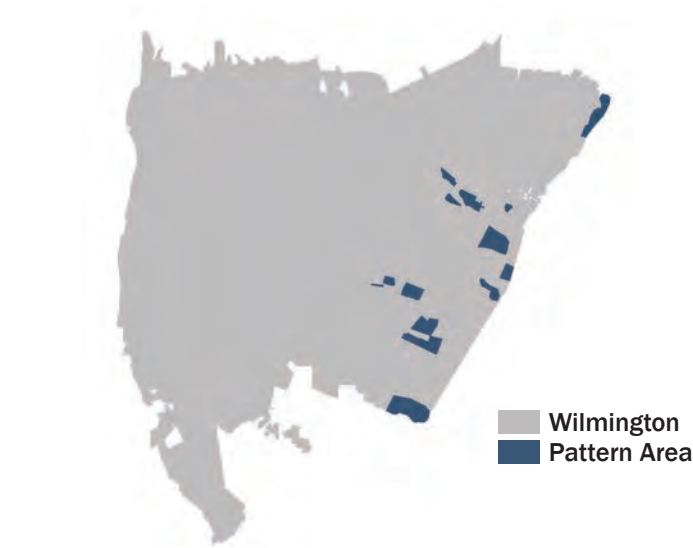
This variation of contemporary suburbs is different in two primary ways: larger lot and home sizes, and an orientation to nearby water bodies as an amenity (and key market driver for more elaborate home features and styles). This pattern is also less consistent in its application, where larger homes are spaced further apart and in a less uniform manner along the streets. Streets can also have patterns that relate to the contours of the adjacent water body. In most other ways, these are much like the contemporary suburbs, especially the development era, street/block pattern, and housing type. Each parcel may not have direct access and orientation to the water, rather access may be shared among the subdivision or limited only to those along the water edge. These are located alongside the eastern border of the city, especially at Bradley, Whiskey and Hewletts creeks.

Development Eras

Many of these communities were developed in the early 1990s though the late 2000s, with very little construction activity since 2008. It is unclear whether market demand or available water-front tracts of land will facilitate additional development of this pattern area in the future.

Block and Street Patterns

These developments usually occur in clusters with streets typically terminating at cul-de-sacs (sometimes at the water's edge). Thus the pattern area has no real block structure. Streets are short and curved, connectivity to surrounding areas is very low. Street edges will very rarely have sidewalks, but curbs and paved driveways are very common.



Block Lot Building Street (Right-of-Way)



Waterfront suburban home



Aerial view of intracoastal waterfront near Shinnwood Road

Lot and Building Configuration

Lot configuration is driven by land and water constraints, where perhaps only one or two rows may be developed along a peninsula and/or land is bound by adjacent development. Most lots range in size from approximately 40,000-70,000 square feet (or one-half to one-and-a-half acres). Setbacks can be very consistent and moderate or range widely (30-90 feet) and be very deep. Buildings are mostly oriented towards the street, but those along the water edge may have an equally dominant front and back façade.

Architectural Styles

Homes can range in size but tend to be very large, two- to three-story structures. Multiple front and rear porches are common on homes closer to the water. Styles might include contemporary country, beach/coastal, Neo-eclectic, and Neo-mediterranean.

Void Spaces & Redevelopment Areas

Land is constrained by natural features and high property values. Moderate lot coverage and waterfront access may provide an opportunity for accessory dwelling units, perhaps to accommodate seasonal use.



Bradley Creek



Softwind Way

Community Pattern Characteristics

Street & Block System	
Street Network	Curvilinear, Cul-de-sac
Block Shape	n/a
Block Size (Feet)	n/a
Intersection Density	Very Low
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Pie, Irregular
Avg. Lot Size (Sq. Ft.)	40,000-70,000
Lot Coverage	Moderate
Front Setback	Deep (30-90 Feet)
Lot Uniformity	Very High
Other	
Parking	Driveway, Garage
Sidewalk Availability & Connectivity	Very Rare, Very Rare
Dominant Land Uses	Residential
Supported Transportation Modes	



Waterfront suburban home



Skystasail Drive

8.11 Intracoastal Tidewater Estates

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

The eastern edge of Wilmington is lined by the Atlantic Intracoastal Waterway, a linear water body separated from the Atlantic Ocean by a series of barrier islands. Along this edge lies a development pattern consisting of large homes on long, narrow, mostly east-west running lots. These rows of homes are deeply set back from the main roadway and often have clear views of the water. These are distinct from the waterfront oriented suburbs in their scale and era of development, irregular pattern, and linear lot shapes. This pattern is found in the following neighborhoods:

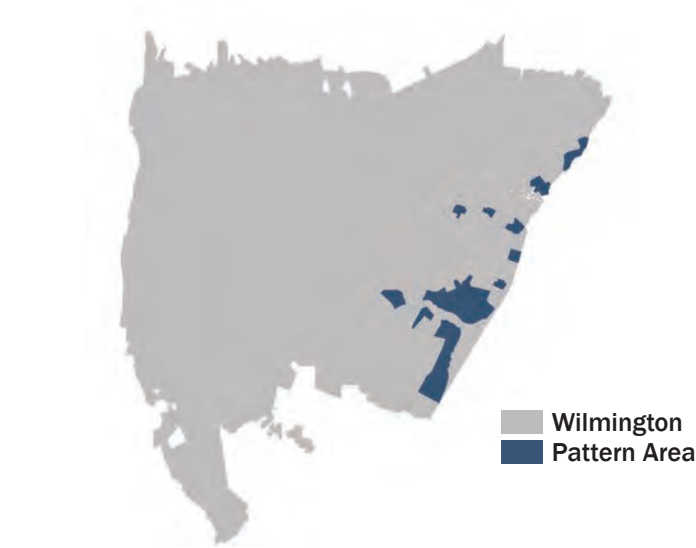
- Landfall
- Greenville Loop
- Masonboro Sound
- Airlie
- Summer Rest

Development Eras

The era of development ranges very widely, with some sites dating as far back as late 1800s (common along Masonboro Sound Road and Summer Rest Road). Homes developed incrementally between 1910 and 1960, with significant development occurring between the late 1960s and early 1980s, and again in the late 1990s. This wide range is reflective of market conditions, where the price of land along the water's edge is conducive to high-value, custom built homes.

Block and Street Patterns

No block pattern is found, but the distribution of parcels between the water's edge and the single curvilinear roadway is distinct (with the roadway running between the parcels and the waterfront). Streets edges are almost always unimproved, having no curbs, gutters or sidewalks. Private streets and driveways, mostly oriented east-west, may service



Block Lot Building Street (Right-of-Way)



Intracoastal Waterway



Aerial view of intracoastal waterfront at Masonboro Sound Road

one to three homes from the main road. Long, private docks often extend directly from the alignment of these private driveways (with some distances from the beginning of the driveway to the end of the private dock as long as one-third of a mile).

Lot and Building Configuration

The typical lot pattern for these estates tends to be very long and narrow, oriented mostly east-west (perpendicular to the water's edge). Lot widths range from 100-300 feet and lengths range from 800 feet to one-half mile. Buildings on these parcels are very large (3,500-6,000 square-feet or more), multistory homes set so far back from the street that they often cannot be seen from the main road (200-1000 feet). Other lot instances are more squared and clustered than linear, but maintain very large lot and home sizes.

Architectural Styles

Styles vary widely based on the development era. Early instances are large, traditional Victorian and Eclectic styles. Mid-century occurrences tend to be Neoclassical and Neo-eclectic. Large porches and courtyards opening to the water are common features.

Void Spaces & Redevelopment Areas

These areas intensify by developing tightly spaced rows of housing along the private driveways between the main road and the water, leaving the original home at the street end (if applicable). These maintain their east-west orientation and the dock sometimes becomes a shared facility. Alternative growth patterns might be considered to create a walkable, efficient street and pathway network, enhancing the pattern's waterfront village character.



Masonboro Sound Road

Community Pattern Characteristics

Street & Block System	
Street Network	Loop Roads
Block Shape	n/a
Block Size (Feet)	n/a
Intersection Density	Very Low
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Elongated Rectangular
Avg. Lot Size (Sq. Ft.)	100,000-350,000+
Lot Coverage	Very Low
Front Setback	Very Deep (200-1000 Feet)
Lot Uniformity	Moderate
Other	
Parking	Driveway
Sidewalk Availability & Connectivity	None, None
Dominant Land Uses	Residential
Supported Transportation Modes	



Aerial view of Masonboro Sound

8.12 Semi-rural Areas

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

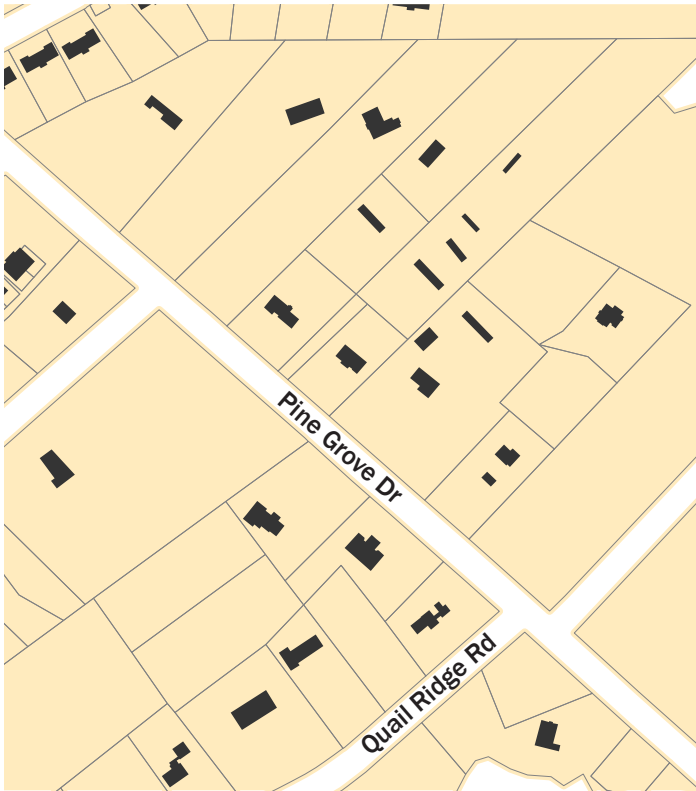
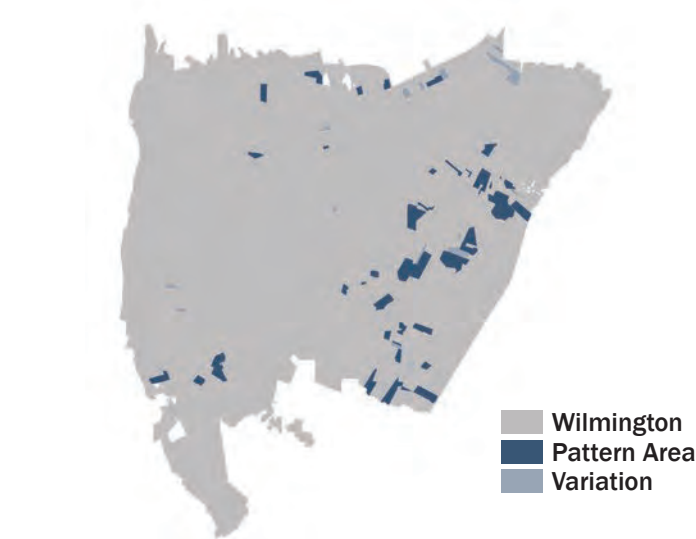
Some parts of the city look and feel more like rural areas than urban or suburban. Large, inconsistently shaped parcels, older country-style houses, bucolic landscapes, and in many cases, unimproved roadways generate this unique pattern. These semi-rural locations are surrounded by various types of suburban pattern areas as the more contemporary development and major street networks of Wilmington consumed large amounts of available land. Many of the semi-rural neighborhoods are found along major thoroughfares that were once long country roads. Pine forests, large fields, and other natural features dominate the landscape.

Development Eras

Many of these areas were developed between 1920 and 1960, when they were beyond Wilmington’s city limits. Homes were being constructed in these rural-like settings during the post-war suburban boom and eventually annexed into the City of Wilmington.

Block and Street Patterns

Block structure is not a dominant aspect of this pattern area, except where the city’s street connections have been made through them. Some streetcar-era platting that experienced slow build-out may exhibit a cohesive block structure while having semi-rural characteristics at the site level. These areas often do not connect well with the surrounding street network, evidenced by an abundance of dead-end roads, ranging from 200 feet to nearly one-half mile. Homes are often serviced by unimproved streets, private roads, and long dirt or gravel driveways.



Block Lot Building Street (Right-of-Way)



Masonboro Sound Road



Masonboro Sound Road

Lot and Building Configuration

Lot sizes vary widely in shape and size, but are generally larger than their contemporary neighbors. These range in size from one-quarter of an acre to four acres. Building setbacks are usually very deep (60-150 feet) and lot coverage is very low. These small homes on large lots can be oriented at any direction.

Architectural Styles

Building types vary, with the most common being the country-style, brick ranch and mobile homes. A large number of custom- and owner-built homes can be found.

Void Spaces & Redevelopment Areas

The abundance of land and lack of street connectivity of these areas, which are surrounded by higher intensity land uses, suggest they could accommodate more development. This has often occurred as contemporary suburban subdivisions, tightly-spaced suburban clusters and more incremental, assorted-type site development (see other pattern areas for more information on these). Some centrally-located occurrences may be candidates for mixed-use town centers or higher-density multifamily residential development.

Pattern Variation: Mobile Home Parks

Mobile home parks are a form housing based on mass production of affordable living quarters. The mobile home was introduced in the 1950s and was especially popular as an affordable housing option in the 1960s and 1970s. Such homes constructed after the introduction of Federal Housing Authority guidelines in 1976 are technically called “manufactured homes,” of which Wilmington has seen few developed since the 1980s. Mobile/manufactured home parks typically consist of rows of long buildings placed in diagonal rows along an unimproved, often circular, driveway.



Greenville Village on Greenville Loop Road

Community Pattern Characteristics

Street & Block System	
Street Network	Expanded Grid, Loop Roads
Block Shape	n/a
Block Size (Feet)	n/a
Intersection Density	Very Low
Use of Alleys	n/a
Lots & Buildings	
Typical Lot Shape	Irregular
Avg. Lot Size	Varied (0.5 - 4 Acres)
Lot Coverage	Very Low
Front Setback	Very Deep (60-150 Feet)
Lot Uniformity	Low
Other	
Parking	Driveway
Sidewalk Availability & Connectivity	None, None
Dominant Land Uses	Residential
Supported Transportation Modes	



Greenville Loop Road



Manufactured housing on Greenville Loop Road

8.13 Semi-urban Multi-family Development

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

These are typically two- to four-story apartment or condominium communities situated among parking lots with interior circulation networks. There are usually a limited number of connections to the public street network, many of which are restricted by limited access gates. Common amenity areas may exist within the development. A large concentration of this pattern exists in midtown and can be found in all parts of the city, with very few in Greater Downtown and in the southeast part of the city. There are very few true urban multifamily projects in Wilmington (those represented by a well-connected street and sidewalk grid, buildings up the street with high lot coverage and structured parking).

Development Eras

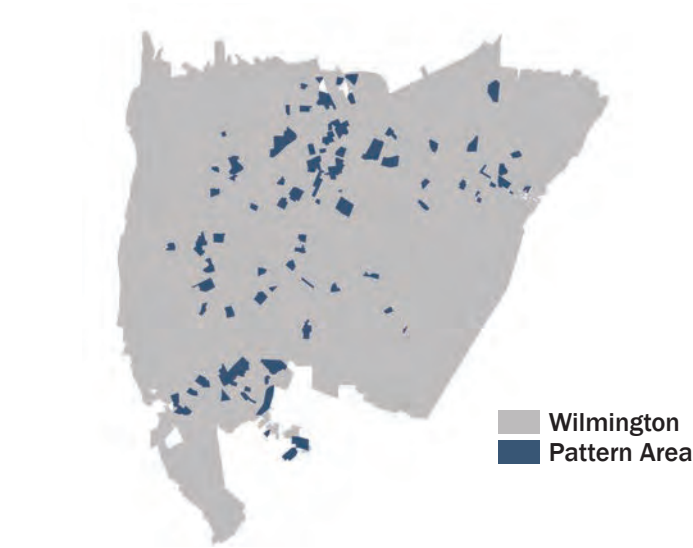
Development ranges from the late 1950s to present day, with much of the development between 1970 and 2000. There was significant development activity prior to the 2008 recession and recent trends indicate a surge in multi-family development during the post-recession economic recovery.

Block and Street Patterns

Many multi-family developments do not adhere to the overall street and block pattern, rather, they create their own, often curvilinear, circulation system within large tracts of land. These vary in structure from a cohesive, block-like system to indiscernible, circuitous networks. Sidewalks may be limited to direct building access from parking lots (the most common), have a comprehensive internal network around buildings and common areas, or may be well-connected to the public sidewalk system (least common).

Lot and Building Configuration

Buildings are usually internally-oriented within parcels, facing away from the public street towards a parking lot



Block Lot Building Street (Right-of-Way)



Mill Creek Apartments



Aerial view of Avalon and Market North apartments

or driveway. Large, linear landscape islands may separate parking lots from public streets, with buildings located deep into the site. Some occurrences have buildings directly facing internal streets with garage doors and driveways along the ground floor frontage. Parking lots are very typical and are approximately equal in surface area to building footprints.

Architectural Styles

Building types, configurations and architectural styles vary widely. Most structures are two- to three-stories, 45-60 feet wide, and vary in length from 80-250 feet. Single-story structures exist but are older and less common. Whereas there is wide range of densities and housing types among these developments, the same building type and architectural style is always repeated within the development (i.e., they are internally homogenous).

Void Spaces & Redevelopment Areas

- A mix of uses could be considered, introducing office, retail or institutional spaces to the development either within the same building (vertical) or located on the same site (horizontal).
- The abundance of surface parking lots in some apartment complexes may present infill development opportunities.
- More urban frontages and pedestrian connections can be achieved on the perimeter of these developments.
- Many older, less-dense developments could be redeveloped with higher densities with more street and sidewalk connectivity.
- Interconnectivity of new development with existing street grids has been limited due to concerns over traffic. This places more pressure on arterial streets as destinations and results in increased traffic congestion.
- Incorporation of structured parking on smaller sites may allow for more intense development, especially in areas where a direct, pedestrian-oriented frontage is encouraged instead of large, secluded parking lots and deep setbacks.



Reserve at Mayfaire

Community Pattern Characteristics

Street & Block System	
Street Network	Superblock, Curvilinear, Varied
Block Shape	n/a (Internal Driveways)
Block Size (Feet)	Varied, n/a
Intersection Density	Moderate
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Varied
Avg. Lot Size (Sq. Ft.)	Varied
Lot Coverage	Moderate-High
Front Setback	Varied (10-70 Feet)
Lot Uniformity	n/a (Buildings Highly Uniform)
Other	
Parking	Surface Lots, Varied Locations
Sidewalk Availability & Connectivity	Low, Low (Internal Circulation Provided)
Dominant Land Uses	Residential
Supported Transportation Modes	



Townhomes at Echo Farms



Headwaters at Autumn Hall

8.14 Mid-century Standardized Housing

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

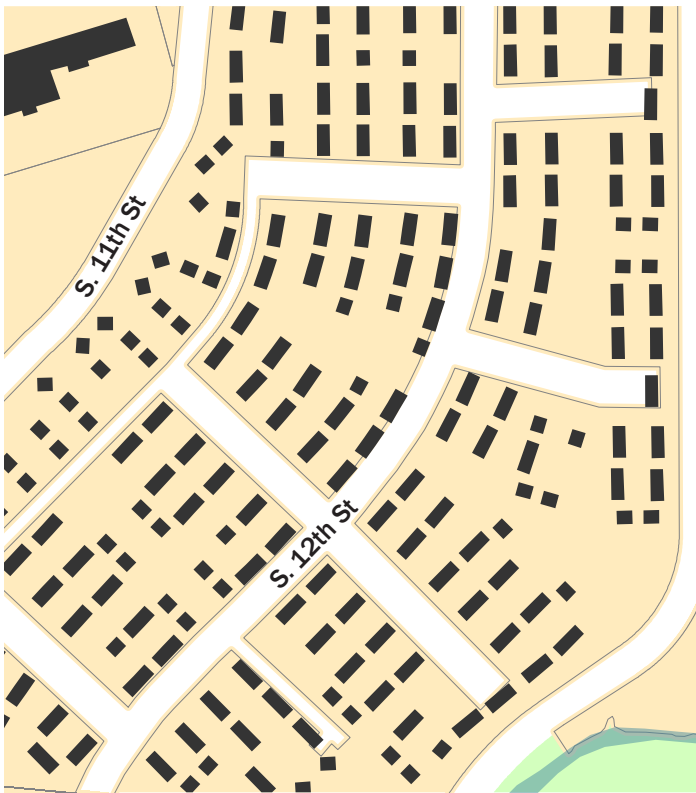
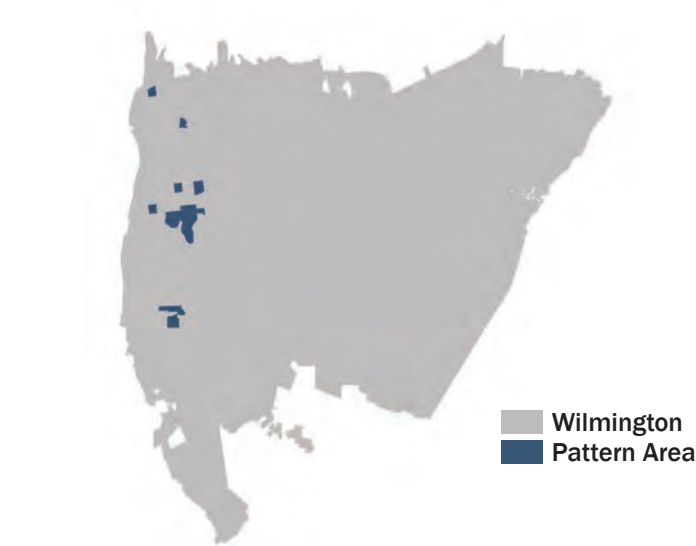
This pattern area is highly distinct, having the most homogenous building forms spread over a single area. Massive public projects were intended to provide housing for a thriving shipbuilding industry (early developments) and later to address poverty (late 1960s) as part of federal government housing programs. There is a heavy concentration of public housing in Greater Downtown's Southside area and south of Shipyard Blvd.

Development Eras

Garden Lake Estates, Lake Forest and Greenfield Terrace developments date from World War II, with some parts of Greenfield Terrace being even older. This was part of a housing boom initiated by the Wilmington Housing Authority to meet demand from a surge of wartime workers and servicemen. Lake Forest was built for defense workers; structures were built to be easily deconstructed and reassembled elsewhere after they were not needed anymore. Lake Village units were pre-fab structures that were shipped to Wilmington by rail and assembled on site. These developments are now privately-owned. Built in 1940, Nesbitt Court was shut down in 2007 and renovated into market-rate apartments in 2011. Houston Moore and Hillcrest, a similar type of development, was constructed in 1941 and 1942 and remains public housing today.

Block and Street Patterns

These developments occupy superblocks, some the result of consolidating four-to-six rectilinear blocks of the traditional urban neighborhoods, others having more organic street patterns generating blocks of a similar scale. Despite the overall street pattern in



Block Lot Building Street (Right-of-Way)



Rankin Terrace housing community



Aerial view of Hillcrest public housing community

which these sites are located, they each have an internal secondary circulation network of streets, driveways, parking courts, and pedestrian-only pathways (the pattern being unique to the style and placement of development).

Lot and Building Configuration

Buildings do not exist on their own lots; rather, the entire development is owned and controlled by a single entity. Parcels may actually be larger than entire blocks. Building placement is highly regular and consistent. A common configuration for government-designed housing of this era is several rows of long buildings placed side-by-side at their ends, with a street occurring between every-other row and a pedestrian pathway occurring along the others.

Architectural Styles

Architecture is completely homogenous within each development, as the same exact building is repeated many times over a vast landscape. The typical public housing model is representative of an outdated national development program; examples can be found across the United States.

Void Spaces & Redevelopment Areas

The recently completed South Front Apartments demonstrates the creative adaptability of older public housing projects like Hillcrest and Houston Moore. Public housing with barracks-style cinder block buildings are no longer constructed. The Jervay housing complex represents another form of redevelopment for public housing, with its walkable blocks and varied, neo-traditional building types (see sidebar). Since much of the housing was intended to be temporary and is now over 60 years old, there may be opportunities for large-scale redevelopment, partial redevelopment, or adaptive reuse (as previously described).



South Front Apartments

Community Pattern Characteristics

Street & Block System	
Street Network	Superblock, Varied
Block Shape	Rectilinear; Some Curvilinear
Block Size (Feet)	800-950 x 1,200+
Intersection Density	Moderate
Use of Alleys	Mid-Block Pedestrian Paths
Lots & Buildings	
Typical Lot Shape	Large Square, Varied
Avg. Lot Size	Very Large, Varied
Lot Coverage	Many Buildings on One Lot
Front Setback	Moderate (10-25 Feet)
Lot Uniformity	n/a (Buildings Strictly Uniform)
Other	
Parking	Lot Internal to Development
Sidewalk Availability & Connectivity	High, High (Internal Circulation Provided)
Dominant Land Uses	Residential
Supported Transportation Modes	



Contemporary Patterns

Public housing is often redeveloped using contemporary building and urban design guidelines, such as the creation of various building types, a mix of uses, and a walkable pathway and street system. Sometimes there is a central open space and/or a community center. Parking is limited due to low private automobile ownership. New public housing strategies seek to employ a mixed-income approach with the intent of relieving the negative effects associated with concentrated poverty. Neo-traditional urban design and architecture principles are commonly used, often creating more connections to surrounding areas than were previously available.



Robert S. Jervay multi-family housing

8.15 Automobile-oriented Commercial Strips

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

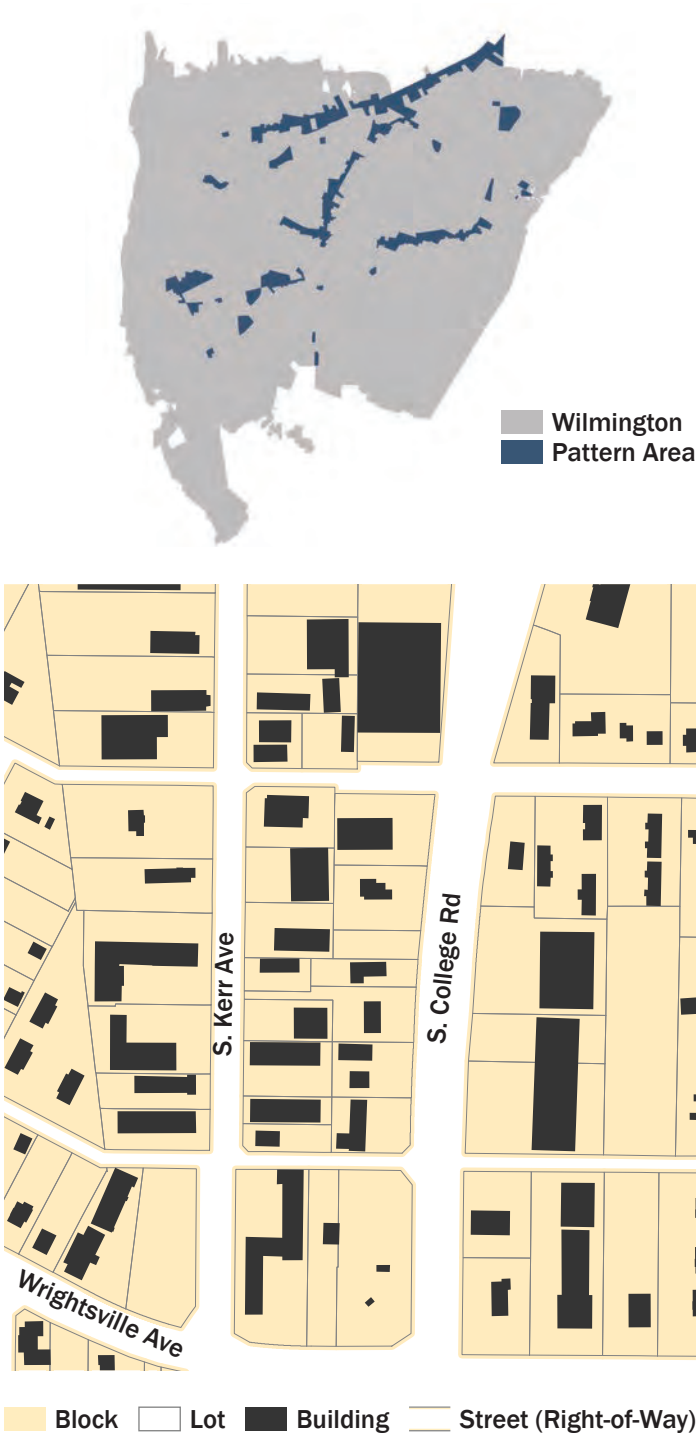
This pattern area consists of moderate to large, single-story buildings deeply and inconsistently setback from high traffic corridors, which results in a streetscape unsuited for pedestrians. Parking, signage, and occasional landscaping dominate the setback area. Grass streetyards and numerous driveways are primary street edge conditions, most of which do not have sidewalks. Parcels and buildings are usually oriented chaotically along the street and lot coverage is very low to accommodate large parking fields, often two times the building area. This pattern is located along major thoroughfares, especially along Market Street, College Road, Oleander Drive and Carolina Beach Road. The pattern is not limited to development immediately along major thoroughfares, and can also be found several sites deep into adjacent residential and assorted semi-urban areas.

Development Eras

Some of the automobile-oriented commercial along Market Street emerged before 1950. Greenfield Plaza, built in 1942, and Hanover Center, built in 1956, were the first of their kind. Late 1950s and 60s versions are found along close-in areas, expanding outward from downtown in a “leap-frog” pattern, with even more intensification occurring from the 1970s onward along state highways. Development is now reoccurring along these corridors as infill and site redevelopment that continues the same automobile-oriented development pattern.

Block and Street Patterns

The pattern is highly linear, with parcels of various



Market Street east of Lullwater Drive looking east



Aerial view of Market Street at Barclay Hills Drive

sizes individually arranged along streets with large rights-of-way and heavy traffic volumes. There is either no block structure or the block structure is dependent upon widely spaced roadways perpendicular to adjacent residential development. Connectivity between sites is often poor, except through parking lots that may occasionally join driveways. Access is often limited to the automobile, as many areas lack sidewalks and transit infrastructure. Pedestrians most often share store access with vehicular traffic, forcing people to negotiate their way through parked and moving cars to the entrance.

Lot and Building Configuration

Lots have widely varying shapes and sizes, with a common width being 200 feet. The pattern often occurs as long, narrow lots with buildings set far back from the street (generally from 60-200 feet). Structures can be oriented parallel or perpendicularly to the main thoroughfare. There is a highly inconsistent, undisciplined building pattern.

Architectural Styles

The initial wave of strip commercial development occurred in an “atomic age” or midcentury-modern style, mostly in the form of small shopping strips, motels, drive-up and family restaurants. Later versions introduced the metal shed with brick and stucco façade, drive-through banks and restaurants, large-scale automobile dealerships and large-format retail (often called “big box”). Noteworthy building types constructed more recently include medium-format pharmacy stores, café-type drive-through restaurants, and various showrooms for online and on-demand shopping.

Void Spaces & Redevelopment Areas

Many areas are experiencing disinvestment, resulting in vacant, abandoned, obsolete and underused properties. These corridors are often well-positioned for reuse and redevelopment because of the high volumes of automobile traffic that they continue to experience. A variety of suburban retrofit strategies have been successful in other cities, for example using “liner” buildings within a more shallow setback, introducing a more urban street network, introducing transit, and building new sites with most parking in the rear instead of the front.

Community Pattern Characteristics

Street & Block System	
Street Network	Major Thoroughfare, n/a
Block Shape	n/a
Block Size (Feet)	400-1,000+ (Superblock)
Intersection Density	Moderate-Very Low
Use of Alleys	Very Rare
Lots & Buildings	
Typical Lot Shape	Rectangular, Irregular
Avg. Lot Size	Varied
Lot Coverage	Moderate-Low
Front Setback	Very Deep (60-200 Feet)
Lot Uniformity	Low (Highly Varied)
Other	
Parking	Surface Lot in Front / Side
Sidewalk Availability & Connectivity	Low, Very Low
Dominant Land Uses	Retail, Office, Other
Supported Transportation Modes	



Sigmon Road



Market Street at Lennon Drive

8.16 Suburban Office & Business Areas

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

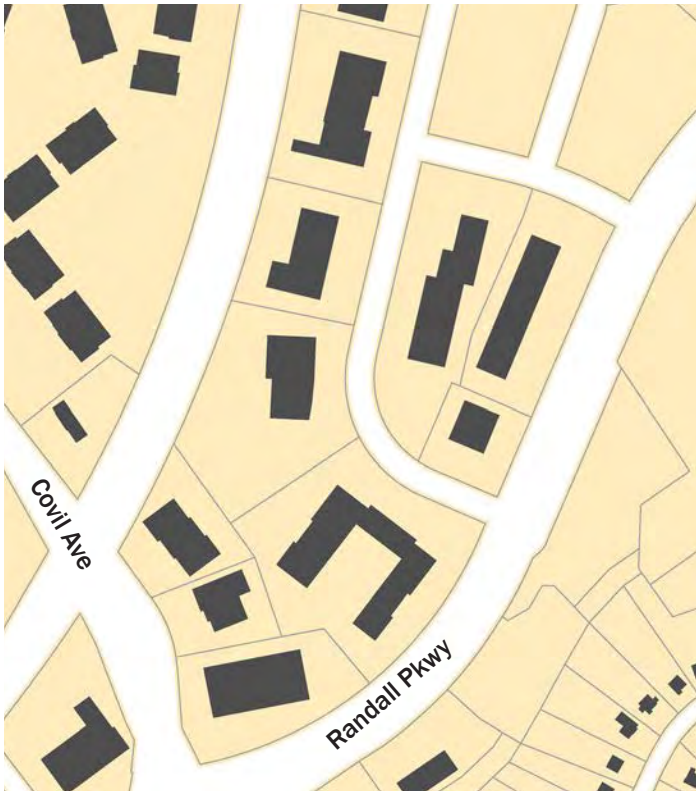
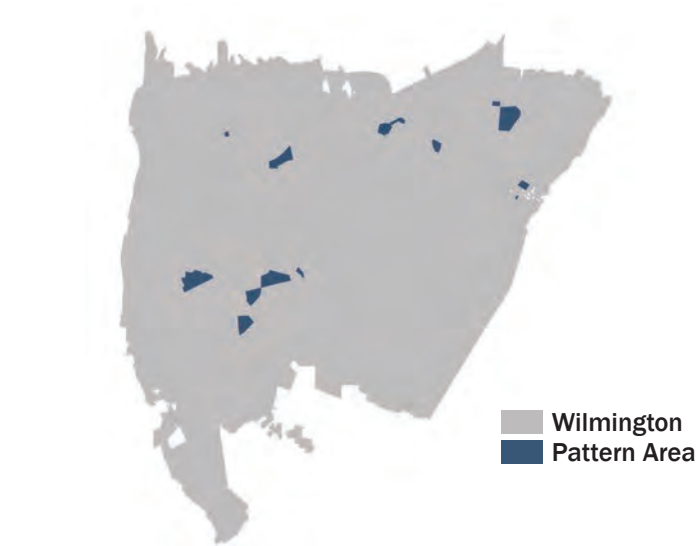
This is a campus-like development pattern composed of individual office buildings surrounded by surface parking lots. Building sizes range from moderate to large, as tenants often require contiguous floor plates to minimize disruption in business operations. The pattern also includes retail and other buildings that exhibit similar characteristics or are contained within the campus. Occurrences are found in the central southern portion of the city on Shipyard and Independence boulevards and Medical Center Drive, in areas of midtown on Randall Parkway and Racine and Cardinal drives, and along Military Cutoff Road in the northeast.

Development Eras

Suburban office parks have been developed since the 1950’s as competitors to the central business district. Due to advances in communication technologies and rapid suburban residential development, firms are less reliant on physical proximity to other offices to conduct business. Better office parks have evolved as master-planned, mixed-use developments incorporating a variety of ancillary uses such as residential, retail and recreational components.

Block and Street Patterns

Office parks can have two types of urban “block” structures. They may exhibit a distinct, modified rectilinear block structure bound by arterials and collector streets. Internal driveways and parking fields complement the pattern. Conversely, office parks may be placed organically along a collector street, often



Block Lot Building Street (Right-of-Way)



Racine Drive



Aerial view of Sir Tyler Drive

having the same cul-de-sac distribution found in their residential counterpart pattern area, contemporary suburban communities.

Lot and Building Configuration

Single-use buildings are placed in the center of their lots and surrounded on all sides by parking. The main structure may range from one- to six-stories, having a primary entrance and central elevator core. Driven by a high demand for employee and visitor parking, sites in this pattern display a low-to-moderate building coverage. Parking lots may be twice, or even three times, the footprint of the building.

Architectural Styles

Aesthetics are important for corporate and business identity, thus office buildings are often designed with a variety of materials, well-articulated facades, and monumental features. First generation office parks may be composed of modern-style buildings having plain stucco or concrete walls and/or facades composed of large, unadorned glass panels. Contemporary buildings are designed with a distinct base, middle, and top and incorporate a range of decorative materials.

Void Spaces & Redevelopment Areas

These areas may have opportunities for mixing uses, especially residential components to minimize travel time and engage in shared parking arrangements. Office buildings in other cities often use structured parking decks to accommodate high parking volumes close to urban areas or where driven by land values and/or financing. The arrangement of buildings from a campus-like configuration to a “main street” configuration is possible by situating buildings close to the street and providing active ground floor uses such as retail. Moreover, abundant surface parking lots can accommodate additional buildings, perhaps converting a collector street into a main street as described above. Aging lower-density sites closer to urban centers can be redeveloped or adaptively reused. Finally, multi-modal access to employment designations could reduce surface parking demand and peak flow traffic congestion. Facilities such as safe walking and cycling connections and transit access might be considered. Parking in these areas should be limited as they do not need to capture the drive-by demand of that of a typical retailer.

Community Pattern Characteristics

Street & Block System	
Street Network	Curvilinear Grid, Cul-de-sac
Block Shape	n/a
Block Size (Feet)	Large, Varied
Intersection Density	Moderate
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Irregular
Avg. Lot Size	Varied (2.5 - 8 Acres)
Lot Coverage	Moderate
Front Setback	Moderate-Deep; Varied
Lot Uniformity	Varied
Other	
Parking	Surface Lot around Building
Sidewalk Availability & Connectivity	Low, Low (Internal Circulation Provided)
Dominant Land Uses	Office, Industrial
Supported Transportation Modes	



NE corner of Independence Boulevard and S. 17th Street



Iron Gate Office Park on Independence Boulevard

8.17 Suburban Commercial Centers

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

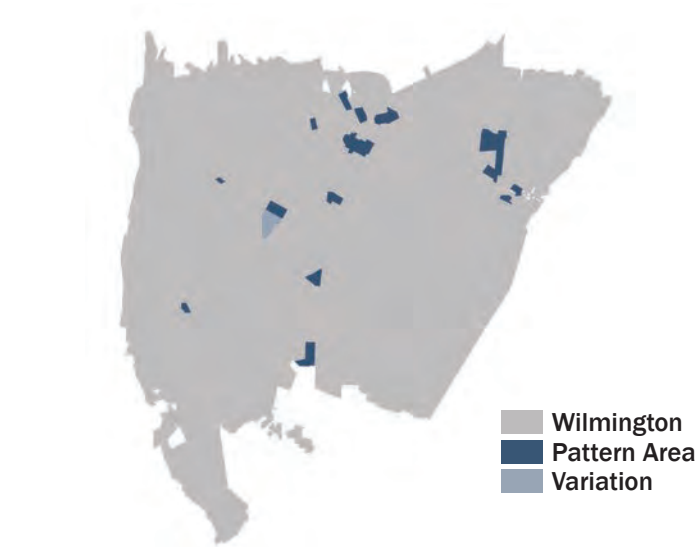
This pattern accounts for large shopping centers, shopping malls and other large-scale destinations having major retail anchors (e.g. Wal-Mart, Home Depot, Costco, Sears, J.C. Penny, etc), attached retail strips, and various types of out-parcels. These areas are more nodal than linear and have a regional-scale draw of people, making them distinct from automobile-oriented commercial strips. These can be found outside the 1945 corporate limits.

Development Eras

Long Leaf Mall opened in 1973; following decades of vitality and decline, it was renovated in 2009. Independence Mall opened in 1978, which capped the exodus of large department stores from downtown. University Centre was constructed in 1989 and expanded in 2001. Shopping centers with large big-box retailers continue to be developed, but are becoming more pedestrian-friendly and now use a variety of architectural features.

Block and Street Patterns

If any block structure exists, they are very large and bound by multi-lane regional thoroughfares (these are often called “superblocks.” Streets typically consist of busy arterials and interior circulation among parking lots. Sidewalks are generally exclusive to shop fronts, with walkable connections to adjacent areas limited in various ways, mostly by the absence of sidewalks.



Whole Foods shopping center adjacent to Independence Mall



Aerial view of University Commons at New Centre Drive and College Road

Lot and Building Configuration

Lot sizes are very large, reflecting single-entity ownership, with small outparcels located along the perimeter of the shopping center along thoroughfares. Centers will have major retail anchors, often 60,000-90,000 square feet in size. Main buildings are often deeply set back off the street to allow a large parking field; they can face the main corridor or be oriented internally around the parking lot.

Architectural Styles

This pattern varies widely in architectural style. Independence Mall is a typical mall format, with department stores as entry “bookends” leading to indoor retail strips and various kiosks. The style of Independence Mall is considered to be vintage modern. More recently constructed centers employ neo-traditional and coastal design styles.

Void Spaces & Redevelopment Areas

Ample parking is the hallmark of these areas, and much land is devoted to surface parking. Structured parking would allow for higher intensity land uses and taller infill buildings, especially vertical mixed-use buildings. These areas function as disconnected islands, with large gaps in the urban fabric and a lack of connecting streets to adjacent residential and commercial areas. Vehicles are typically forced onto major thoroughfares to move between centers, adding to congestion. Aging and under-performing retail centers can be redeveloped as mixed-use centers, especially those which are well located. Connections to surrounding residential and other land uses should be encouraged to promote walkability and reduce automobile trips on major thoroughfares.



K-mart parking lot

Community Pattern Characteristics

Street & Block System	
Street Network	Superblock
Block Shape	Rectangular, Varied
Block Size (Feet)	Very Large (1,000+)
Intersection Density	Moderate-Low
Use of Alleys	Yes (Rear Loading Zones)
Lots & Buildings	
Typical Lot Shape	Rectangular
Avg. Lot Size	Varied (5-30 Acres)
Lot Coverage	Moderate
Front Setback	Very Deep (150-500 Feet)*
Lot Uniformity	Varied
Other	
Parking	Large Surface Lot in Front
Sidewalk Availability & Connectivity	Low, Very Low Internal Circulation Provided
Dominant Land Uses	Retail, Restaurant
Supported Transportation Modes	



Pattern Variation: Regional Indoor Mall

Malls have major department store anchors as “bookends” to indoor rows of smaller shops. The large structures are surrounded by surface parking and outparcels. Most shops face internally, but some may have outside facades near entrances.



8.18 Neo-traditional Suburban Town Centers

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

A town center is a walkable and integrated open-air, mixed-use development that is organized around a clearly identifiable public realm. It is usually anchored by major destination retail, dining, and other uses such as office and residential. Often the development includes at least one other use, such as entertainment, hospitality, and/or cultural. The mix of uses tends towards a heavy focus on retail, as they represent an evolution of the indoor shopping mall. These developments seek to mimic the principles of a traditional downtown to fit a suburban setting.

Development Era

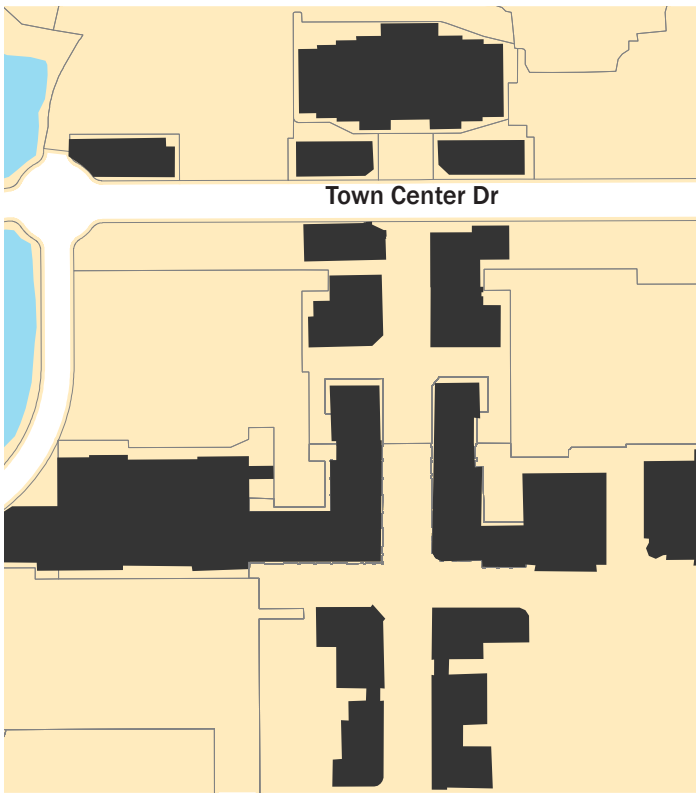
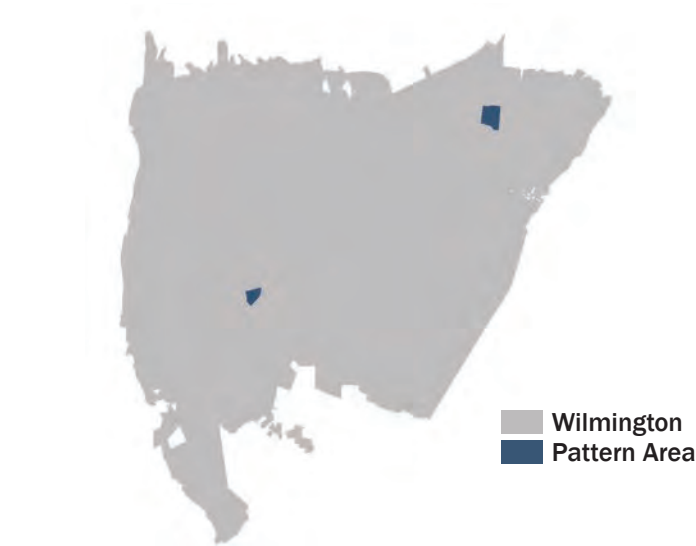
Mayfaire began construction in 2002 as Wilmington’s first master-planned, mixed-use development and continues to be built out. Similar developments are planned for other areas of town (e.g. Autumn Hall, Fairfield Park, Riverlights), as this is an increasingly popular development model.

Block and Street Pattern

Streets are generally organized as a slightly-modified rectilinear grid, especially along the main shopping streets intended to resemble traditional American main streets. Parts of Mayfaire, for example, exhibit an urban-scale block structure generally measuring 310 x 340 feet, but the development uses a variety of curvilinear street configurations moving away from its shopping core. Streetscape elements in the core often include wide sidewalks, landscaping, furniture, decorative lighting, and on-street parking, all of which are meticulously maintained and programmed as private development. While featuring a walkable core, these developments still provide suburban quantities



Mayfaire Town Center



Block Lot Building Street (Right-of-Way)



Aerial view of Mayfaire Town Center

Town Center Model

The town center development model is being used throughout the United States to capture increasing consumer demand for walkable places in suburban settings. Mayfaire represents one of the many possible configurations for these development patterns, especially in terms of mixing of uses, proximity to urban areas, and the arrangement of streets, driveways, pathways, and parking.

- Here are five examples of this development model in North Carolina and South Carolina:
- Birkdale Village (Huntersville, NC)
 - Biltmore Park (Asheville, NC)
 - North Hills Mall (Raleigh, NC)
 - The Market Common (Myrtle Beach, SC)
 - Southern Village (Chapel Hill, NC)



Bayshore Town Center, Whitefish Bay, MI

of parking. Parking lots are sometimes connected to the main street by alleys and courtyards. Street design features outside of the core often include roundabouts and suburban-type parking lot driveway characteristics.

Lot and Building Configuration

These development are usually composed of only a few very large parcels controlled by a single entity. Buildings along the main shopping streets are typically pulled up to the sidewalk, creating an urban-scale pedestrian enclosure. These developments have both single and mixed-use buildings that vary in height from one-to-three stories. Buildings address the street with articulated facades, balconies, windows, and multiple ground-floor entries. Some buildings front onto both the main street and the surface parking area behind it. It is also common for building corners to be accentuated using rounded facades and increased height.

Architectural Styles

Community Pattern Characteristics

Street & Block System	
Street Network	Rectilinear Grid, Curvilinear
Block Shape	Varied
Block Size (Feet)	Varied
Intersection Density	High-Moderate
Use of Alleys	Some; Pedestrian Alleys
Lots & Buildings	
Typical Lot Shape	Varied
Avg. Lot Size (Sq. Ft.)	Varied
Lot Coverage	Varied
Front Setback	Abrupt (0-15 Feet)*
Lot Uniformity	n/a
Other	
Parking	On-street, Behind Buildings*
Sidewalk Availability & Connectivity	Robust, Moderate (Some neighbor connections)
Dominant Land Uses	Commercial, Mixed-use
Supported Transportation Modes	

*Does not include outparcels and parking lots.

Buildings often employ a range of styles along the street, creating visual interest and giving each retail location a distinct identity. Many developments employ neo-traditional style architecture that resemble downtowns. Single-story buildings are often designed to appear as two story structures.

Void Spaces & Redevelopment Areas

Neo-traditional town centers often lack walkable connections to surrounding development, resulting in a public street orientation that is primarily for automobiles. Large surface parking lots often separate building entrances from the public street and landscaping is required to buffer parking along the street. In spite of these shortcomings, these new developments hold considerable promise in terms of encouraging livelier places and in facilitating transit use and non-motorized travel.

8.19 Neighborhood Industrial Transition Areas

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

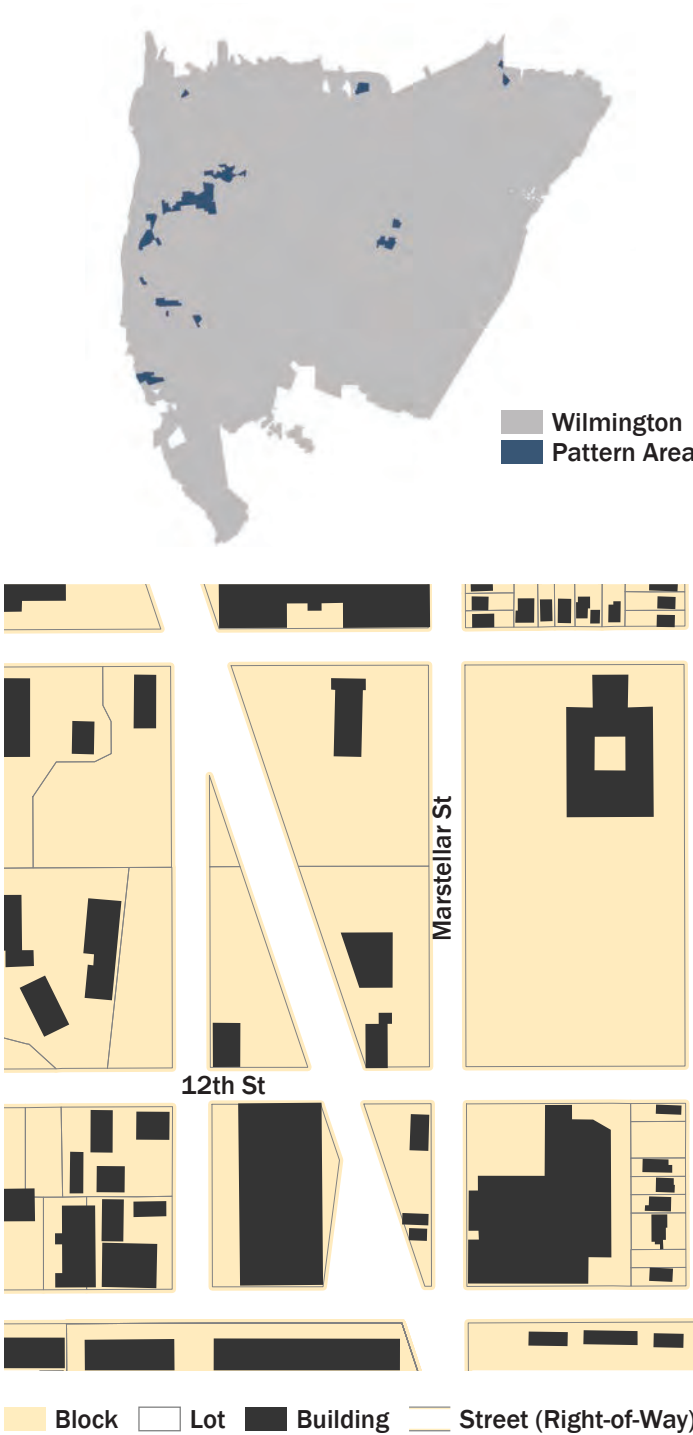
Some moderate to small-scale industrial operations have been developed within or along the edges of single-family neighborhoods, particularly the traditional urban neighborhood pattern area. Development assumes the same block structure as the surrounding fabric, but differs greatly in building scale. These are typically full-block industrial facilities that take on a variety of forms, from low-lying brick warehouses to large metal sheds. The distribution and other functions inherent with this use can have various effects on surrounding neighborhoods, including absence of street life during non-work hours, degraded infrastructure, abrasive street edges, and vacant land and buildings. This distinct pattern occurs along the southern edge of the Greater Downtown, from Greenfield Lake to 17th Street and Wrightsville Avenue, and are scattered throughout the traditional urban neighborhood and assorted semi-urban pattern areas.

Development Eras

The pattern area generally developed between 1935 and 1955 in correlation with World War II and development of the Port of Wilmington. The strategic location along a major rail line and the port was ideal for these structures at that time. Instances of this pattern along Wrightsville Avenue developed much later, generally from 1960 to 1975.

Block and Street Patterns

Block patterns generally follow the 330 x 390 foot structure of the historic city grid except for two main deviations: the diagonal interruption of a major railroad line and the consolidation of two to four blocks at



Warehouse on S. 5th Avenue



Aerial view of rail corridor between 10th and 13th streets

specific locations. This results in a less connected street network, triangular blocks, and some block-faces that measure up to 850 feet in length. The edge conditions of streets vary widely, with residential portions having sidewalks directly across from industrial sites that have none. In many cases, large industrial blocks have long, poorly maintained sidewalks lined with a chain-link fence or a long, blank walls. Railroad infrastructure is a defining street element in most locations.

Lot and Building Configuration

Lots are generally rectangular and inconsistently sized; some measure 22,000-40,000 square feet, while full-and consolidated-block sites can measure up to ten acres. Main buildings will be directly oriented towards the street and have shallow setbacks (0-25 feet). Tall single-story buildings commonly have very high lot coverage, with the exception of the rear loading, parking, and outdoor storage areas. Building footprints range in size from 3,000-150,000 square feet and are often situated irregularly on their lots.

Architectural Styles

Industrial buildings from the postwar era can have a distinct architectural style and many are historic. These generally have articulated brick walls, a distinct main entry with a large awnings, glass doors and windows, an entry plaza, and often large, free-standing metal lettering. Much of the remaining building edge may include large garage doors and covered loading docks.

Void Spaces & Redevelopment Areas

The abundance of obsolete industrial structures present unique redevelopment opportunities. In some cases, architecturally interesting structures lend themselves to adaptive reuse and higher-density or intensity on-site infill development surrounding the principal structure. These areas typically have on-street parking and are within a short walk of existing residential areas

Community Pattern Characteristics

Street & Block System	
Street Network	Interrupted Rectilinear Grid
Block Shape	Rectangular, Square
Block Size (Feet)	330 x 390-850
Intersection Density	High
Use of Alleys	Some
Lots & Buildings	
Typical Lot Shape	Rectangular
Avg. Lot Size	Varied (0.25-10 Acres)
Lot Coverage	High
Front Setback	Shallow (0-25 Feet)
Lot Uniformity	Low
Other	
Parking	On-Street; Front/Side of Lot
Sidewalk Availability & Connectivity	High, Moderate
Dominant Land Uses	Industrial, Residential, Other
Supported Transportation Modes	



Warehouse at corner of 2nd and Willard streets



Century Mills building on Greenfield Street

8.20 Hospital & Medical Office Transition Areas

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

The development outcome of growing medical facilities in Wilmington, these transitional areas are dominated by medical and medical-related uses, including offices, laboratories, clinics, pharmacies, and senior care facilities. Demand for such medical-related business is so high that single-family homes and other buildings not intended for office uses are being repurposed. The pattern area includes insertions of multi-family development, automobile-oriented retail and single-family housing along the periphery. Single-family neighborhoods may not have direct street connections to the pattern area. Most structures, including banks and office buildings, are generally single story. Surface parking and deep building setbacks are defining street characteristics. The primary location of this pattern area is along 17th Street at New Hanover Regional Hospital, with the area between Oleander Drive and Wrightsville Ave at Cape Fear Hospital exhibiting similar characteristics.

Development Eras

New Hanover Regional Medical Center was built in 1966, with the surrounding development occurring from the early 1970's through today. Infrastructure investments in the early 1990s such as Medical Center Drive and others have facilitated expansion of the pattern area. Growth in the medical industry continues to drive development.

Block and Street Patterns

Blocks are very large due to infrequent and disconnected street networks. Private or interior circulation connecting surface parking is a common



Medical office on Delaney Avenue



Aerial view of S. 17th Street at New Hanover Regional Medical Center

movement system. Block patterns are highly inconsistent. Some rectilinear blocks exist among curvilinear street networks, many of which connect only at “T” intersections. Disconnected interior circulation and driveways are more dominant than a hierarchy of public streets. Dead-end streets and “superblocks” are very common. Street edge conditions are a mix of manicured walkways (less common) and curbed parking islands with driveways and no sidewalk (most common).

Lot and Building Configuration

Like the block structure, lots and their buildings vary widely in shape and size. The smallest common lot dimension is 100 x 200' feet with other common lot dimensions ranging from 300-600 feet in width and 300-450 feet in depth. Building orientation varies due to large, multi-structure office parks, but a common situation is one in which a building faces both the street and side parking lot. Setbacks from the public street are very deep in most cases (80-200 feet). Lot coverage is proportional to the parking lot that typically surrounds the building. Internal connections may be present through shared parking lot driveways.

Architectural Styles

Office buildings of the Neo-colonial, International, Modern, and Shed style are highly common. Contemporary-modern office structures, having more varied materials can also be found. Strip commercial buildings, hotels, and drive-through restaurants are dominant along corridors.

Void Spaces & Redevelopment Areas

Inconsistent street networks can create unused parcels of land. Automobile parking remains in high demand, but collections of small lots might be combined in a structured or shared parking scenario. Aging collections of automobile-oriented buildings or under performing office parks may present opportunities for more intense redevelopment. New Hanover Regional Medical Center and Cape Fear Hospital will be challenged to find adjacent land for expansion, especially without the use of structured parking.

Community Pattern Characteristics

Street & Block System	
Street Network	Curvilinear Grid, Thoroughfare
Block Shape	Various
Block Size (Feet)	330-600 x 800-1,200+
Intersection Density	Moderate
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Rectangular, Irregular
Avg. Lot Size (Sq. Ft.)	15,000-120,000+
Lot Coverage	Varied
Front Setback	Moderate-Deep
Lot Uniformity	Low
Other	
Parking	Surface Lot, Parking Deck
Sidewalk Availability & Connectivity	Low-Moderate, Low
Dominant Land Uses	Medical Office
Supported Transportation Modes	



Magnolia Office Park on Oleander Drive



Hospital Plaza Drive

8.21 Large-scale Industrial Areas

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

Large-scale industrial areas are mostly found along the Cape Fear River and the northern edge of the city (near the Wilmington International Airport, for example). These areas are composed of structures that can drastically exceed human scale, whether they are 250,000-square foot distribution facilities or more moderate-sized warehouses such as those found along Raleigh Street at Carolina Beach Road. These areas are geared toward heavy machinery and equipment and are designed to accommodate large volumes of freight traffic. They contain no housing.

Development Eras

The North Carolina General Assembly approved the issuance of \$7.5 million in bonds for construction and improvement of state’s seaports in 1949. Terminals equipped to handle oceangoing vessels were completed at the Port of Wilmington in 1952. Industry began development along the north side of the city in the early 1960s. This marked a shift in industrial production from older brick warehouses to large metal sheds, many with low-profile, windowed front offices composed of brick or cinder block.

Block and Street Patterns

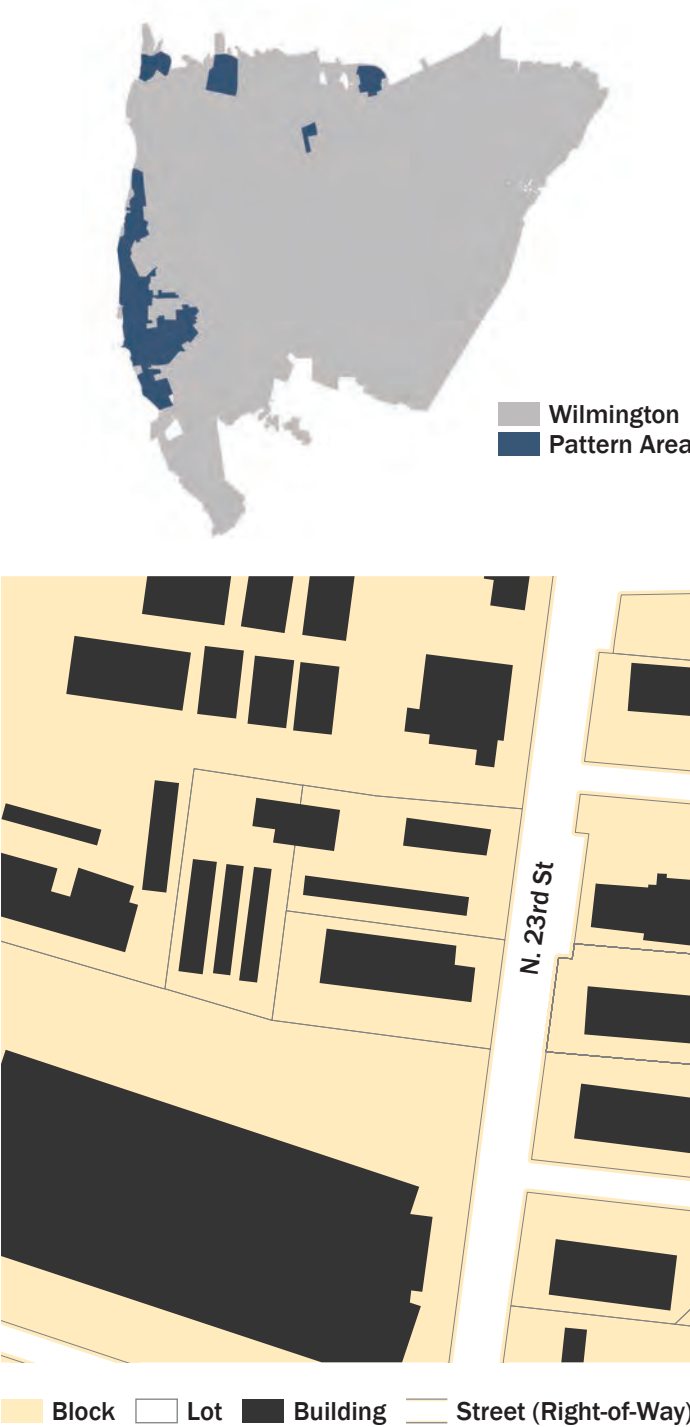
No coherent block pattern exists in these areas; however, the Port of Wilmington and other areas have an interior circulation system of warehouses constructed in a rectilinear pattern that resembles a block structure. The sizes of industrial parcels are comparable with or larger than blocks in the traditional urban neighborhoods pattern area (330 x 390 feet). Streets in these areas do not typically accommodate pedestrians, some smaller sites situated closer to residential and commercial areas may have sidewalks.



Industrial site on N. 23rd Street



Aerial view of N. 23rd Street



Lot and Building Configuration

Large sites are situated along arterial roadways that facilitate freight movement and are designed to accommodate turns and loading. Buildings can have deep setbacks and typically do not relate directly to the street, but may include large front lawns and surface parking lots between the building and the street. Most often, the streets are faced with large blank walls, garage doors, loading docks, shrubbery, and/or a variety of mechanical and other facilities such as ventilation, storage yards, dumpsters, etc.. Moreover, sites are internally-oriented and often separated from the public realm by security fences.

Architectural Styles

These areas are composed of warehouses ranging from very large to moderate-sized, mostly constructed from metal. Tank farms, gantry cranes, and miscellaneous structures and facilities are prevalent in many areas.

Void Spaces & Redevelopment Areas

- Large tracts of undeveloped land surround these areas, often used as a transition or buffer to separate industrial from residential land uses.
- Numerous potential brownfield sites exist in these areas, with some located adjacent to the Cape Fear River.
- These areas include large swaths of industrial uses, expansive storage yards for heavy machinery, and very wide transportation corridors (especially along railways).
- Vacant metal sheds may accommodate new industrial uses.



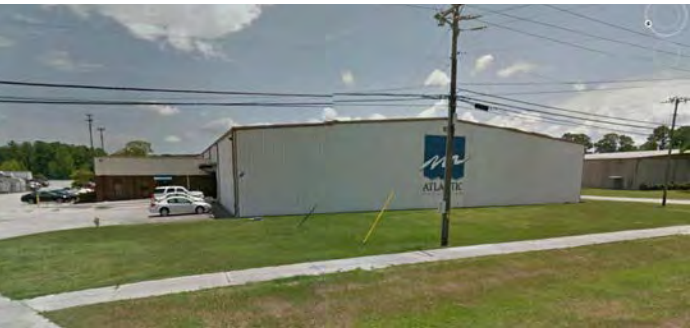
Port of Wilmington entrance at Shipyard Boulevard

Community Pattern Characteristics

Street & Block System	
Street Network	Thoroughfare
Block Shape	n/a
Block Size (Feet)	Superblock (1,000+)
Intersection Density	Very Low
Use of Alleys	None
Lots & Buildings	
Typical Lot Shape	Irregular
Avg. Lot Size (Sq. Ft.)	Very Large
Lot Coverage	Moderate-High
Front Setback	Varied
Lot Uniformity	Varied
Other	
Parking	Surface Lot
Sidewalk Availability & Connectivity	Rare, Low (if Available)
Dominant Land Uses	Industrial
Supported Transportation Modes	



Industrial site on River Road



Industrial warehouse on N. 23rd Street

8.22 Academic/Institutional Campus

- Urban Core
- Urban
- Semi-Urban
- Suburban
- Semi-Rural
- Other

This pattern area is intended to capture various academic, civic, religious, and other institutional campuses that have a distinct site configuration and building placement. These are usually composed of large, often symmetrical and monumental-looking buildings on large lots. There may also be several buildings arranged in close proximity as part of a campus, along with various support structures. Buildings range from one to three stories and are often organized around a pedestrian circulation network that connects disparate buildings together. Large amounts of open space are common for gathering, athletic facilities and informal, unbuilt areas.

Development Eras

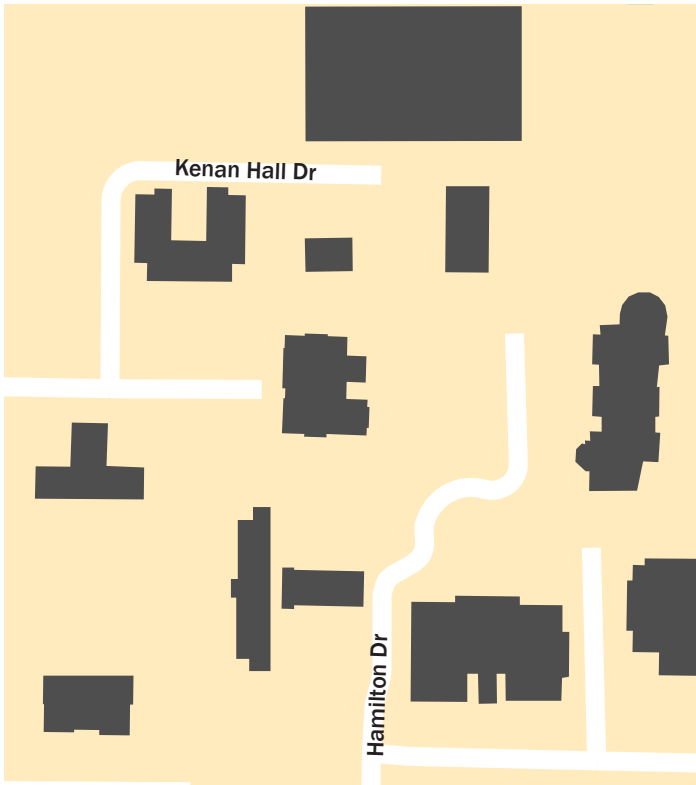
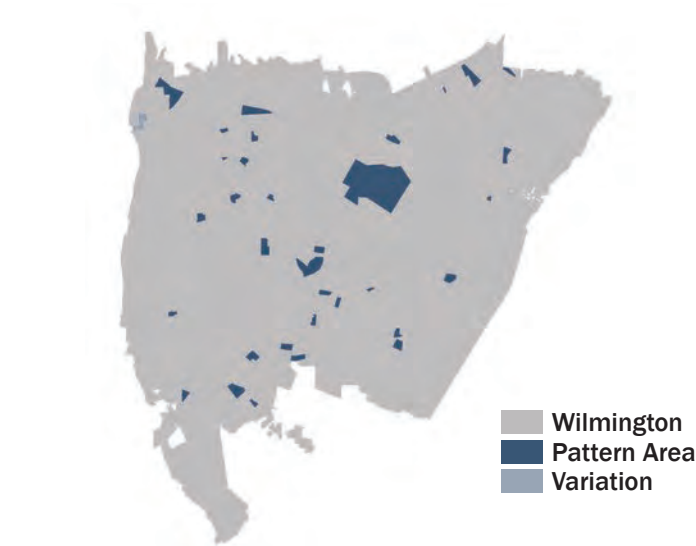
The era in which these patterns were developed varies widely; however, most of the suburban academic and institutional campuses were built after 1950. UNCW is the largest example of this pattern area. It was first constructed in 1947 as Wilmington College and has undergone various expansions since. Notably, this pattern area does not include the downtown campus of Cape Fear Community College, as it does not reflect the suburban development character typified by these institutions. It is mentioned on the next page, however, as a pattern variation

Block and Street Patterns

The internal driveway and pedestrian circulation network may form areas that resemble blocks, but this is only found when several buildings form a campus (such as UNCW and others). The pedestrian network between buildings may include covered walkways and opens space courtyards but pathways connecting buildings to destinations outside of the campus are



UNCW campus



Block Lot Building Street (Right-of-Way)



Aerial view of UNCW campus

infrequent. Most often, sites are accessed from a thoroughfare or collector street and internal circulation is curvilinear with multiple driveway connections. Surface parking is a dominant feature.

Lot and Building Configuration

Lots and buildings are very large in comparison to their surroundings and building to lot coverage is low to moderate. Symmetrical site layouts are common. Many American campuses are designed in a Jeffersonian style, where structures are grouped around grand walkways, especially where such a walkway terminates at a main building entrance. Buildings can also be organized organically within a site, having various orientations not dependent on any exterior street structure.

Architectural Styles

Neoclassical, Jeffersonian, Modern and Neo-traditional styles are common. Buildings are frequently symmetrical with a main entrance. Suburban schools are commonly single-story, modern-style structures. Red brick construction, columns, and vertical features are also common.

Void Spaces & Development Opportunities

- These sites often possess a great deal of excess land available for on-site infill development. Expansions of existing use or introduction of new uses could be part of a mixed-use development.
- Connectivity between these sites and their surroundings is usually limited for security concerns, but their large size and high usage at specific times warrant better access for all modes of transportation as appropriate.
- UNCW, in particular, lacks a commercial main street often found adjacent to other campuses in North Carolina (examples include: UNC Chapel Hill – Franklin Street, UNC Greensboro – Tate Street, and NC State University – Hillsborough Street).



Roland-Grise Middle School

Community Pattern Characteristics

Street & Block System	
Street Network	Thoroughfare
Block Shape	n/a
Block Size (Feet)	n/a
Intersection Density	Moderate
Use of Alleys	No
Lots & Buildings	
Typical Lot Shape	Varied
Avg. Lot Size (Sq. Ft.)	Varied
Lot Coverage	Moderate-Low
Front Setback	Varied
Lot Uniformity	Low
Other	
Parking	Lots Internal to Development
Sidewalk Availability & Connectivity	Moderate, Moderate (Internal Circulation Provided)
Dominant Land Uses	Academic, Religious
Supported Transportation Modes	



Pattern Variation: Urban Academic Campus

Some instances of this pattern area can be found in more urban areas of the city, where buildings occupy more of the lot, are usually taller (3-5 stories), and often use structured parking facilities. New Hanover High School and Cape Fear Community College are good examples of this pattern area variation. UNCW has also recently constructed a parking deck, but its campus is not considered to be urban.



Aerial view of Cape Fear Community College downtown campus