



# CREATE WILMINGTON COMPREHENSIVE PLAN

## Growth Factors Report

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**Growth Factors Report**

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Foundations Report

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Growth Strategies Report

ADOPTED 3/1/2016

**W**<sup>CITY OF</sup>  
**WILMINGTON**  
NORTH CAROLINA



## City Council

Mayor Bill Saffo

Mayor Pro-Tem Margaret Haynes

Neil Anderson

Paul Lawler

Kevin O'Grady

Laura Padgett (former member)

Charlie Rivenbark

Earl Sheridan

## City Shape and Motto

"Persevere" is Wilmington's motto, established and written onto the official seal in 1866. The blue shape found on the back cover of this document reflects the general boundary of the city; it is used frequently throughout Comprehensive Plan Box Set.

# How to Use the Comprehensive Plan Box Set

## 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.

Electronic readers click here to view or download this document.

3

### 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.

Electronic readers click here to view or download this document.

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 policies.

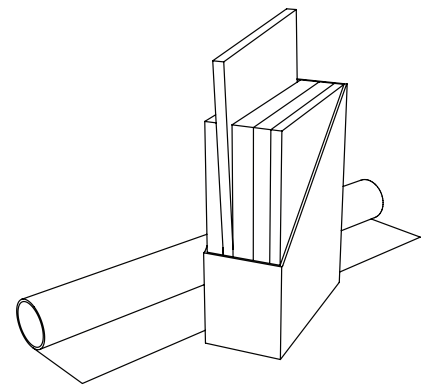
Electronic readers click here to view or download this document.

5

### Growth Strategies Report

A forward looking document that describes the aspirational growth patterns of the city through specific growth strategies. This document works in concert with the Growth Strategies Maps and Policies.

Electronic readers click here to view or download this document.



The Box Set includes 5 documents and a set of 5 map posters.

## Find Your Way Around

Cross references are provided throughout the entire box set. Cross references identify related information within another box set component, within the same box set component, or valuable information outside of the box set. Identified cross references are not exhaustive as other relationships may also exist.

### Three Types of Cross References



#### Box Set Cross Reference

This symbol is used to point you to a different box set component, as described above.



#### Document Cross Reference

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



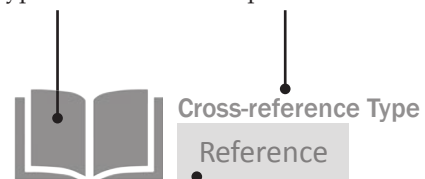
#### External Resource

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

### How it Works

The color of the symbol indicates the type of reference.

The name of the reference is provided here.



This is the location within the document or box set or the name of the external resource.

# 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 and 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 transportation, along with other modes of transportation, should be explored as valid alternatives to automobile transportation, 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 County and surrounding towns and counties, is critical to Wilmington's and the region's success. Cooperative relationships with the University of North Carolina Wilmington and Cape Fear Community College, as well as the public school system, state ports, and utility providers will help everyone flourish.

### Topics Covered:

- Leadership and 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; the future will include a significant level of infill and redevelopment. Envisioning suitable infill and redevelopment and optimizing existing development will be critical to the 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 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 the built environment should enhance the character of the 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 technical standards
- Greenspace
- Infill
- Redevelopment
- Connecting land use and transportation
- Placemaking



### Nurturing our Community

Environmental sustainability is at the core of Wilmington’s future. Natural resources are a major factor in attracting residents and visitors to the area; balancing accessibility and protection of these resources will be a challenge. How interactions with the natural habitat, from parks, water, and open spaces, to locally-grown agriculture, to protecting water quality to solid waste disposal are managed will be critical to Wilmington’s future success.

#### Topics Covered:

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

Wilmington was first surveyed in 1769 and was approximately 140 acres, centered around the intersection of Front and Market Streets. Today, Wilmington is more than 52 square miles and is the urban center of a three-county region.

The Growth Factors Report is a snapshot of what Wilmington looks like today and tells the story of how the city has evolved over time. This 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. This report does not contain policies but is to be used as a reference document.

Maps, graphs, and charts are used throughout this report and support the policies and growth strategies maps report. Maps of existing conditions and various factors related to Wilmington’s growth over time are presented. This information is used to inform the other documents in the plans box-set. The Growth Factors Report is intended to provide a “snapshot” of existing conditions, not predict the future.



List of Contributors

Page 156

A complete list of contributors to this project, including the Comprehensive Plan Steering Committee and city staff is available at the end of this document.

## Planning Process



This document may be considered a “background report”. Along with the public input described in the Foundations Report, the analysis and information from this document was used to develop polices and growth strategies.



Box Set Cross Reference

Foundations Report

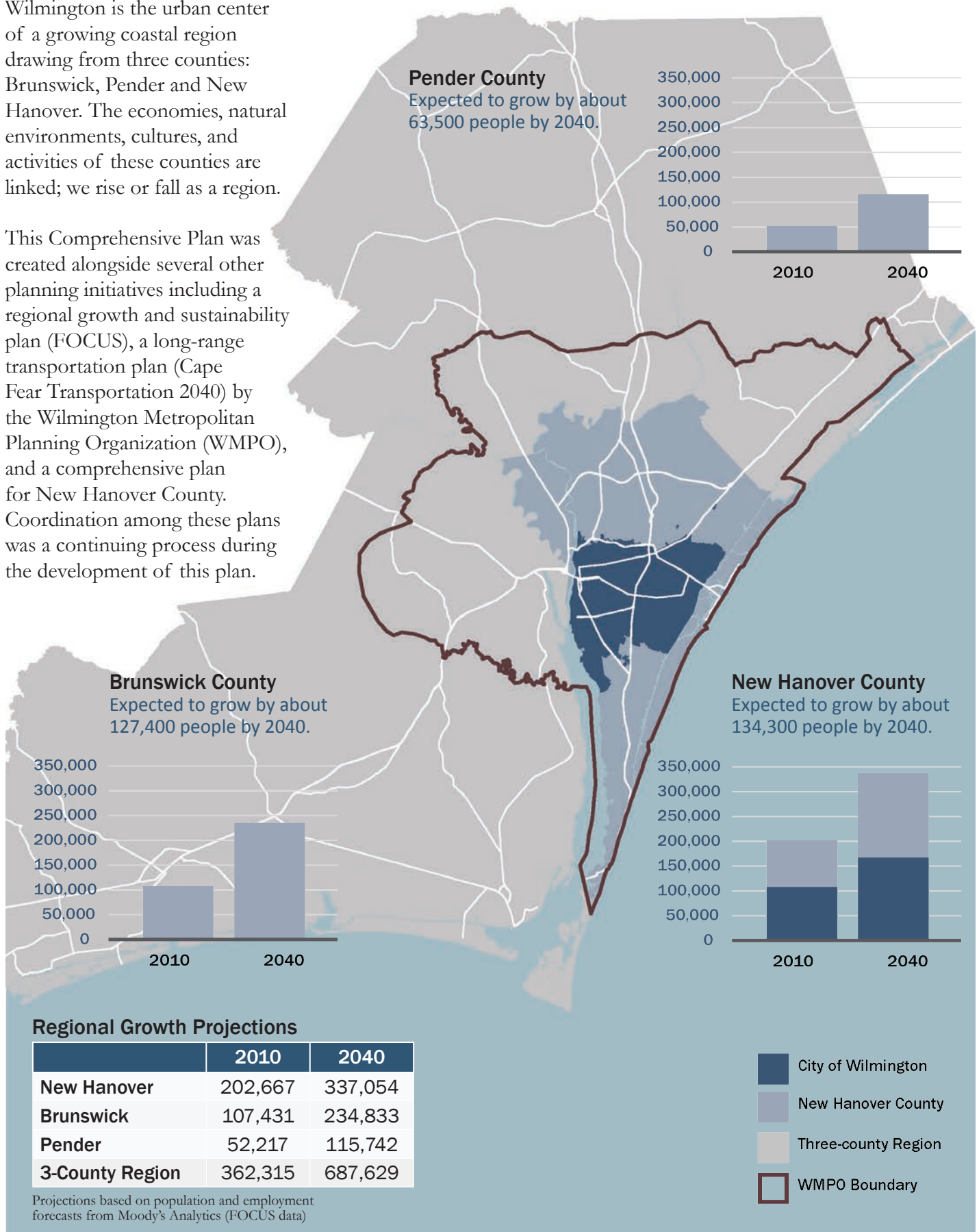
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# The Wilmington Region

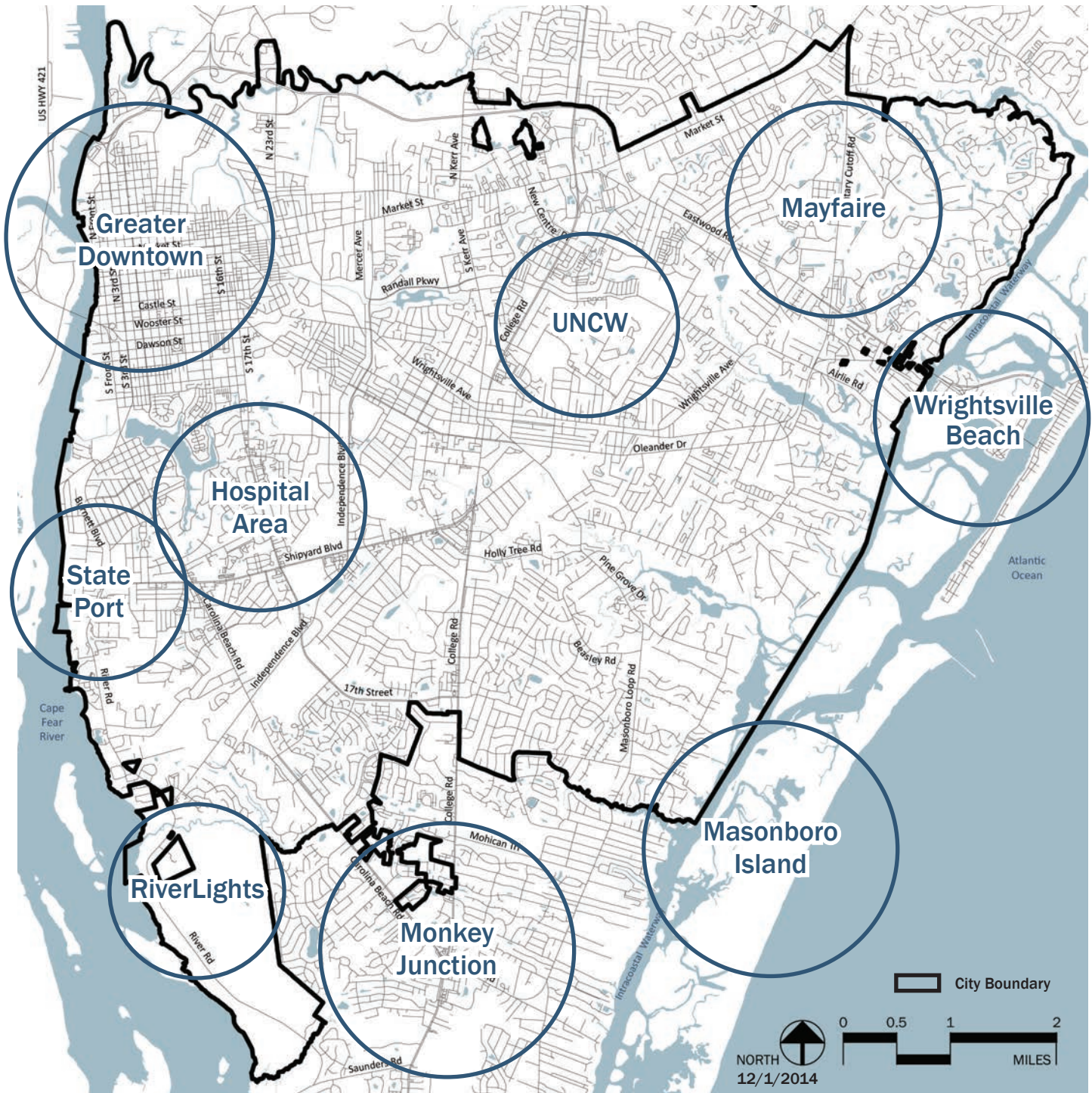
Wilmington is the urban center of a growing coastal region drawing from three counties: Brunswick, Pender and New Hanover. The economies, natural environments, cultures, and activities of these counties are linked; we rise or fall as a region.

This Comprehensive Plan was created alongside several other planning initiatives including a regional growth and sustainability plan (FOCUS), a long-range transportation plan (Cape Fear Transportation 2040) by the Wilmington Metropolitan Planning Organization (WMPO), and a comprehensive plan for New Hanover County. Coordination among these plans was a continuing process during the development of this plan.





# Map of Wilmington



This is a map of Wilmington’s current corporate limits, major and minor streets, waterways, and general areas of reference. The city limits reach from the Cape Fear River on the west to the Atlantic Intracoastal Waterway on the east. Wilmington’s corporate limits include a total of 52.9 square miles, or 33,858 acres.



## Shape of the City

This is a rough outline of Wilmington. It is used to illustrate a variety of information throughout this report and other components of the Comprehensive Plan.



# 1

## Wilmington's Growth

- 1.1 Growth in Population
- 1.2 Growth by Transportation Era
- 1.3 Growth by Annexation
- 1.4 Growth Trends by Decennial Census
- 1.5 Growth in Context
- 1.6 Population Projections

### **Downtown Wilmington - 1962**

This image is taken from Wilmington's 1962 *Future Land Use Plan*. Much has changed since that plan was created, as much will continue to change after this Plan is adopted. The Growth Factors Report is intended to provide a "snapshot" of existing conditions.

Source: City of Wilmington



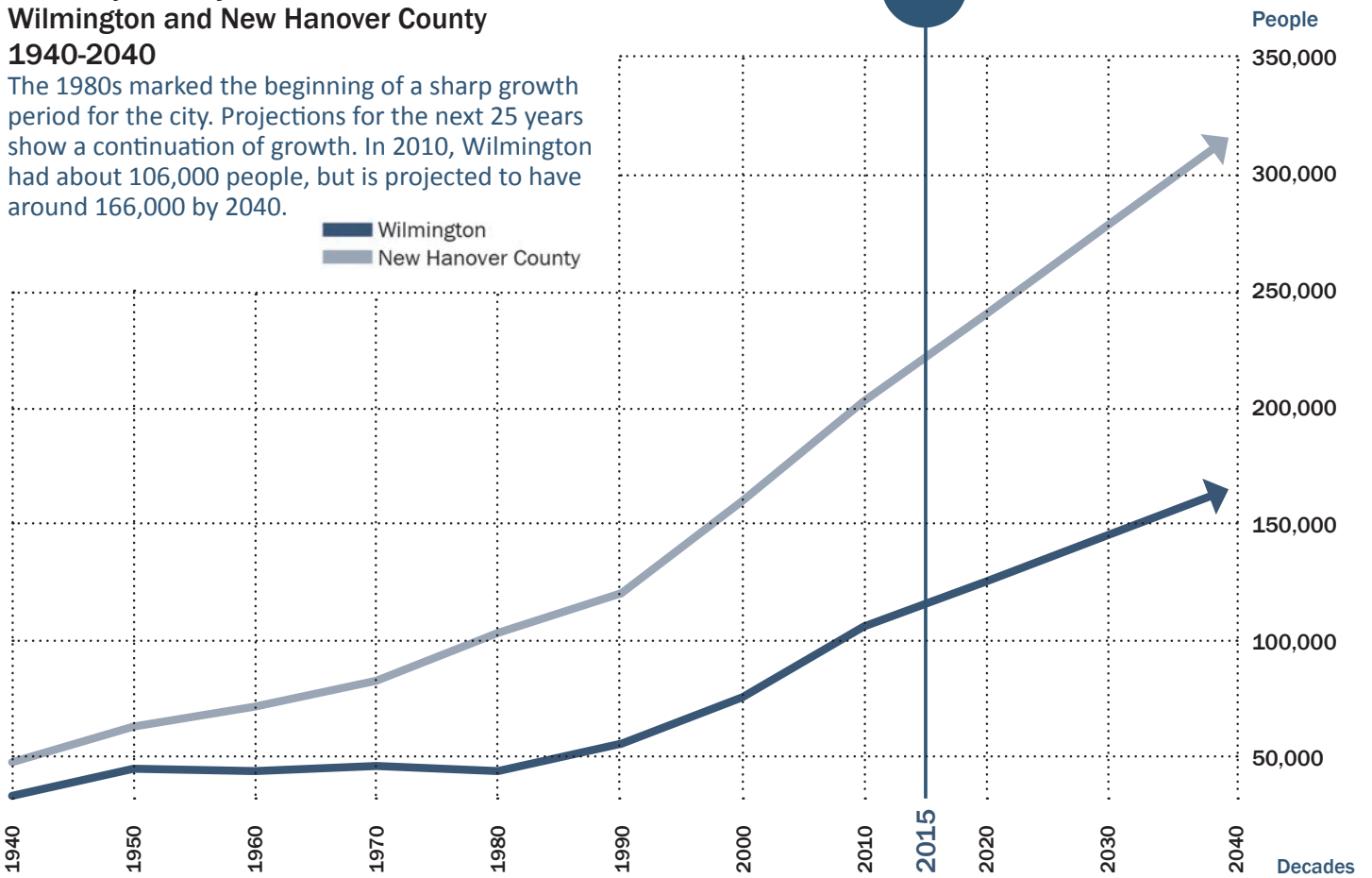
“You never really know what is coming. A small wave, or maybe a big one. All you can really do is hope that when it comes, you can surf over it, instead of drown in its monstrosity.”

— Alysha Speer

# 1.1 Growth in Population

## Historic Population Growth with 25-year Projection Wilmington and New Hanover County 1940-2040

The 1980s marked the beginning of a sharp growth period for the city. Projections for the next 25 years show a continuation of growth. In 2010, Wilmington had about 106,000 people, but is projected to have around 166,000 by 2040.



### Past

Development practices in the 1940s and beyond were typically sprawling, low-density, and automobile-centric.



### Present

Currently developers are using infill development practices to make the most efficient use of available land.



### Future

A focus on inward and upward development will be necessary, at a higher built density to accommodate projected growth.

Source (All Images): City of Wilmington



## 1.2 Growth by Transportation Eras

The shape, size, look and feel of the city, or its development pattern, is heavily influenced by dominant modes of transportation used throughout its history. The development and evolution of Wilmington’s urban form can be divided into four distinct periods based upon the predominant form of mobility used at the time and other significant city-building investments. Each of these periods has a different design focus that changes the orientation of development and the resulting experience of place.

1



### Foot, Boat, and Horse (circa 1739 - 1892)

Wilmington began as a port city, focused on maritime transportation, horse and carriage, and traveling on foot. The point of foundation for the city’s growth is the historic core of downtown, known for its walkable street network.

2



### Streetcar (circa 1892 - 1940)

By 1900, the city had a robust network of streetcars, mass transit running along rails in the middle of the street. Streetcar-era suburbs were designed and platted in conjunction with the streetcar system that initially ran from downtown to Wrightsville Beach.

3



Source (All Other Images):  
Lower Cape Fear Historical Society

### Shipbuilding and State Port (circa 1918 - 1945)

World War II and the relocation of the state port in mid-1900s fueled a development boom south of Greater Downtown. This growth is responsible for the expansion of Sunset Park and other neighborhoods, port-related infrastructure, and in large part, the roadway network.

4



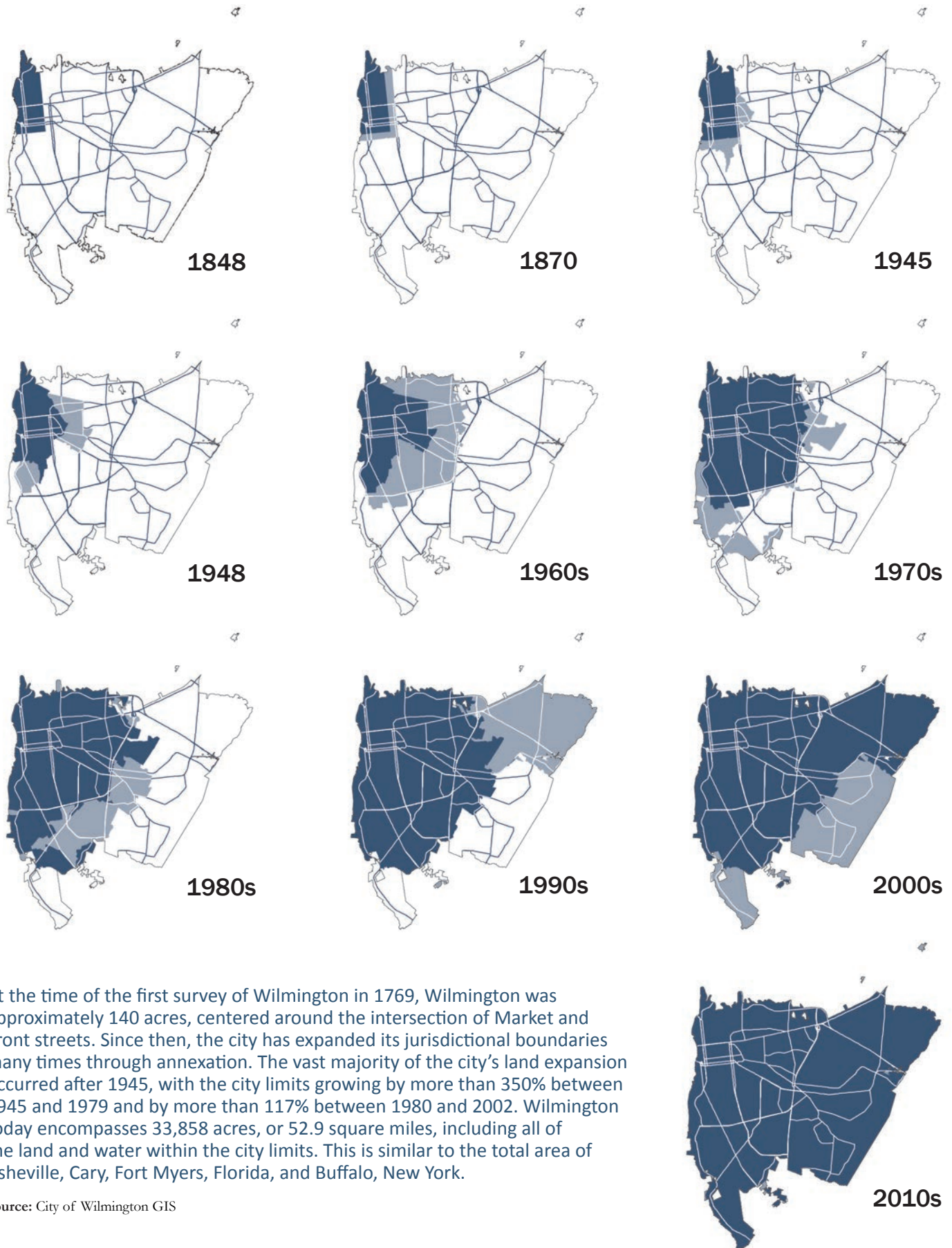
Source: City of Wilmington

### Post-war and I-40 (circa 1945 - Present)

The rapid growth of the region and continued automobile usage contributed to an urban form characterized by wide streets, high volumes of traffic, large parking lots, limited pedestrian networks, and spread out development.

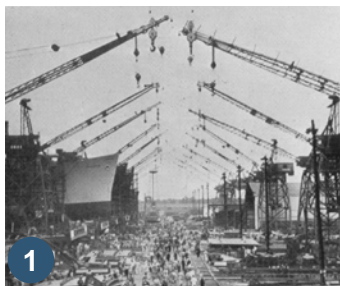
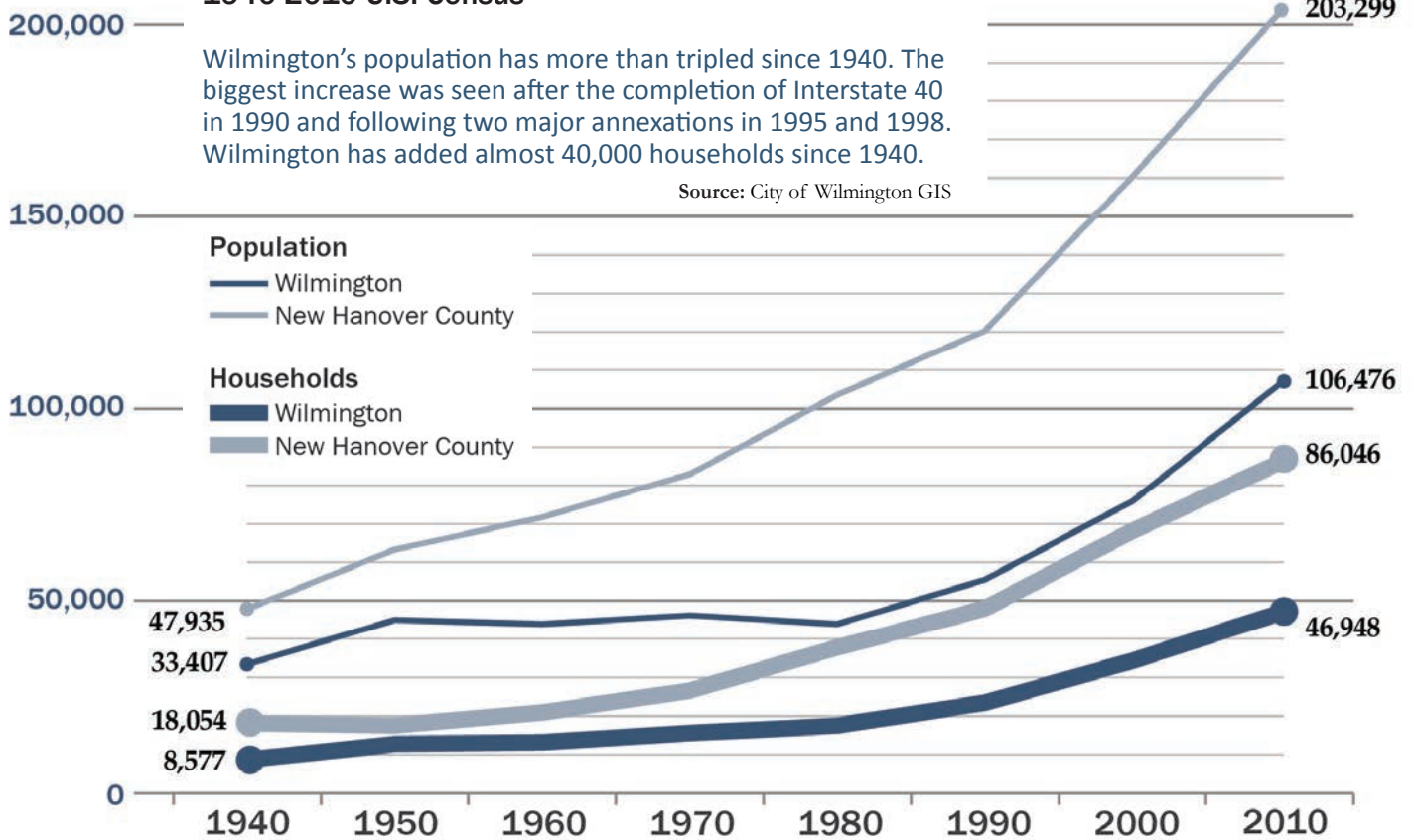


## 1.3 Growth by Annexation



# 1.4 Growth Trends by Decennial Census

## Historic Population and Household Growth Wilmington and New Hanover County 1940-2010 U.S. Census



Source (All Other Images): City of Wilmington



Source : Wilmington International Airport

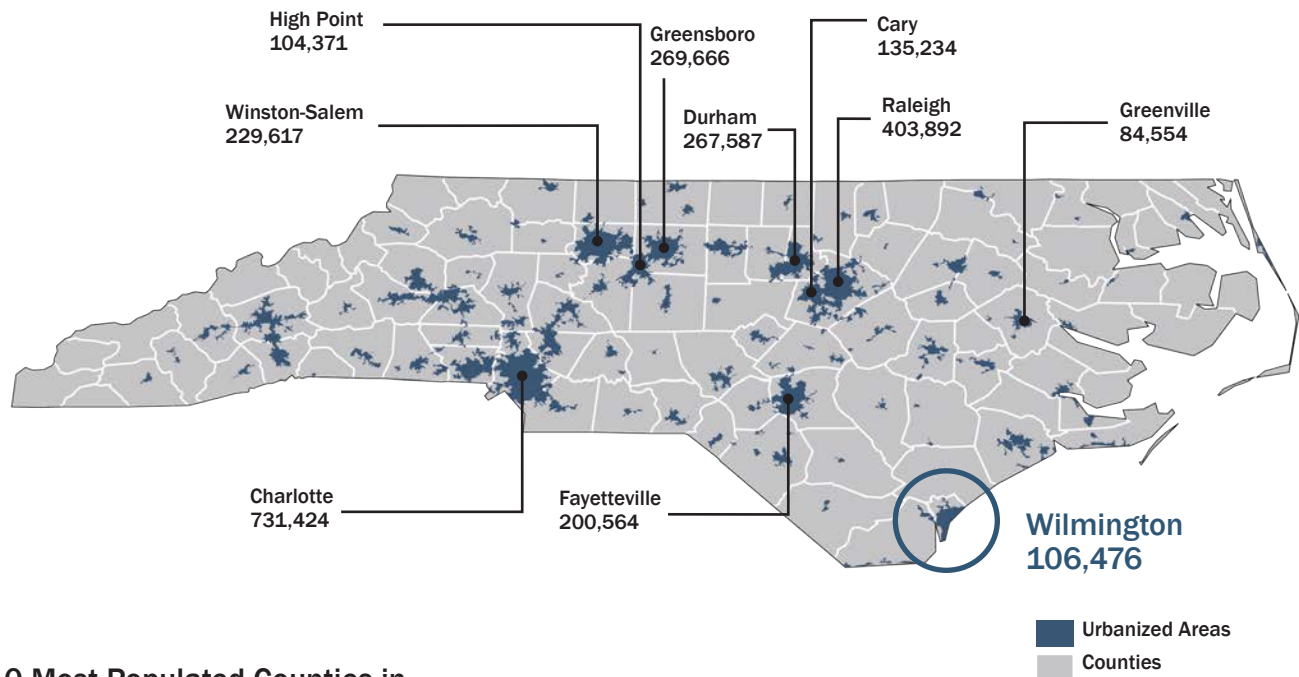
### Significant Milestones (1940-2015)

1. The State Port Authority was approved in 1945 and ever since then has remained a major factor in the region's economy.
2. Interstate 40 opened in 1990, at which time tourism grew as one of the thriving industries for the entire region and earned Wilmington the distinction of being one of the fastest developing American cities during the 1990s.
3. USS North Carolina was dedicated on April 29, 1962, as the state's memorial to its World War II veterans. This memorial is a major tourist attraction still today.
4. Wilmington Airport began operating in 1927 as Bluethenthal Field, named for aviator Arthur Bluethenthal, the first Wilmingtonian to be killed in World War I. On December 17, 1997, the New Hanover County Airport Authority changed the name to Wilmington International Airport.

# 1.5 Growth in Context

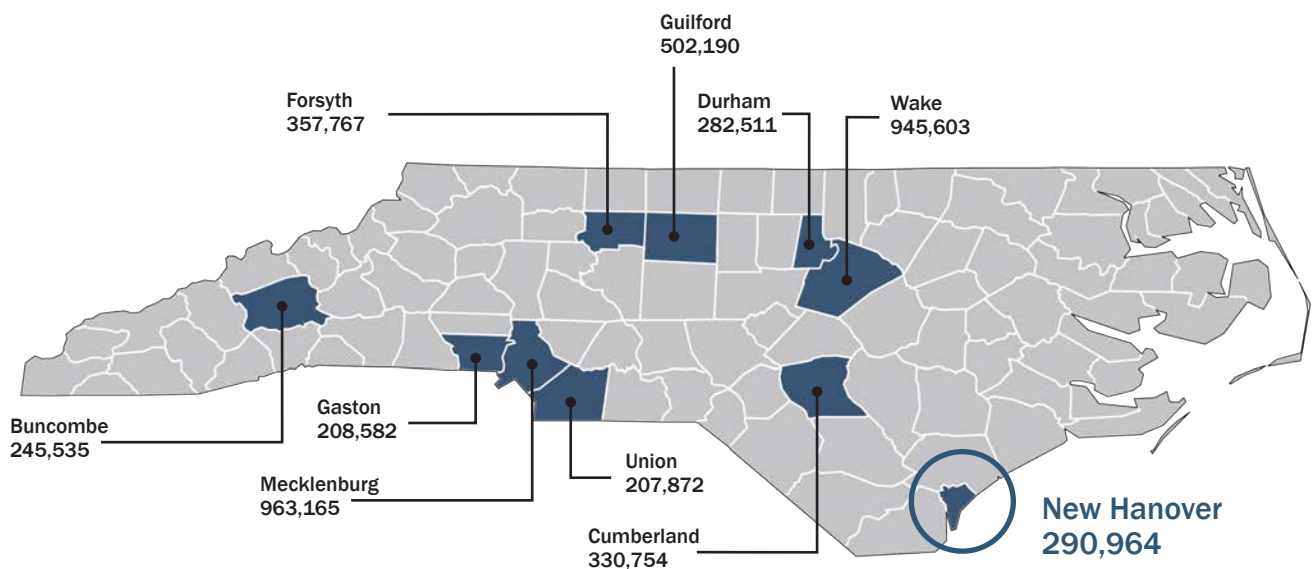
## Top 10 Most Populated Cities in North Carolina (2010, U.S. Census)

Of the 10 most populated North Carolina cities, Wilmington ranks 8th in total population.



## Top 10 Most Populated Counties in North Carolina (2010, U.S. Census)

Of the 10 most populated North Carolina counties, New Hanover ranks 8th in total population. This report compares various factors among these top 10 counties.





# 1.6 Population Projections

## Population Projections City, County, and Region 2010-2040

The population of New Hanover County, including Wilmington, is expected to increase by 56% between 2010 and 2040, nearly double the rate of North Carolina as a whole.

### Three-county Region

It is estimated that the combined population of Brunswick, New Hanover, and Pender counties will reach nearly 688,000 residents by 2040, an increase of more than 300,000 residents.

### New Hanover County

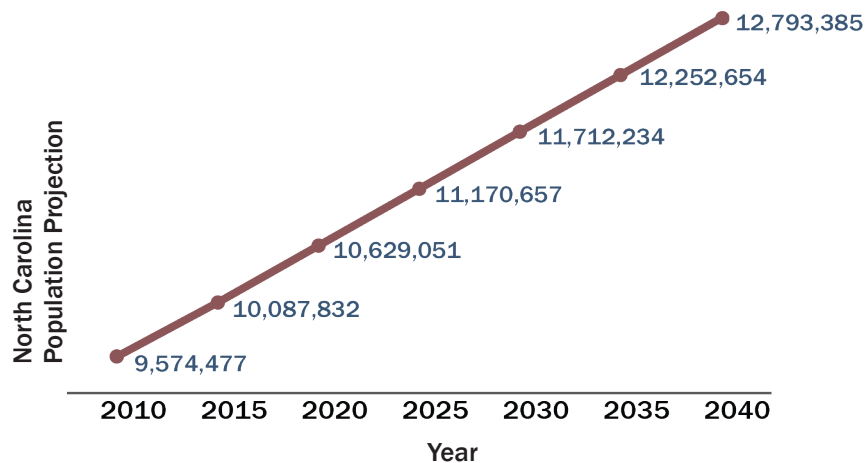
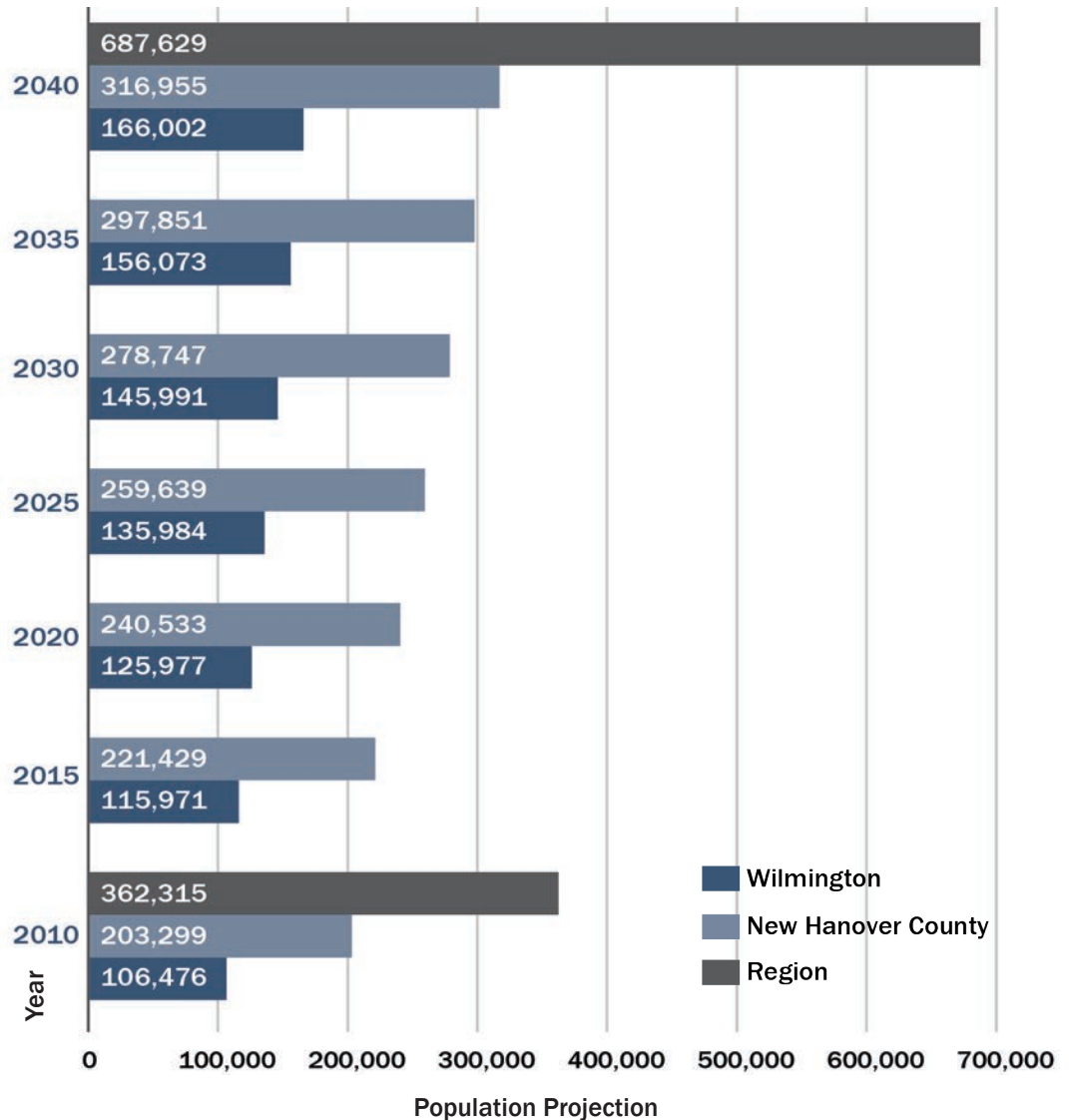
It is estimated that New Hanover County's population will reach almost 317,000 residents by 2040, an increase of more than 100,000 residents.

### City of Wilmington

It is estimated that Wilmington's population will surpass 166,000 residents by 2040, an increase of nearly 60,000 residents.

### North Carolina

It is estimated that North Carolina's population will reach nearly 12.8 million residents by 2040, an increase of more than 3.2 million residents.



Source (All Charts): North Carolina State Demographer 2013



# 2

## Social & Economic Conditions

### Demographics

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- 2.1 Population Density
- 2.2 Wilmington Neighborhoods
- 2.3 Population Characteristics 1990-2010

### Community Health

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- 2.4 Community Health Indicators
- 2.5 Active Transportation

### Food & Nutrition

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- 2.6 Healthy Food Options
- 2.7 Access to Food Stores

### Schools

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- 2.8 Public Schools in the City
- 2.9 School Enrollment
- 2.10 Public Elementary Schools
- 2.11 Public Middle Schools
- 2.12 Public High Schools
- 2.13 School Performance
- 2.14 Educational Attainment

### Economy

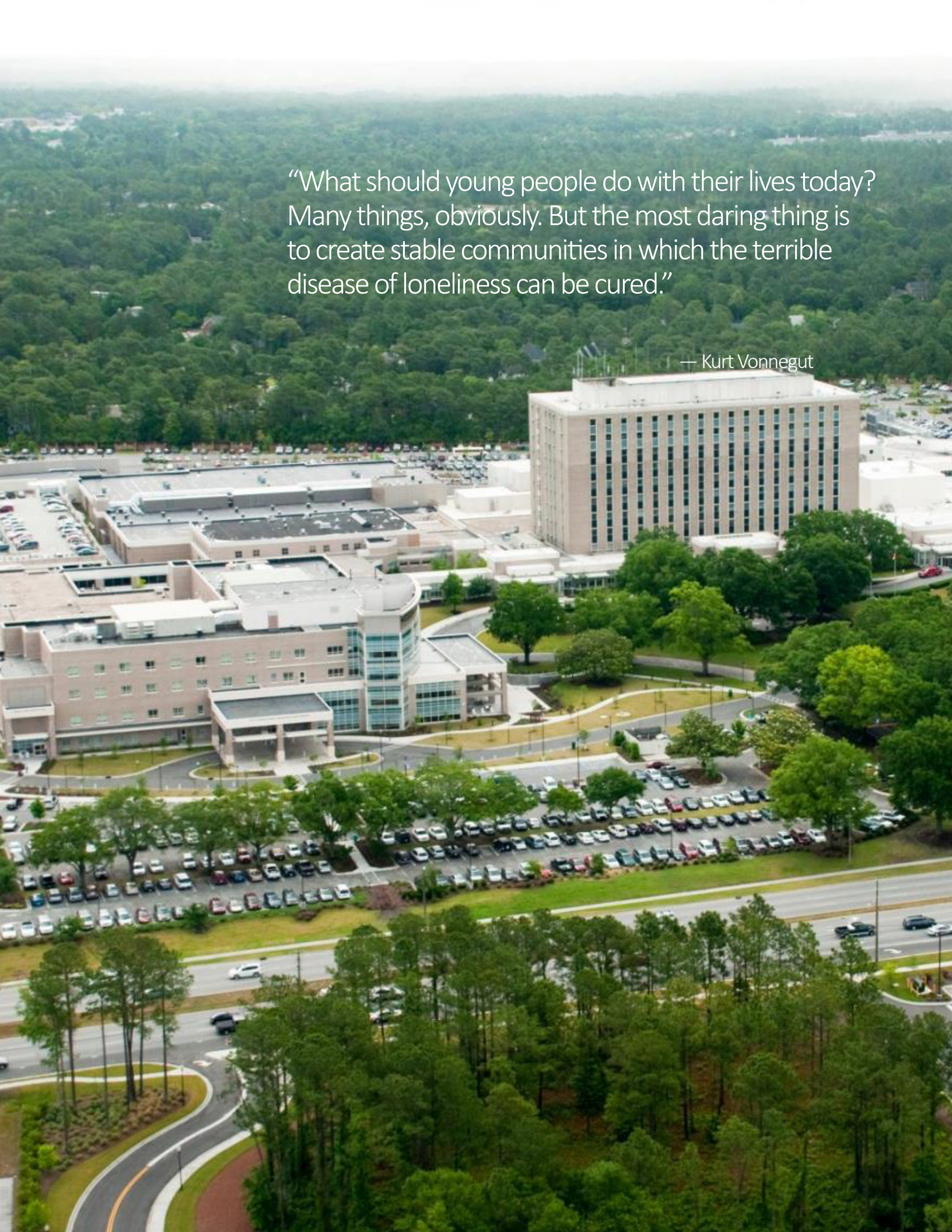
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- 2.15 Income
- 2.16 Employment
- 2.17 Tourism
- 2.18 Tax Revenues
- 2.19 State Port

**New Hanover Regional Medical Center**  
 Aerial image of New Hanover Regional Medical Center located on South 17th Street.  
 Source: City of Wilmington

“What should young people do with their lives today? Many things, obviously. But the most daring thing is to create stable communities in which the terrible disease of loneliness can be cured.”

— Kurt Vonnegut

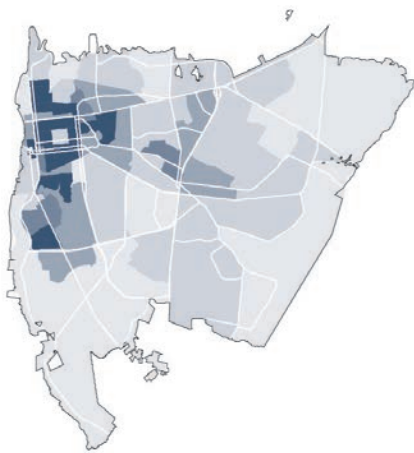
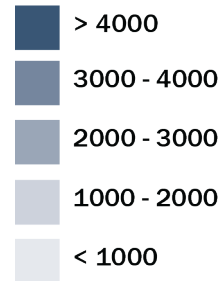


# Demographics

## 2.1 Population Density

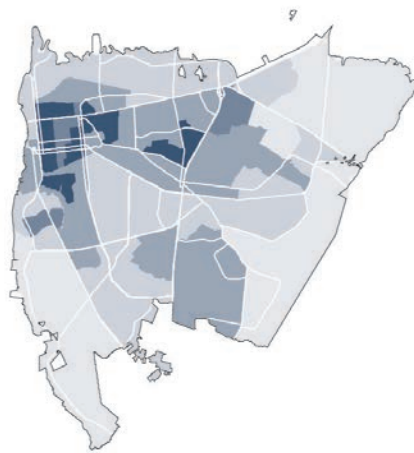
From 1990 to 2010, population densities continued to increase in parts of Wilmington. This increase occurred along major road corridors, near the university, and within the eastern suburban areas. The Greater Downtown area remains densely populated, reflective of its compact development pattern.

People per Square Mile



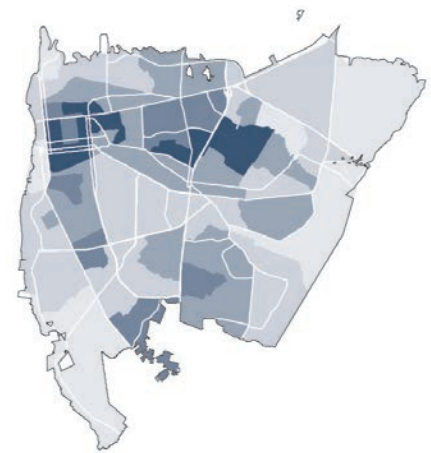
**1990**

At a population of about 55,000, much of the density in 1990 was located in and around the 1945 Corporate Limits and in areas near the University of North Carolina at Wilmington along College Road.



**2000**

Population density increased along major corridors of Market Street, Carolina Beach Road, and College Road.



**2010**

The two major population centers are in midtown and within the Greater Downtown. The core of downtown is less densely populated than many areas.

## Naturally-occurring Retirement Communities

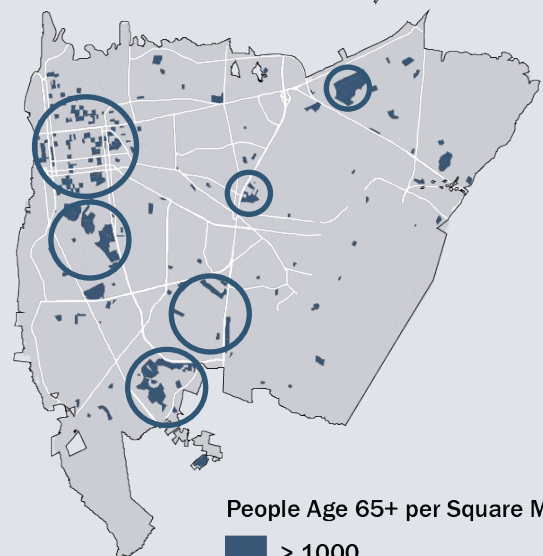
A naturally-occurring retirement community is a community that was not intentionally built for seniors but is home to a significant number of older residents. The map shown here indicates areas of the city where there are a significant number of residents over age 65 living today.

Parts of Wilmington with a higher proportion of residents over 65 years old that may be considered naturally-occurring retirement communities include a number of areas in and around Greater Downtown, Greenfield Lake, Pine Valley, Inland Greens, and areas off of George Anderson and MacMillan drives.



Additional Information

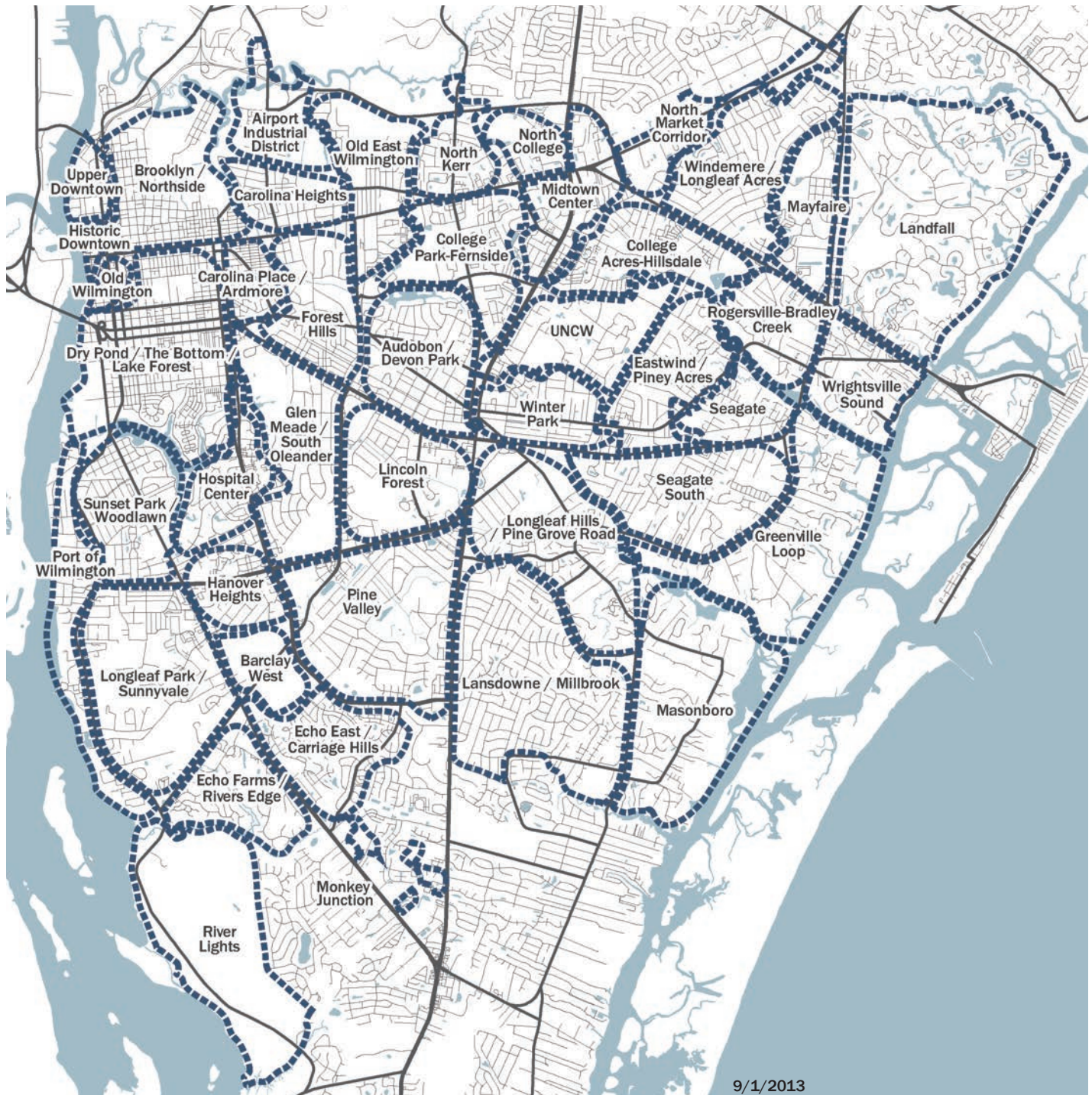
The Maturing of America



People Age 65+ per Square Mile



## 2.2 Wilmington Neighborhoods



This is a generalized map of the various neighborhood areas that make up the city. Neighborhoods may include a small group of homes in the immediate vicinity of each other or they may include a larger area with similar housing types and common commercial and/or social destinations.

**Note:** Two satellite annexations located in the Ogden area fall outside of the extent of this map.



*Foundations Report*

1.2



*Community Pattern Areas*

8

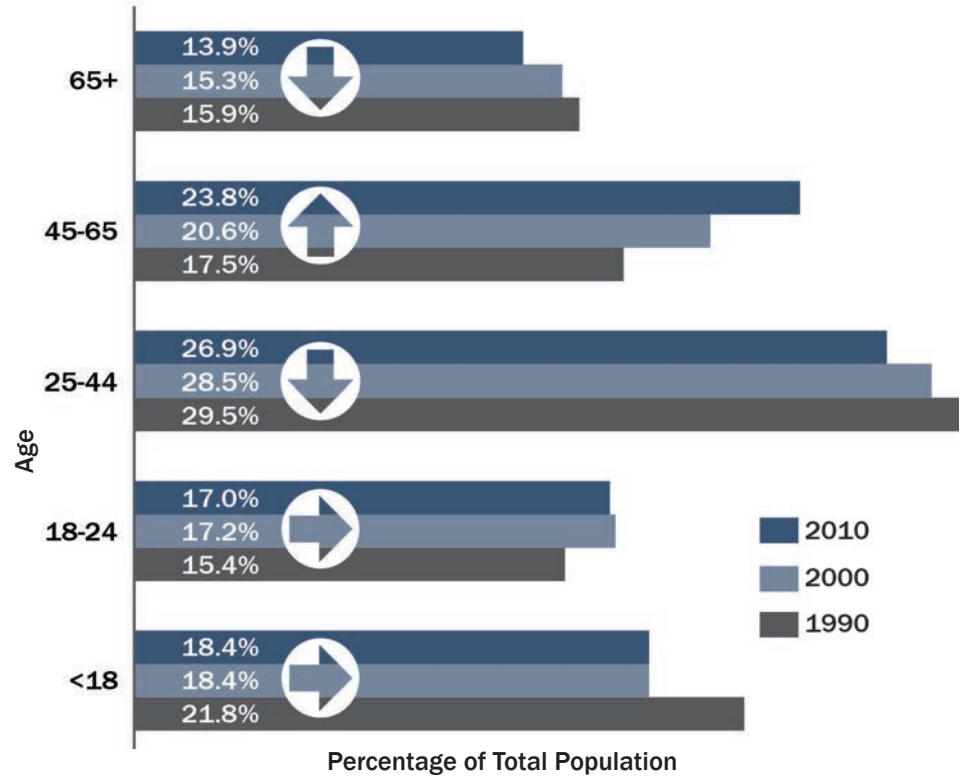
## 2.3 Population Characteristics 1990 to 2010

This information looks at a few of the many features that describe Wilmington's population.

### Age Composition Trend (1990-2010)

Compared to 1990 and 2000, the city's current 45-65-year-old age group makes up a larger proportion and the 25-44 year old age group makes up a smaller proportion of the city's overall population.

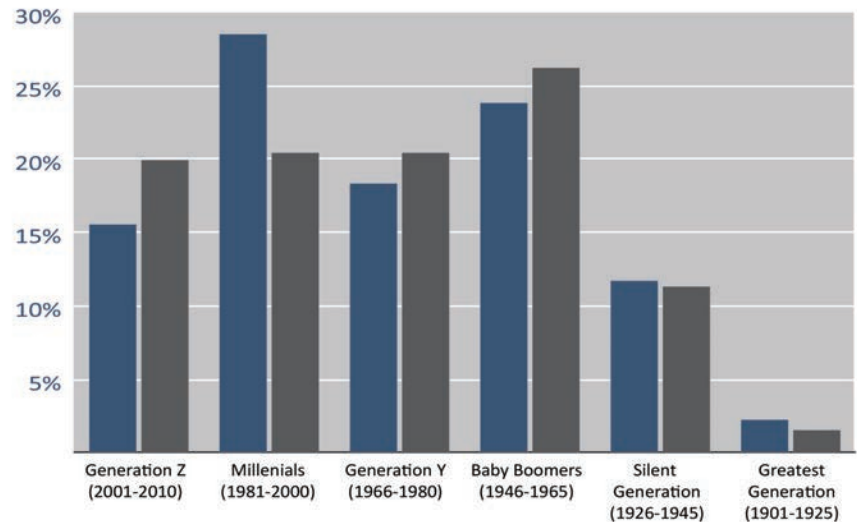
Source: U.S. Census Bureau



### Generational Composition (2010)

As of 2010, Millennials (those born 1980-2000) account for the largest age group within the city (29%), which can be partially attributed to a large student population. Baby Boomers make up the second largest age group (24%).

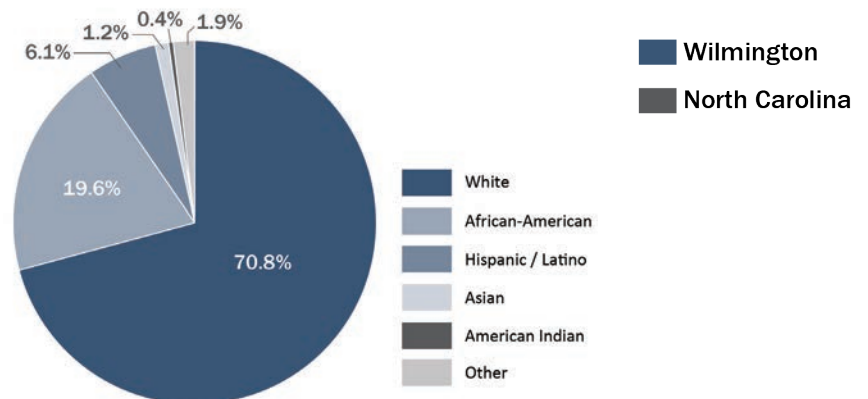
Source: U.S. Census Bureau



### Racial Composition (2010)

As of 2010, about 71% of the population was white, 20% was African-American, and less than 10% were of any other racial composition.

Source: U.S. Census Bureau

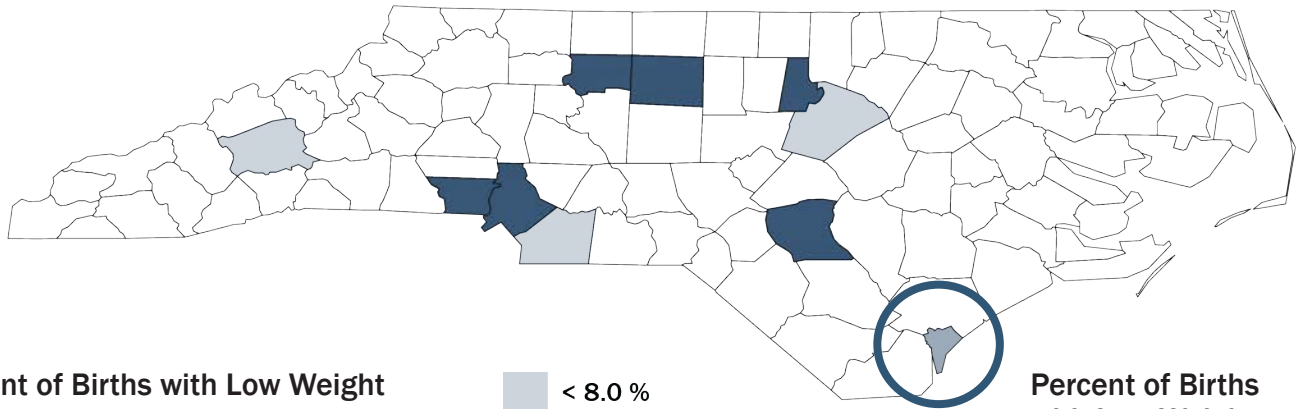


# Community Health

The overall health of the community is impacted, in part, by how well the city is designed and how well it functions. Health is influenced by the local transportation system, parks and recreational opportunities, access to healthcare facilities, and access to healthy foods. By measuring community health,

existing issues can be identified and policies can be created to influence the way Wilmington grows so as to improve the health of its citizens. There are a number of indicators, both social and physical, that can be used to measure community health.

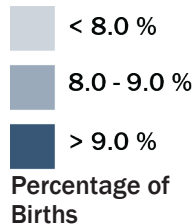
## 2.4 Community Health Indicators



### Percent of Births with Low Weight by County 2007-2011

Of the 10 most populated North Carolina counties, New Hanover County had the fourth lowest percentage of births with low weight.

Source: NC Health Statistics Pocket Guide 2011



### Percent of Births with Low Weight 2007-2011 (average)

Rank	County	Percent
1	Forsyth	10.4%
2	Cumberland	10.0%
3	Gaston	9.8%
4	Guilford	9.6%
5	Durham	9.5%
6	Mecklenburg	9.4%
7	<b>New Hanover</b>	<b>8.6%</b>
8	Buncombe	8.0%
9	Wake	7.9%
10	Union	7.7%

## New Hanover County Community Health Assessment 2011

The NC Department of Health and Human Services requires that all local health departments complete a community health assessment every four years. In 2011, the New Hanover County Health Department and community partners evaluated the county's overall health through such an assessment. The assessment provides an analysis of the health status of the community in the context of the local economic, social, and environmental climate.



### Additional Information

[New Hanover County Community Health Assessment](#)

#### Top Three Health Concerns

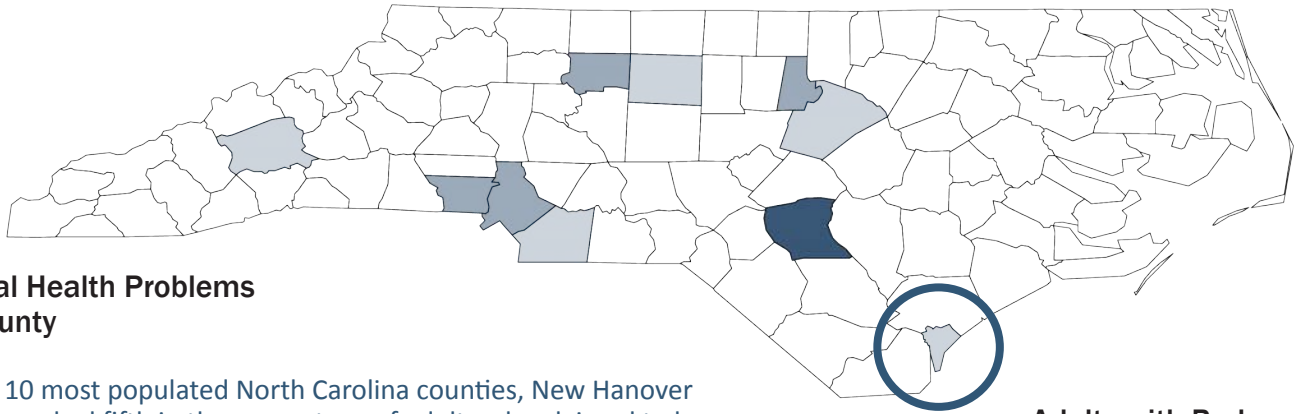
- 1 Chronic Disease
- 2 Obesity
- 3 Drug and Alcohol Abuse

#### Top Three Causes of Death

- 1 Heart Disease
- 2 Cancer
- 3 Cerebrovascular Disease

#### Top Three Health Priorities

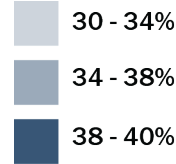
- 1 Obesity
- 2 Violence
- 3 Access to Care



## Mental Health Problems by County 2010

Of the 10 most populated North Carolina counties, New Hanover County ranked fifth in the percentage of adults who claimed to have had mental health problems during a 30-day period in 2010. At that time, approximately 9,438 New Hanover County residents received a behavioral health service; there were also 6,837 calls received by the New Hanover County Southeastern Center for Mental Health, Developmental Disabilities, and Substance Abuse Services.

Source: NHC Community Health Assessment 2011, BRFSS Mental Health Survey



Percentage of Adults

## Adults with Bad Mental Health in Past 30 Days, 2010 (percentage)

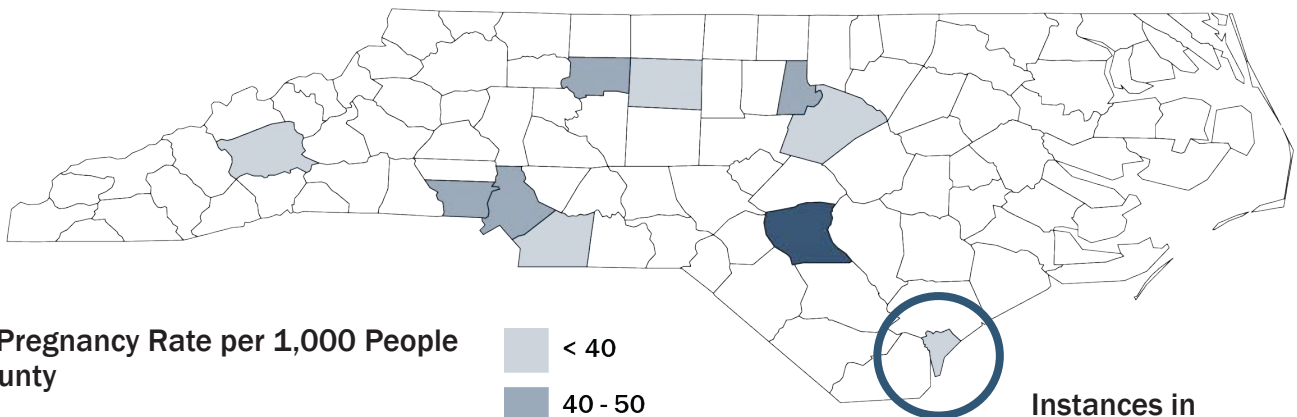
Rank	County	Rate
1	Forsyth	39.2
2	Cumberland	37.4
3	Durham	37.1
4	Buncombe	35.2
5	<b>New Hanover</b>	<b>35.1</b>
6	Wake	34.1
7	Gaston	32.9
8	Guilford	32.4
9	Mecklenburg	31.3
10	Union	30.8

## Bad Mental Health Days

	3-7 Days	8-29 Days	30 Days
<b>New Hanover County</b>	12.7%	11.2%	3.8%
<b>North Carolina</b>	9.2%	8.1%	5.9%

This chart shows the results of a mental health survey conducted in 2010 where respondents were asked: "How many days during the past 30 days was your mental health not good?"

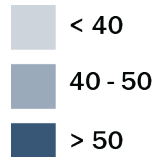
Source: BRFSS Mental Health Survey 2010



## Teen Pregnancy Rate per 1,000 People by County 2011

Of the 10 most populated North Carolina counties, New Hanover County had the third lowest teen pregnancy rate in 2011.

Source: NC Department of Health and Human Services

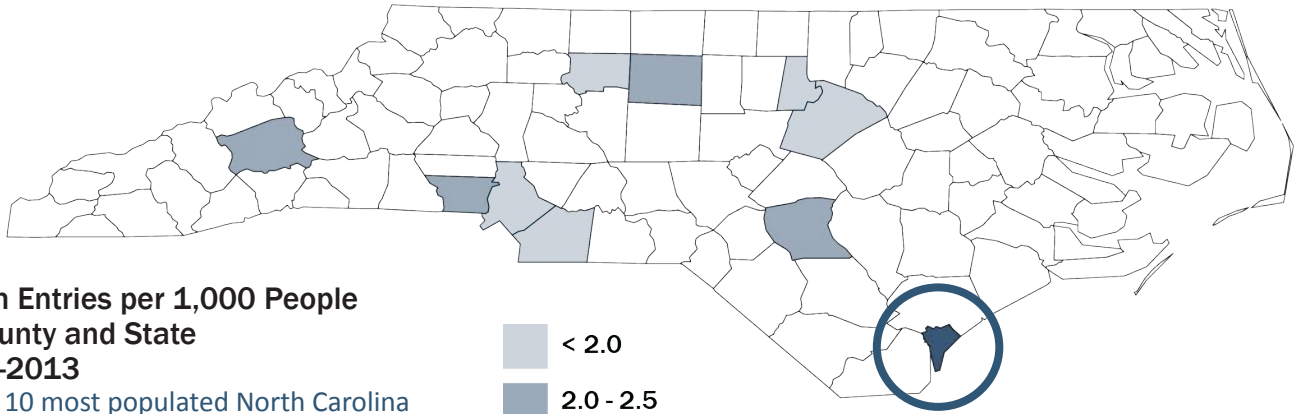


Pregnancies per 1,000 people

## Instances in 2011 (per 1,000 People)

Rank	County	Rate
1	Cumberland	61.8
2	Gaston	48.8
3	Durham	46.9
4	Forsyth	43.9
5	Mecklenburg	40.5
6	Buncombe	39.3
7	Guilford	35.6
8	<b>New Hanover</b>	<b>28.5</b>
9	Wake	28.1
10	Union	27.2

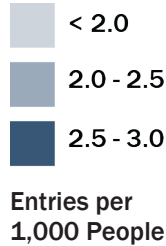




### Prison Entries per 1,000 People by County and State 2008-2013

Of the 10 most populated North Carolina counties, New Hanover County ranked first (highest) for the number of prison entries per 1,000 persons in 2012. At the same time, both New Hanover County and the State of North Carolina have seen a steady decline in prison entries since 2008.

Source: NC Department of Public Safety Research and Planning

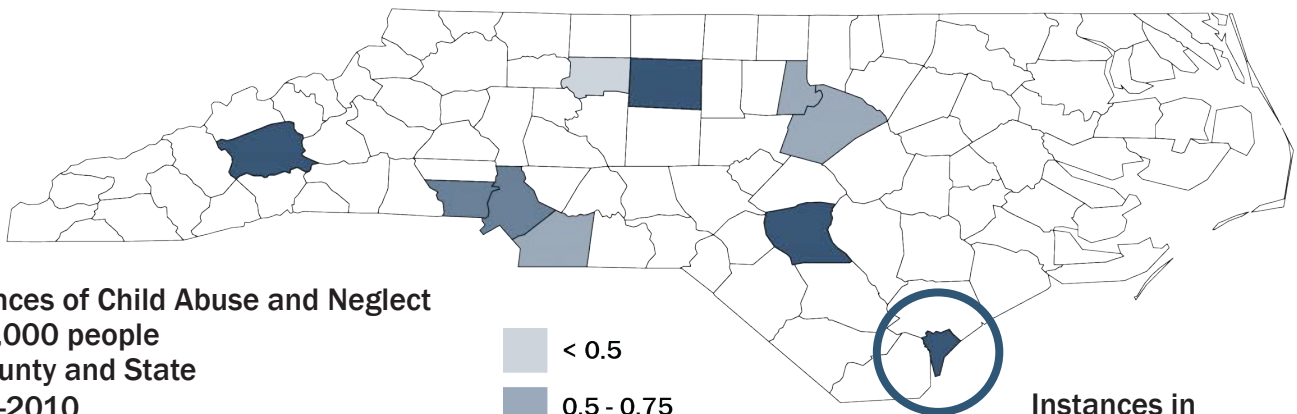


### Prison Entries in 2012 (per 1,000 People)

Rank	County	Rate
1	New Hanover	2.7
2	Gaston	2.5
3	Guilford	2.4
4	Buncombe	2.2
5	Cumberland	2.1
6	Durham	1.9
7	Wake	1.7
8	Forsyth	1.7
9	Mecklenburg	1.4
10	Union	1.2

### Prison Entries (Number of People)

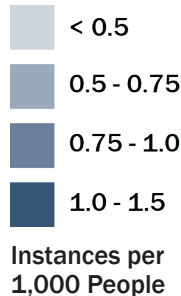
	FY 2008-2009	FY 2009-2010	FY 2010-2011	FY 2011-2012	FY 2012-2013
New Hanover County	1,086	844	876	692	572
North Carolina	30,350	28,164	28,975	24,036	21,538



### Instances of Child Abuse and Neglect per 1,000 people by County and State 2006-2010

Of the 10 most populated North Carolina counties, New Hanover County had the second highest number of child abuse cases per 1,000 persons in 2010. Reported cases of child abuse, however, are down in both New Hanover County and North Carolina in comparison to 2006.

Source: The Annie E. Casey Foundation-Kids Count

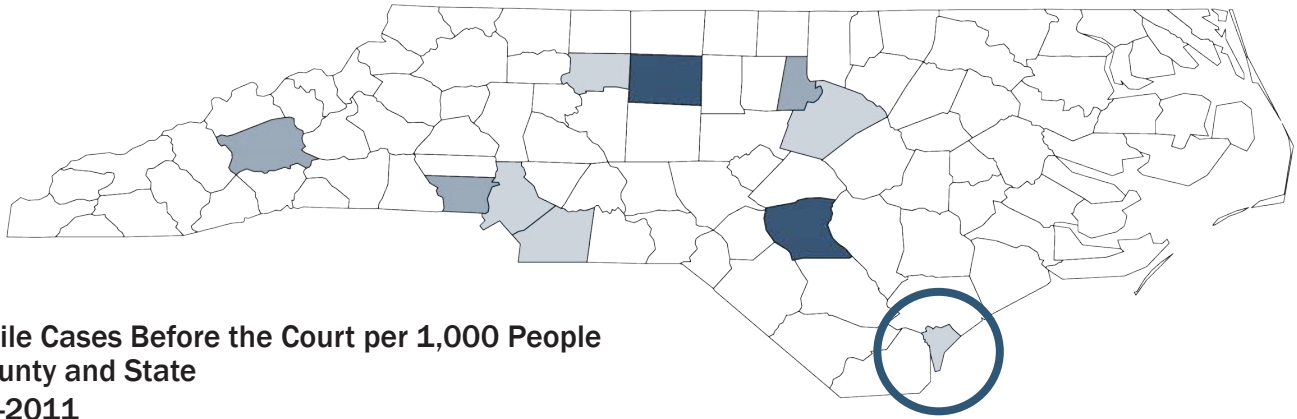


### Instances in 2010 (per 1,000 People)

Rank	County	Rate
1	Cumberland	2.7
2	New Hanover	2.5
3	Guilford	2.4
4	Buncombe	2.2
5	Mecklenburg	2.1
6	Gaston	1.9
7	Wake	1.7
8	Durham	1.7
9	Union	1.4
10	Forsyth	1.2

### Cases of Child Abuse and Neglect (Number of Cases)

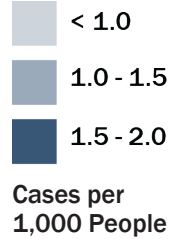
	2006	2007	2008	2009	2010
New Hanover County	301	281	239	241	268
North Carolina	20,340	14,966	12,249	11,252	11,300



### Juvenile Cases Before the Court per 1,000 People by County and State 2007-2011

Of the 10 most populated North Carolina counties, New Hanover County ranked sixth out of 10 for the number of juvenile cases per 1,000 persons in 2011. New Hanover County saw a 16% decline in juvenile complaints that went before the court between 2007 and 2011; North Carolina saw a decline of 18%. This data does not consider eligible cases that were funneled into the federal court system.

Source: The Annie E. Casey Foundation-Kids Count

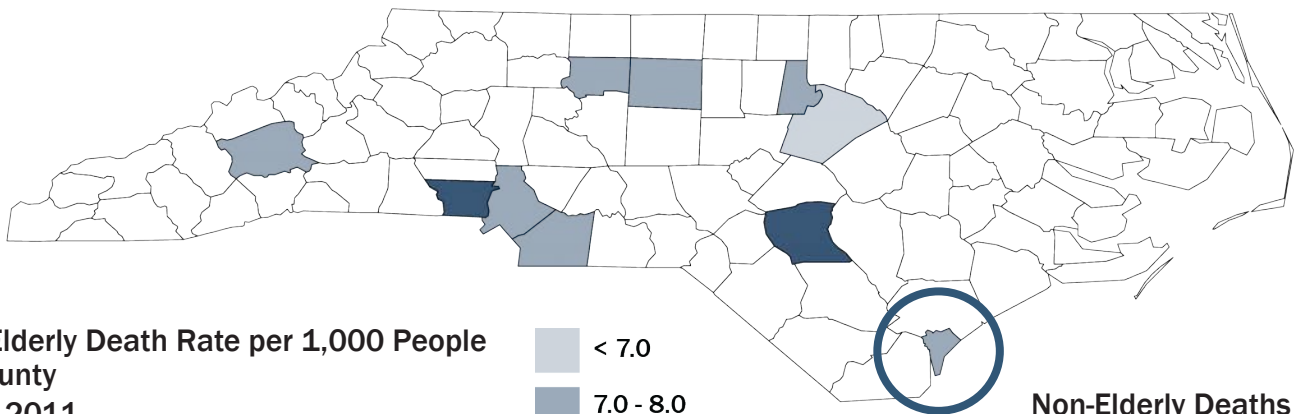


### Juvenile Court Cases 2011 (per 1,000 People)

Rank	County	Rate
1	Cumberland	39.2
2	Guilford	37.4
3	Gaston	37.1
4	Buncombe	35.2
5	Durham	35.1
6	<b>New Hanover</b>	<b>34.1</b>
7	Forsyth	32.9
8	Mecklenburg	32.4
9	Wake	31.3
10	Union	30.8

### Juvenile court cases

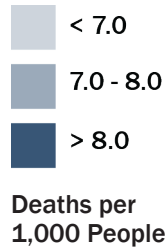
	2007	2008	2009	2010	2011
New Hanover County	230	223	206	198	198
North Carolina	11,374	11,060	10,262	9,442	9,617



### Non-Elderly Death Rate per 1,000 People by County 2007-2011

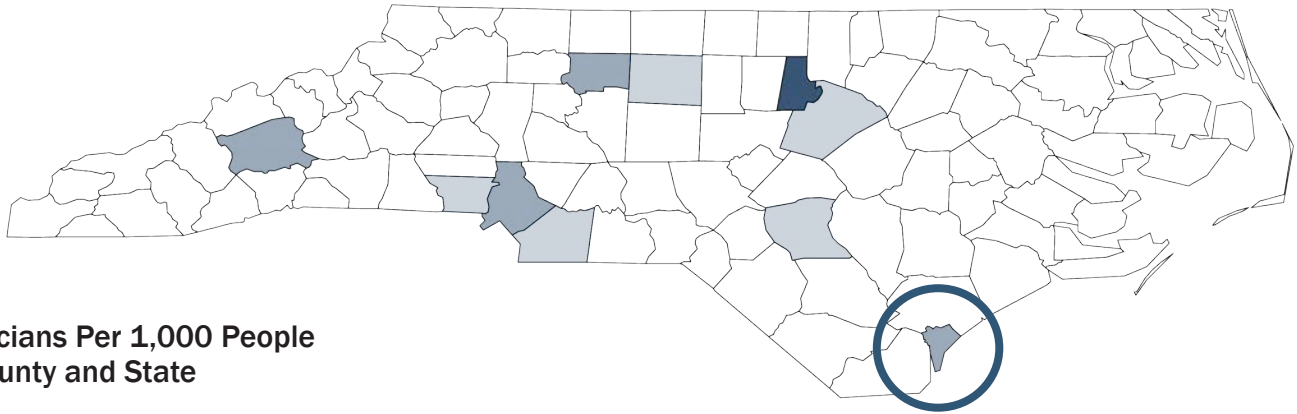
Of the 10 most populated North Carolina counties, New Hanover County had the third lowest non-elderly death rate.

Source: NC Health Statistics Pocket Guide 2011



### Non-Elderly Deaths 2007-2011 (average) (per 1,000 People)

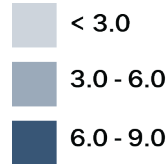
Rank	County	Rate
1	Gaston	9.4
2	Cumberland	8.9
3	Union	7.8
4	Forsyth	7.7
5	Guilford	7.6
6	Durham	7.6
7	Buncombe	7.6
8	<b>New Hanover</b>	<b>7.5</b>
9	Mecklenburg	7.2
10	Wake	6.5



### Physicians Per 1,000 People by County and State 2011

Of the 10 most populated North Carolina counties, New Hanover County ranked fourth for the number of physicians per 1,000 persons. In 2012, there were 741 physicians in New Hanover County. This equated to approximately 3.5 physicians per 1,000 residents.

Source: NC Medical Board 2012, NC State Data Center



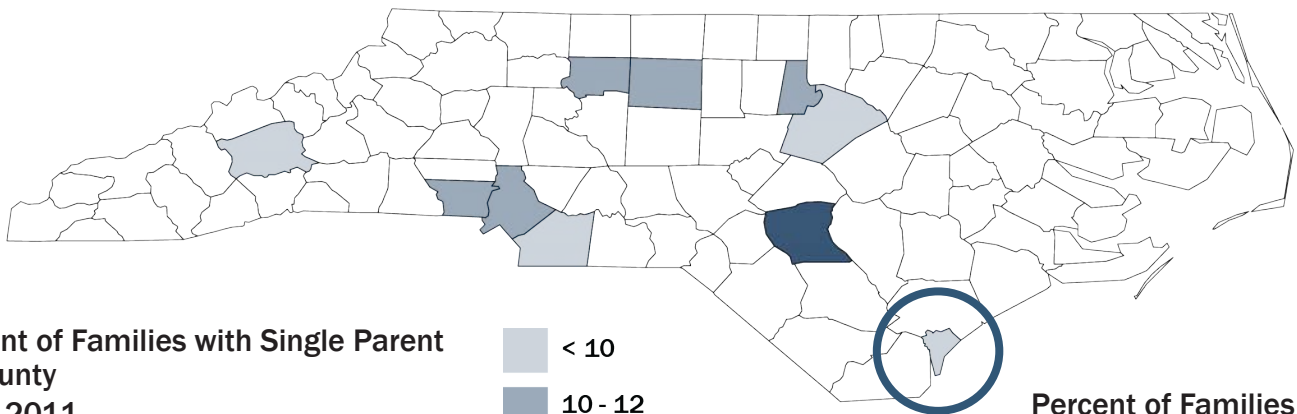
Physicians per 1,000 People

### Physicians (per 1,000 People)

Rank	County	Rate
1	Durham	8.4
2	Forsyth	5.2
3	Buncombe	4.4
4	<b>New Hanover</b>	<b>3.5</b>
5	Mecklenburg	3.0
6	Wake	2.6
7	Guilford	2.6
8	Cumberland	2.5
9	Gaston	2.0
10	Union	0.9

### Physicians per 1,000 People

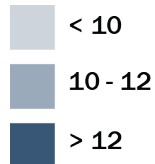
	Physician Population	Resident Population	Physicians per 1,000 Persons
New Hanover County	741	209,964	3.5
North Carolina	23,867	9,765,229	2.4



### Percent of Families with Single Parent by County 2007-2011

Of the 10 most populated North Carolina counties, New Hanover County had the second lowest percentage of single-parent families.

Source: US Census Bureau

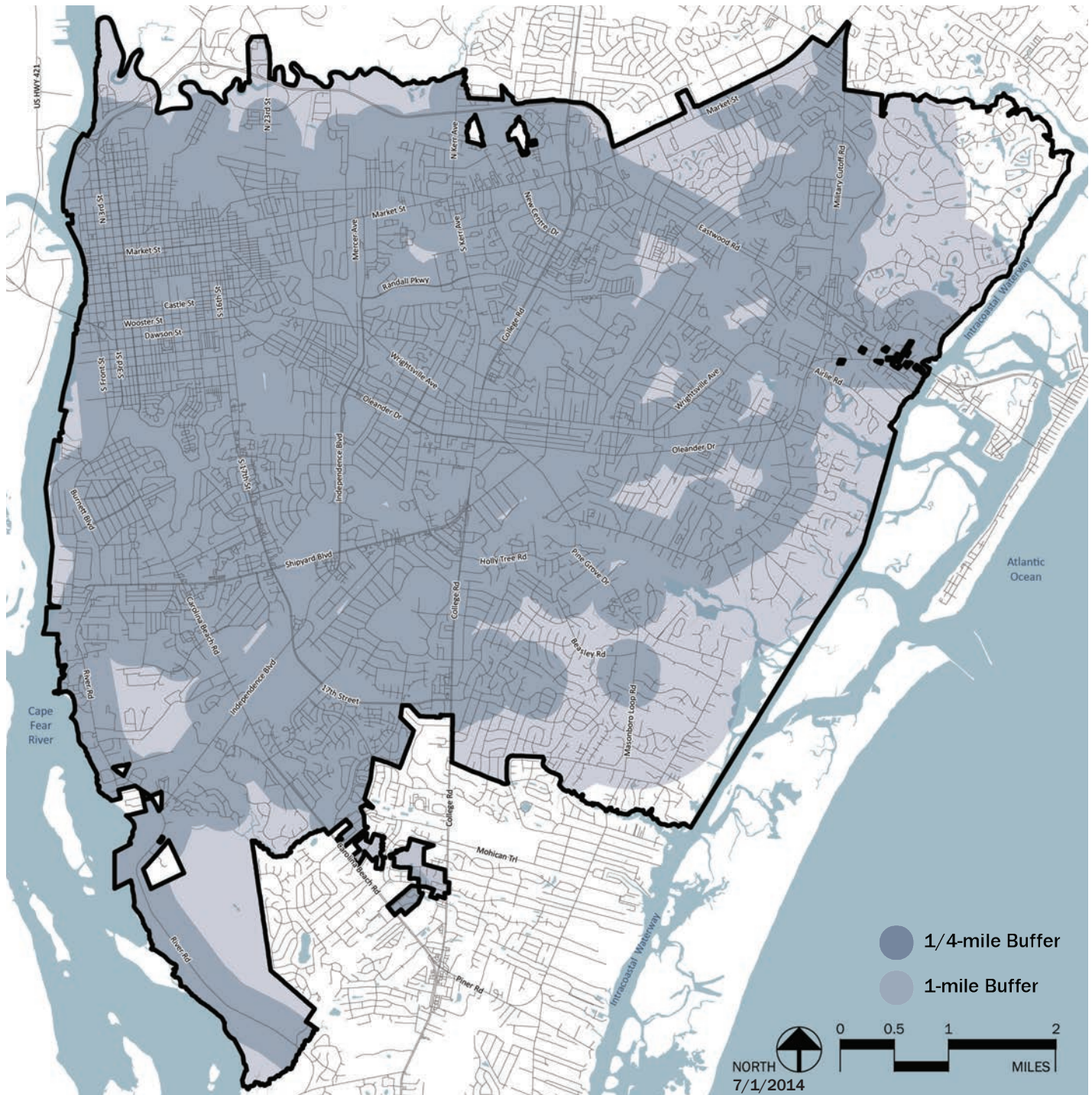


Percentage of Families

### Percent of Families with Single Parent 2007-2011 (average)

Rank	County	Rate
1	Cumberland	14.5
2	Forsyth	11.0
3	Mecklenburg	11.0
4	Guilford	11.0
5	Durham	10.7
6	Gaston	10.7
7	Wake	9.1
8	<b>New Hanover</b>	<b>8.6</b>
9	Union	8.6
10	Buncombe	8.5

## 2.5 Active Transportation



This map depicts the areas of the city that are within 1/4-mile of an active transportation facility, which include sidewalks, bike lanes, and multi-use paths/trails. Active transportation options include travel modes that require an individual to expend energy to reach their destination, such as walking or bicycling.

Source: FOCUS Health and Wellness Gap Analysis



Transportation

7



Additional Information

FOCUS Health and Wellness Gap Analysis

# Food and Nutrition

## 2.6 Healthy Food Options

### Healthy Food Options by Store Type

The range of fresh foods needed for a balanced diet is not available in all types of food stores. Many stores provide mostly unhealthy, processed and prepackaged foods, which furthers the negative effects of food deserts in urban areas. Fewer, conventional stores offer fresh fruits, vegetables and natural foods.

#### Full-service Grocery Stores



**Food Choice:** Complete  
**Fresh Foods:** Available  
**Example:**  
Harris Teeter at Long Leaf Mall

**Source:**  
Mike Kalasnik \ CC BY-SA 2.0 \  
CreativeCommons.org

#### Discount Variety Stores



**Food Choice:** Reduced  
**Fresh Foods:** Very Limited  
**Example:** Family Dollar at Market and  
10th Streets

**Source:**  
Mike Mozart \ CC BY 2.0 \  
CreativeCommons.org

#### Drug and Convenience Stores



**Food Choice:** Limited  
**Fresh Foods:** None  
**Example:** Walgreens at College Road  
and Oleander Drive

**Source:**  
Mike Mozart \ CC BY 2.0 \  
CreativeCommons.org

## Farmers Markets and Produce Stands

Farmers markets provide a location for local growers, producers, artisans and crafters to sell their goods directly to consumers. This promotes the use of locally grown and produced products which enhances local quality of life. At a typical farmers market, an abundant selection of fresh and local fruits and vegetables, dairy products, wines, meats, baked goods and homemade goods can be purchased.

Produce stands are typically less expensive than conventional grocery stores, carry fresher produce and help stimulate agricultural and economic growth among local and regional growers.



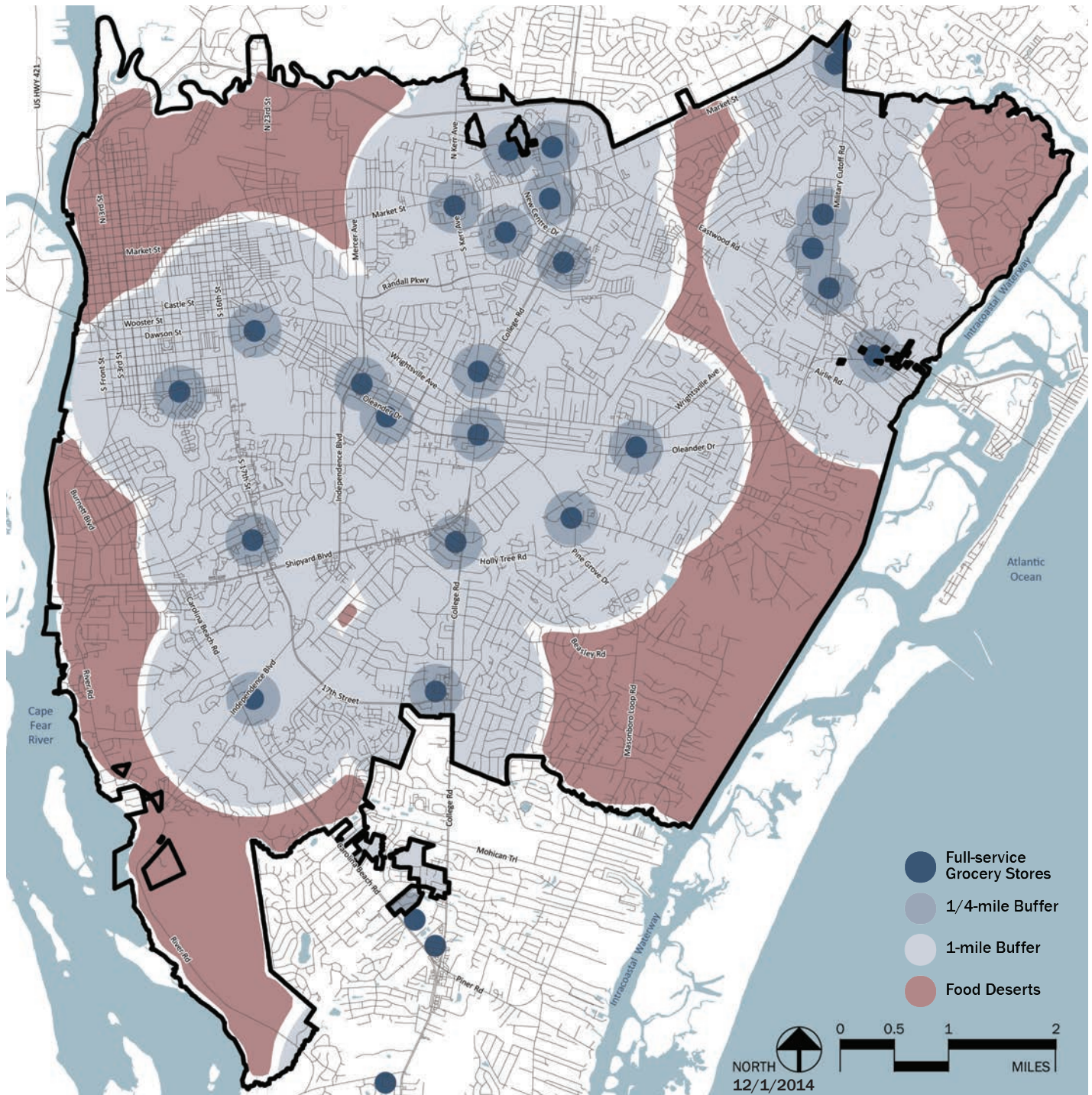
**Source:** Natalie Maynor \ CC BY 2.0 \ creativecommons.org



**Additional Information**

[www.ncagr.gov](http://www.ncagr.gov)

## 2.7 Access to Food Stores

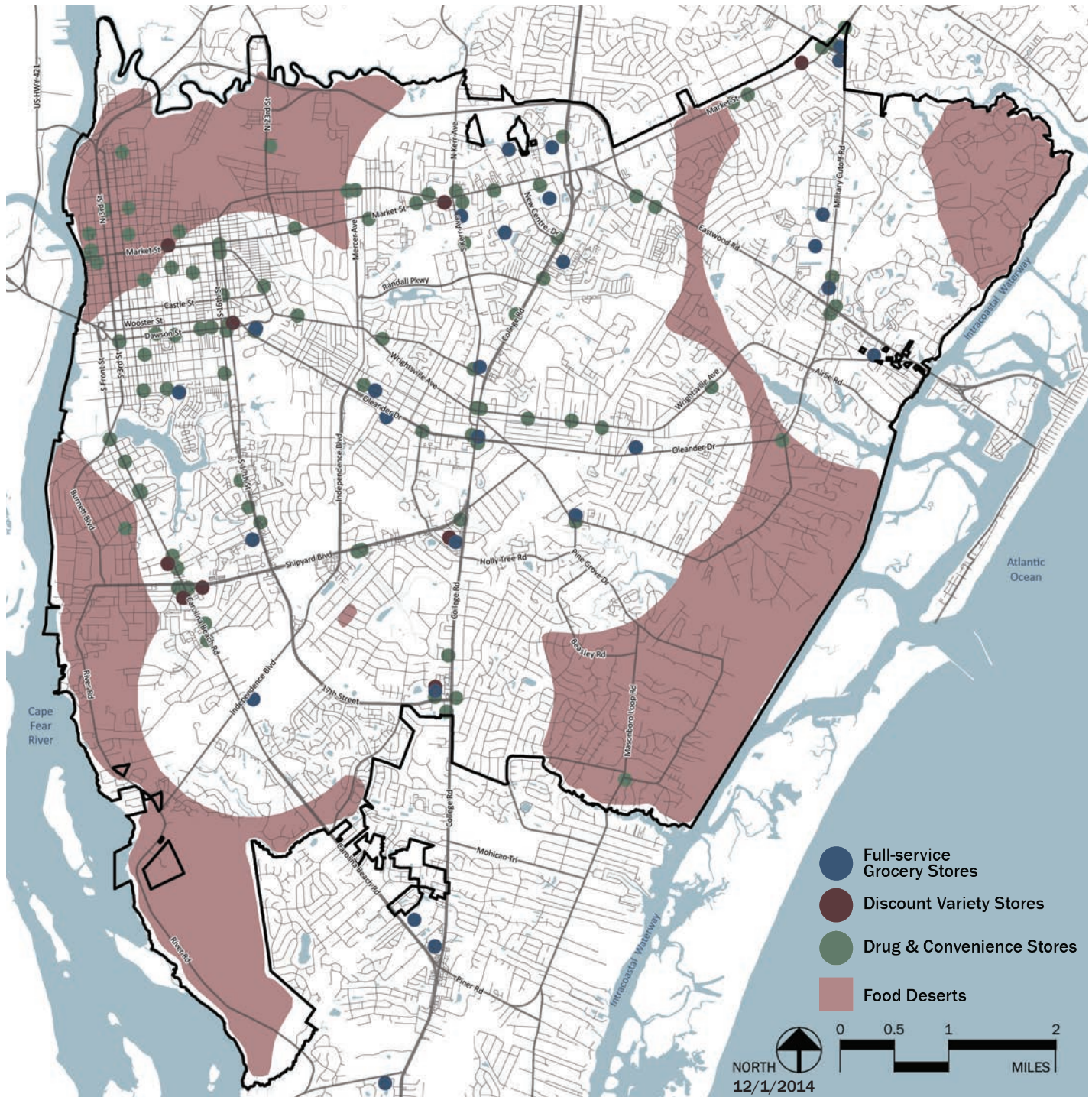


### Full-service Grocery Stores

This map depicts existing full-service grocery stores within the city limits. “Full-service” means that the store is open seven days a week, offers fresh produce, and accepts payment from assistance programs. The map includes a 1/4-mile buffer around each store, indicating the typical distance a person is willing to walk to shop for groceries.

### What is a Food Desert?

A food desert is a geographic area of the city with limited access to fresh, healthy, and affordable food. These areas are not served by full-service grocery stores, requiring greater travel to acquire a full spectrum of healthy foods at competitive prices. Food deserts have a disproportionate impact on areas with lower incomes.



Source: City of Wilmington GIS

### Access to All Store Types

This map depicts all existing food store types within the city limits and existing food deserts, which are areas of the city that are more than one mile away from a full-service grocery store. The types of foods that are available at each type of food store varies from very limited food choice and few healthy eating options to complete food choice and access to fresh foods that are essential for a healthy diet.

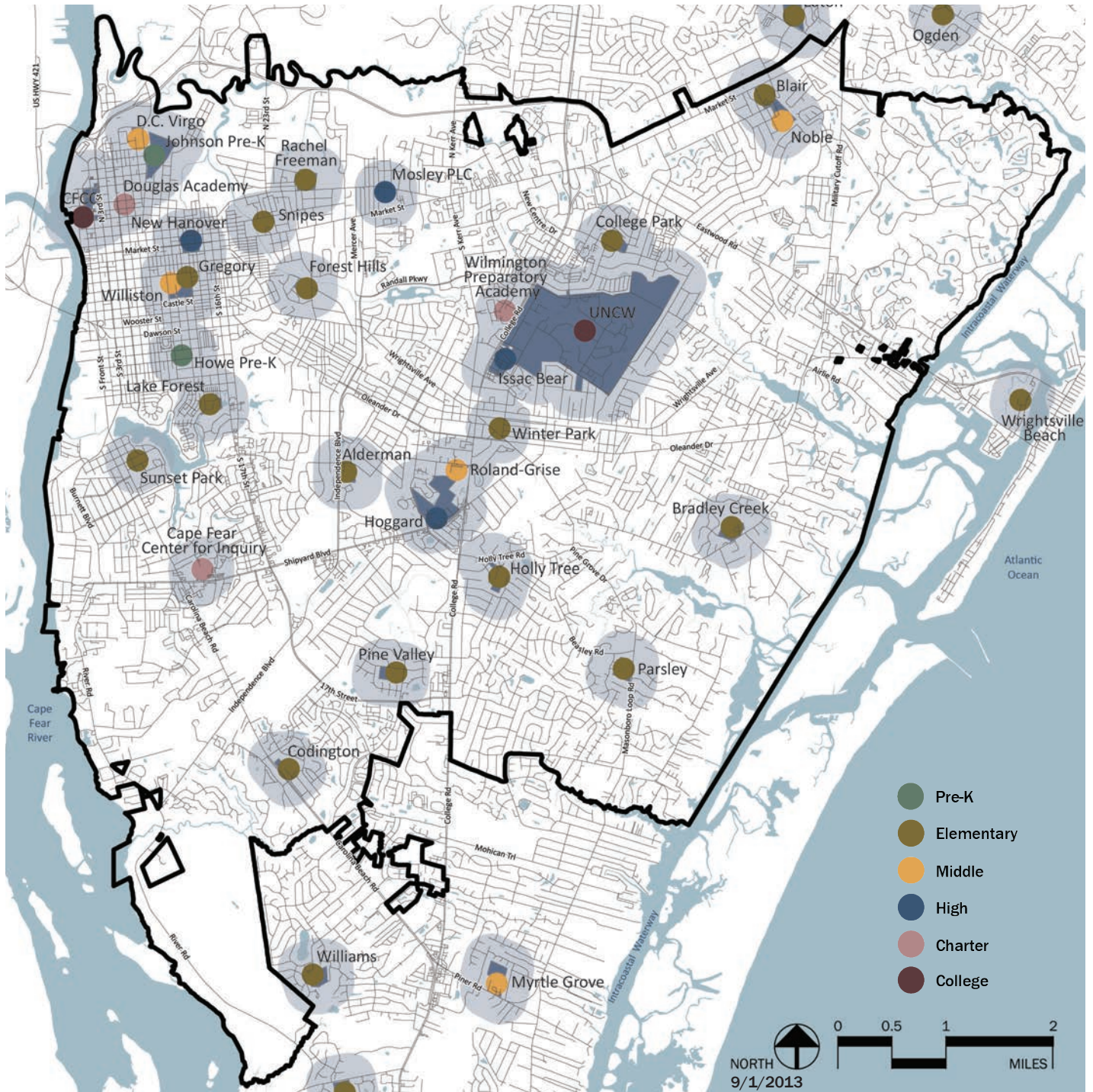


#### Key Planning Theme

### Creating a Place for Everyone

Wilmington wants a welcoming community for youth, families, and seniors, and high-quality services available to everyone.

# Schools



## 2.8 Public Schools in the City

There are a total of 29 public schools within the city limits, occupying approximately 1,027 acres of land. There are two Pre-K (Pre-kindergarten) schools, 14 elementary schools, four middle schools, four high schools, three charter schools, and two colleges/universities.

The map above indicates the location of each school and provides a 1/4-mile buffer around each facility, which indicates the typical distance a person is willing to walk to school. The white areas on the map indicate areas outside of the 1/4-mile buffer.



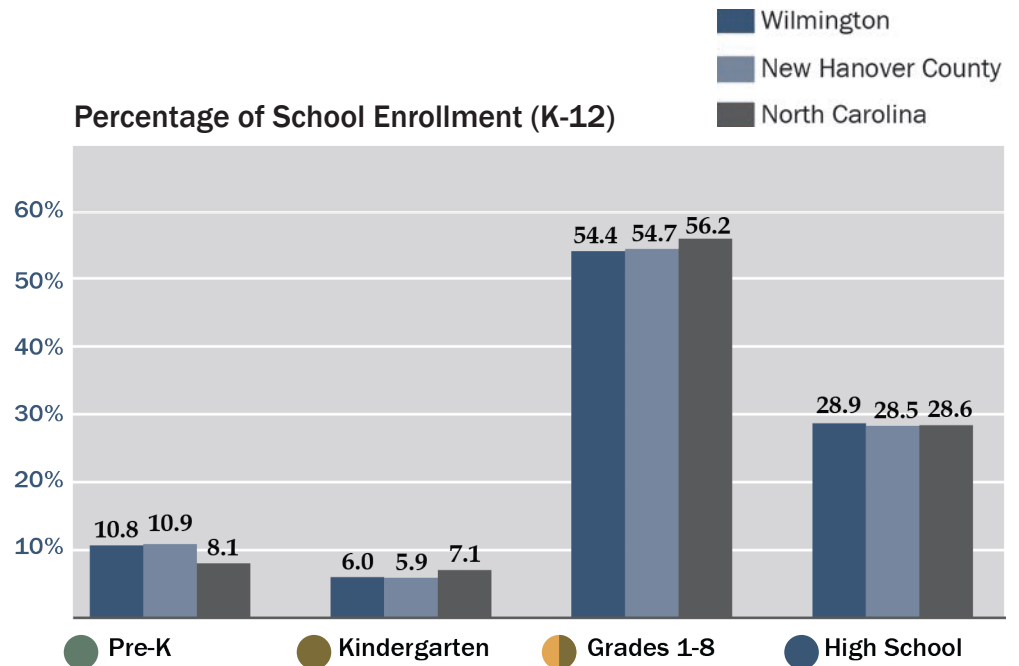
## 2.9 Public School Enrollment

### Public School Enrollment (Pre K-12) by City, County, and State 2010

In 2010, approximately 16,000 students were enrolled in public schools within the city. The primary school student population normally makes up the largest portion of public school enrollment. There are 14 elementary schools, four middle schools, four high schools, and three charter schools located within the city.

Source: U.S. Census Bureau

Percentage of School Enrollment (K-12)



### Public School Students (K-12)

	Student Population	Total Population	Percent of Total Population	Students per 1,000 Residents
Wilmington	14,335	106,476	13.5%	135
New Hanover County	28,799	202,667	14.2%	142
North Carolina	1,645,550	9,535,483	17.3%	173

Of the 10 most populated North Carolina cities, Wilmington ranked second lowest in the number of public K-12 students per 1,000 persons. The city's K-12 student population is also a lower percentage of the population than that of the county and the overall state.

Source: U.S. Census Bureau, 2010



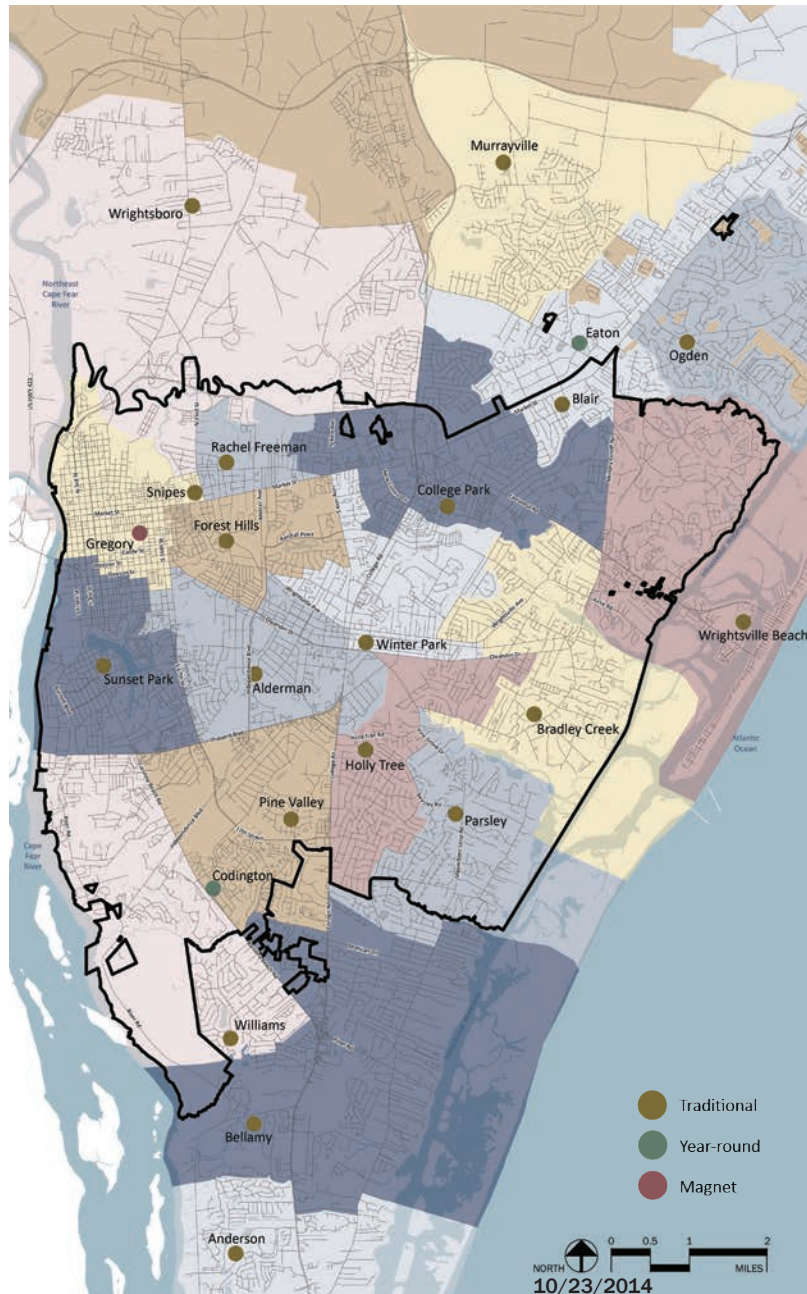
New Hanover County High School is one of the largest public high schools in the Wilmington area.



D.C. Virgo Preparatory Academy is a public middle school on the north side of downtown Wilmington.

Source (All Images): City of Wilmington

## 2.10 Public Elementary Schools (Pre-K - 5th Grade)



Schools: **24**

Students: **11,668**

### Elementary School Performance and Enrollment 2011-2012

School	Reading and Math*	Science*	Total Enrollment
Alderman	59.1%	77.6%	281
Anderson	75.9%	82.9%	652
Bellamy	81.2%	89.7%	642
Blair	74.1%	80.0%	608
Bradley Creek	71.9%	68.3%	425
Carolina Beach	81.6%	73.7%	480
Castle Hayne	60.3%	52.8%	482
Codington**	92.8%	95.0%	532
College Park	70.4%	86.7%	520
Eaton**	91.4%	85.6%	566
Forest Hills	56.2%	73.8%	441
Gregory**	60.3%	76.1%	367
Holly Tree	87.4%	94.0%	495
Murrayville	69.1%	91.0%	639
Ogden	93.0%	93.5%	664
Parsley	95.0%	95.0%	561
Pine Valley	75.2%	89.0%	522
Rachel Freeman	42.4%	61.2%	316
Snipes	32.6%	43.0%	506
Sunset Park	57.7%	95.0%	363
Williams	60.8%	73.0%	433
Winter Park	55.3%	72.2%	381
Wrightsboro	62.8%	76.9%	474
Wrightsville Beach	91.6%	93.9%	318
<b>State Average</b>	<b>67.5</b>	<b>76.6</b>	

\* Percent of students passing end-of-year tests

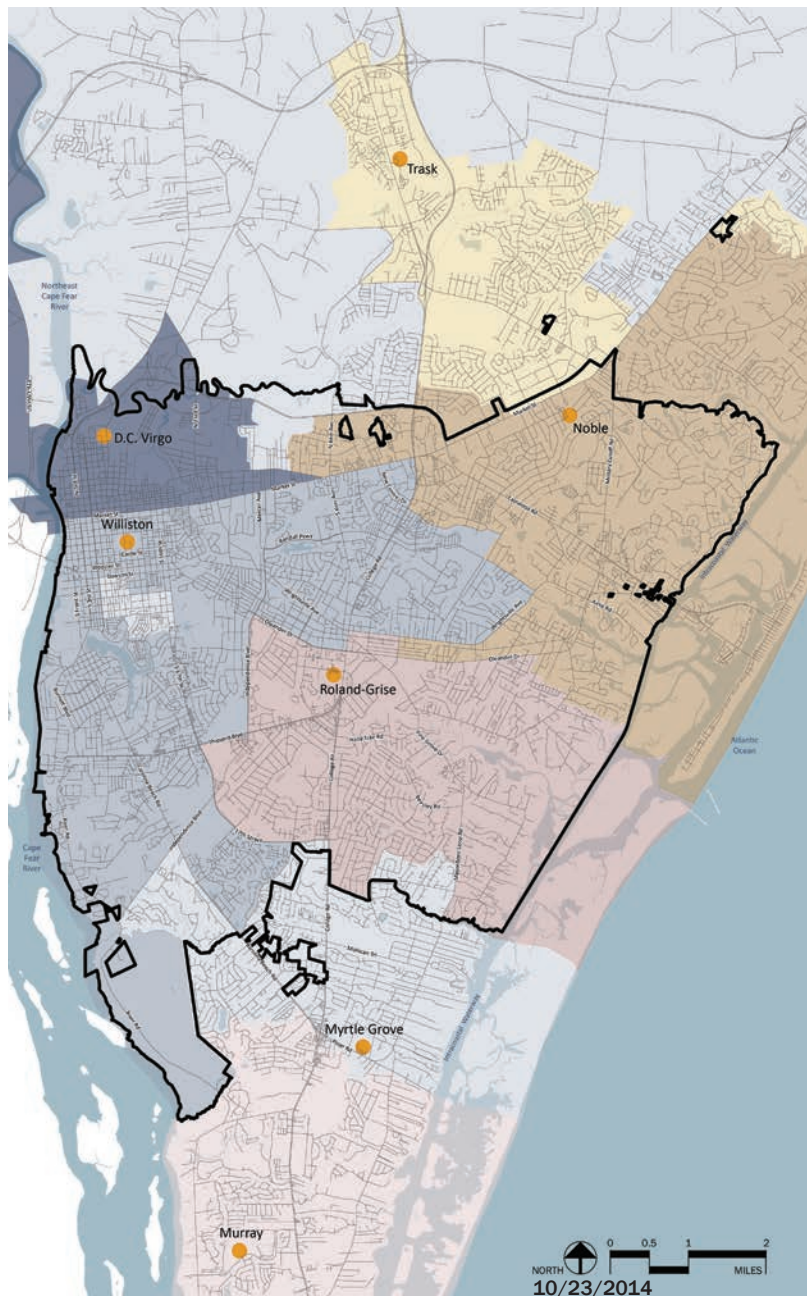
\*\* Year-round or magnet school

Source: 2011-2012 NC School Report Cards

There are a total of 24 public elementary (non-charter) schools located across New Hanover County, including 21 traditional elementary schools, two year-round schools, and one magnet school. This map depicts the elementary schools and the school districts for the traditional elementary schools (2014). There are approximately 11,668 students enrolled in New Hanover County elementary schools, with 6,318 students attending elementary schools located within the city's corporate limits. Year-end testing for reading, math, and science are used to help determine overall school performance. Within the city limits, Parsley, Codington, and Holly Tree elementary schools had the highest percentage of students passing these year-end tests.

Source: New Hanover County Schools

## 2.11 Public Middle Schools (6th - 8th Grades)



There are a total of eight public middle (non-charter) schools located across New Hanover County. This map depicts the middle schools and their current school districts (2014). There are approximately 5,761 students enrolled in New Hanover County middle schools, with 2,649 students attending middle schools located within the city's corporate limits. Year-end testing for reading, math, and science are used to help determine overall school performance. Within the city limits, Myrtle Grove, Noble, and Roland Grise middle schools had the highest percentage of students passing these year-end tests.

Source: New Hanover County Schools

Schools: **8**

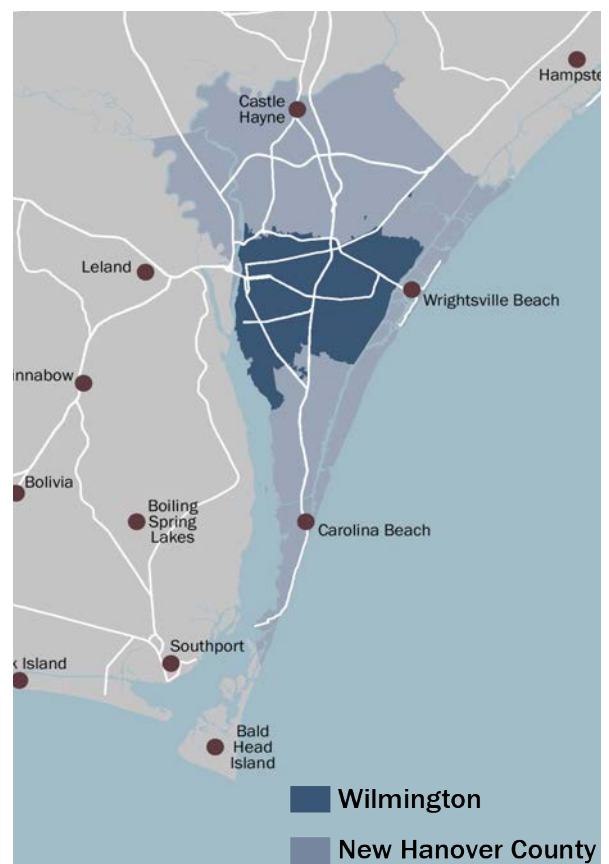
Students: **5,761**

### Middle School Performance and Enrollment 2011-2012

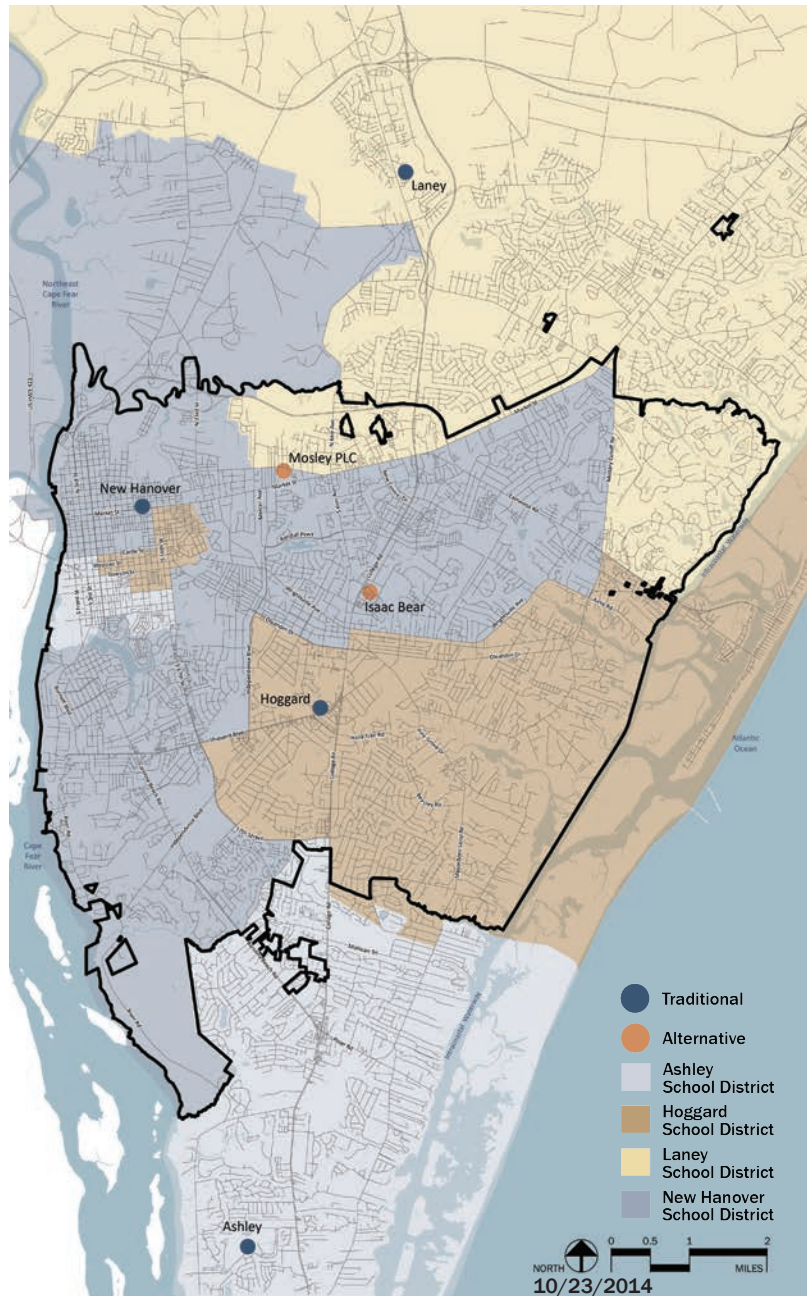
School	Reading and Math*	Science*	Total Enrollment
D.C. Virgo	NA	NA	295
Holly Shelter	67.8%	81.4%	693
Murray	80.8%	85.1%	801
Myrtle Grove	83.3%	87.3%	785
Noble	82.5%	90.0%	718
Roland Grise	81.6%	90.4%	862
Trask	71.9%	82.2%	833
Williston	51.0%	58.4%	784
<b>State Average</b>	<b>67.5%</b>	<b>76.6</b>	

\* Percent passing end-of-year tests

Source: 2011-2012 NC School Report Cards



## 2.12 Public High Schools (9th - 12th Grades)



Schools: **6**

Students: **6,991**

### High School Performance

School	English, Algebra, and Biology*	Average SAT Score
Ashley	81.2%	1009
Hoggard	90.0%	1079
Isaac Bear	95.5%	1151
Mosley	40.5%	NA
Laney	84.5%	998
New Hanover	77.4%	974
<b>State Average</b>	<b>81.4%</b>	<b>997</b>

\* Percent passing end-of-year tests  
Source: 2011-2012 NC School Report Cards

### Graduation Rate and Enrollment

School	Graduation Rate	Enrollment
Ashley	78.7%	1,690
Hoggard	84.5%	1,658
Isaac Bear	95.0%	217
Mosley	66.7%	80
Laney	85.2%	1,841
New Hanover	82.6%	1,505
<b>State Average</b>	<b>80.4%</b>	

Source: 2011-2012 NC School Report Cards

There are a total of six public high schools located throughout New Hanover County. This map depicts the high schools, two traditional high schools and two alternative high schools, and their current school districts (2014). There are approximately 6,991 students enrolled in New Hanover County high schools, with 3,460 students attending high schools located within the city's corporate limits. Year-end testing for English, algebra, and biology and average SAT scores are used to help determine overall school performance. Within the city limits, Isaac Bear Early College High School and Hoggard High School had the highest percentage of students passing year-end tests and had the highest average SAT scores.

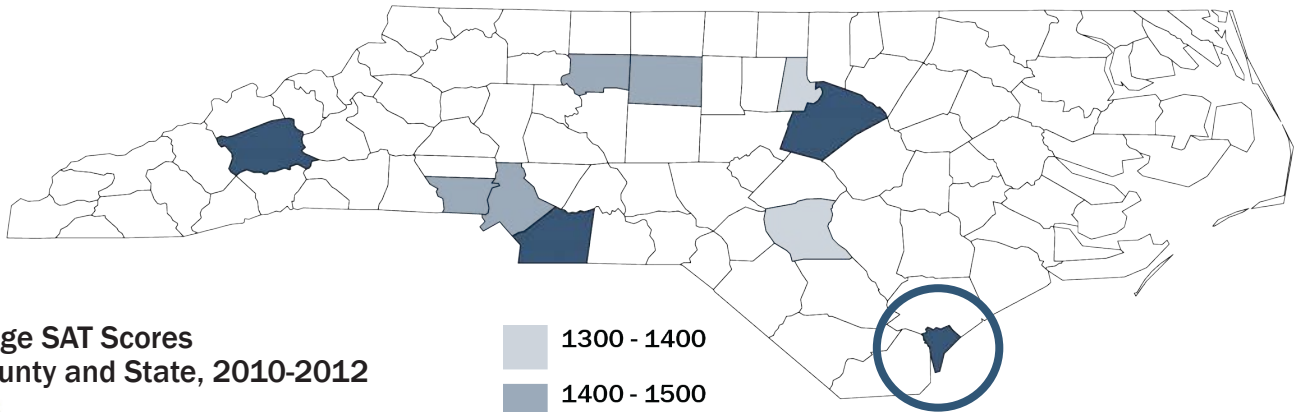
Source: New Hanover County Schools



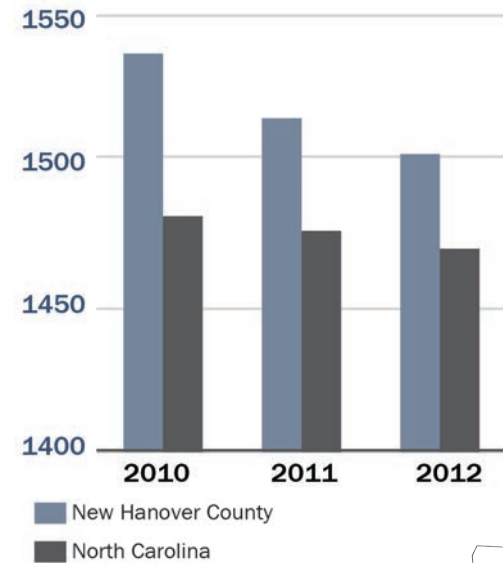
#### Additional Information

Education First  
NC School Report Cards

## 2.13 School Performance



**Average SAT Scores by County and State, 2010-2012**



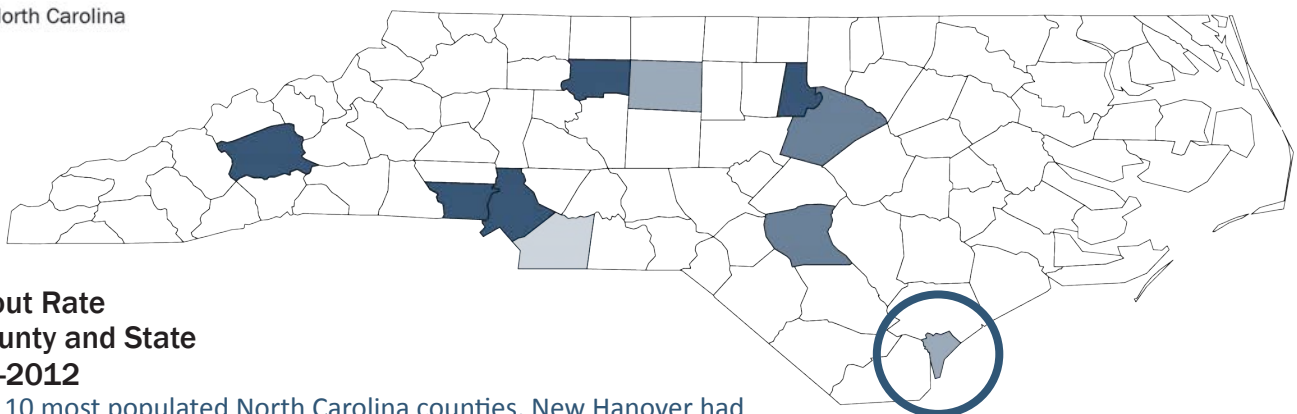
**Average SAT Scores**

Of the 10 most populated North Carolina counties, New Hanover County ranked fourth highest in average SAT scores in 2012. New Hanover County's average SAT scores were slightly higher than the state average between 2010 and 2012.

Source: NC State Board of Education, Department of Public Instruction

**Average SAT Scores, 2012**

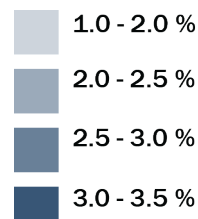
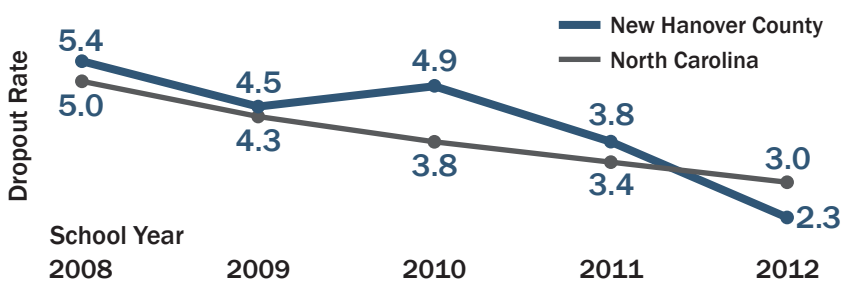
Rank	County	Score
1	Wake	1565
2	Buncombe	1538
3	Union	1529
4	<b>New Hanover</b>	<b>1501</b>
5	Forsyth	1479
6	Mecklenburg	1463
7	Gaston	1429
8	Guilford	1424
9	Durham	1399
10	Cumberland	1383



**Dropout Rate by County and State 2008-2012**

Of the 10 most populated North Carolina counties, New Hanover had the third lowest dropout rate in 2012. Rates are calculated as a percent of total student enrollment (grades 9-12). Overall, dropout rates declined between 2008 and 2012 for both the county and state. New Hanover County's dropout rate declined by half from 2008 to 2012.

Source: NC State Board of Education, Department of Public Instruction



**Average Dropout Rate**

**Dropout Rate in 2012**

Rank	County	Rate
1	Durham	3.6%
2	Gaston	3.4%
3	Forsyth	3.4%
4	Mecklenburg	3.2%
5	Buncombe	3.1%
6	Wake	2.8%
7	Cumberland	2.6%
8	<b>New Hanover</b>	<b>2.3%</b>
9	Guilford	2.2%
10	Union	1.7%

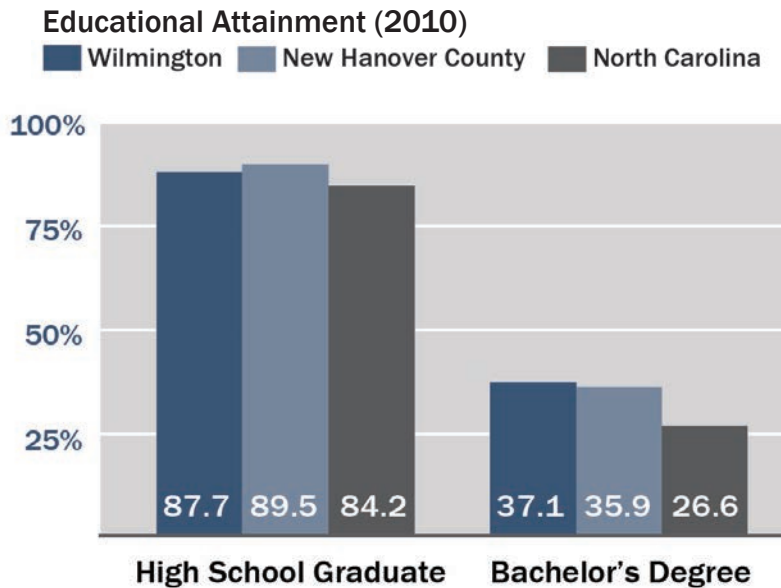
## 2.14 Educational Attainment

### Educational Attainment by City, County and State

#### 2007-2011 5-year Estimate

Nearly 90% of New Hanover County's population had a high school diploma, which is greater than that of the overall state population. Over 37% of the city's population has a bachelor's degree, which is also above the state average. Of the 10 most populated North Carolina counties, New Hanover County ranked second highest for the number of persons with a high school diploma and the fourth highest for the number of persons with a bachelor's degree.

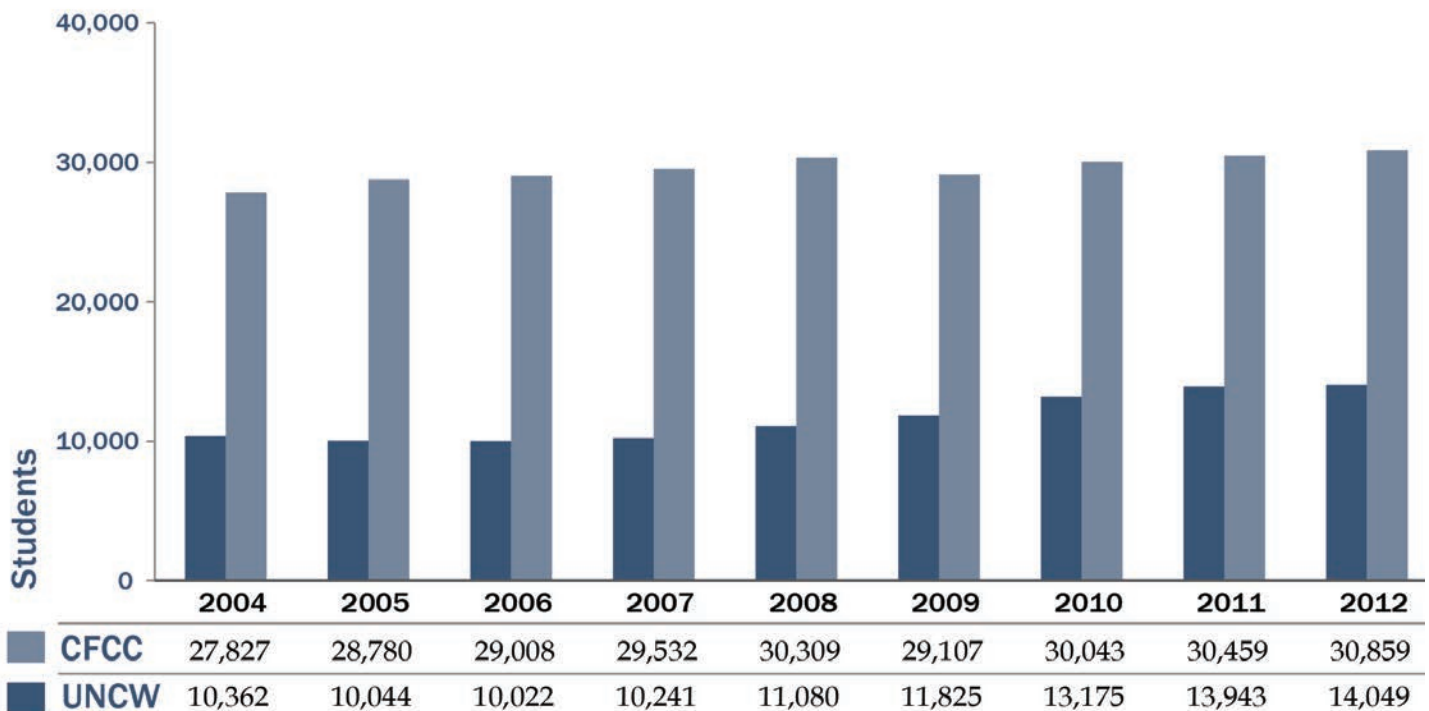
Source: U.S. Census Bureau

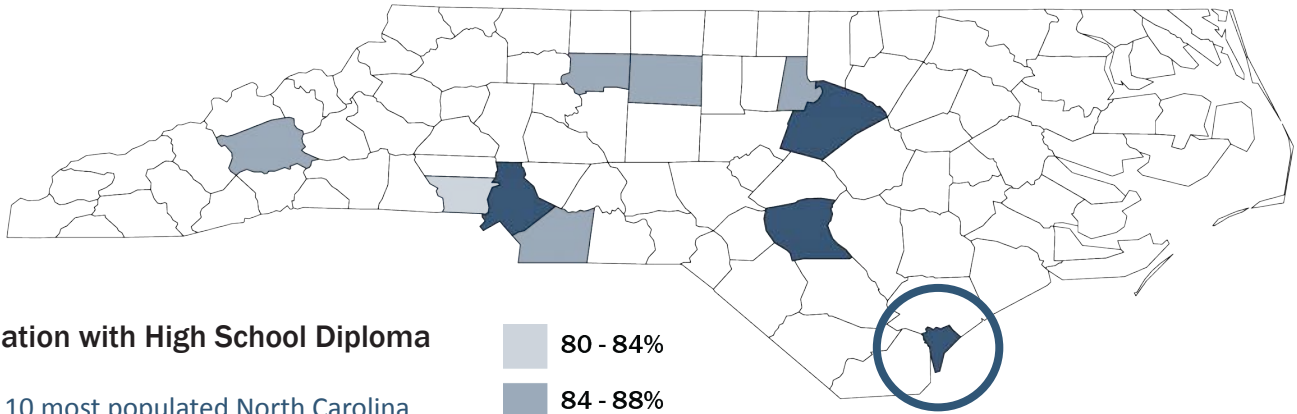


### UNCW and CFCC Enrollment 2004-2012

Both Cape Fear Community College (CFCC) and the University of North Carolina Wilmington (UNCW) saw a steady increase in student population between 2004 and 2012. The community college saw a slightly higher growth rate than that of UNCW. Student enrollment at UNCW is projected to increase by approximately 7% from 2012 to 2020.

Source: UNCW and CFCC

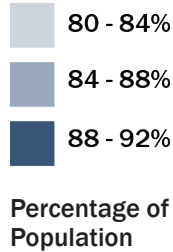




### Population with High School Diploma 2010

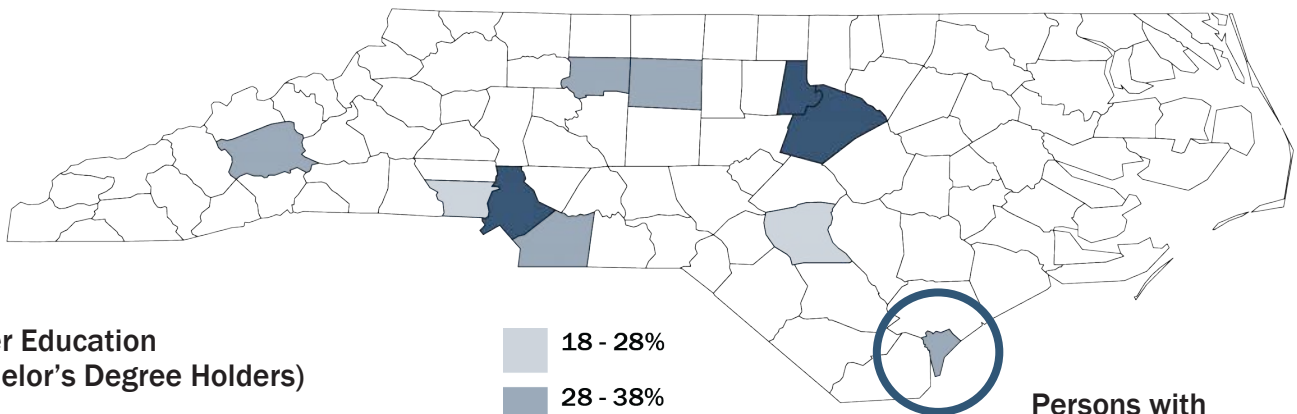
Of the 10 most populated North Carolina counties, New Hanover County ranked second highest in the percentage of population with a high school diploma in 2010.

Source: US Census Bureau



### Persons with a High School Diploma (% of Population, Age 25+)

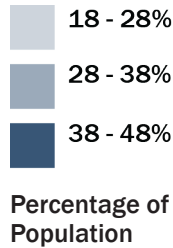
Rank	County	Rate
1	Wake	92%
2	<b>New Hanover</b>	90%
3	Cumberland	89%
4	Mecklenburg	89%
5	Buncombe	88%
6	Forsyth	87%
7	Guilford	87%
8	Union	87%
9	Durham	87%
10	Gaston	80%



### Higher Education (Bachelor's Degree Holders) 2010

Of the 10 most populated North Carolina counties, New Hanover County ranked fourth highest in the percentage of population over age 25 with a bachelor's degree in 2010.

Source: US Census Bureau



### Persons with Bachelor Degrees (% of Population, Age 25+)

Rank	County	Rate
1	Wake	48%
2	Durham	44%
3	Mecklenburg	40%
4	<b>New Hanover</b>	36%
5	Guilford	33%
6	Buncombe	32%
7	Forsyth	31%
8	Union	30%
9	Cumberland	22%
10	Gaston	18%

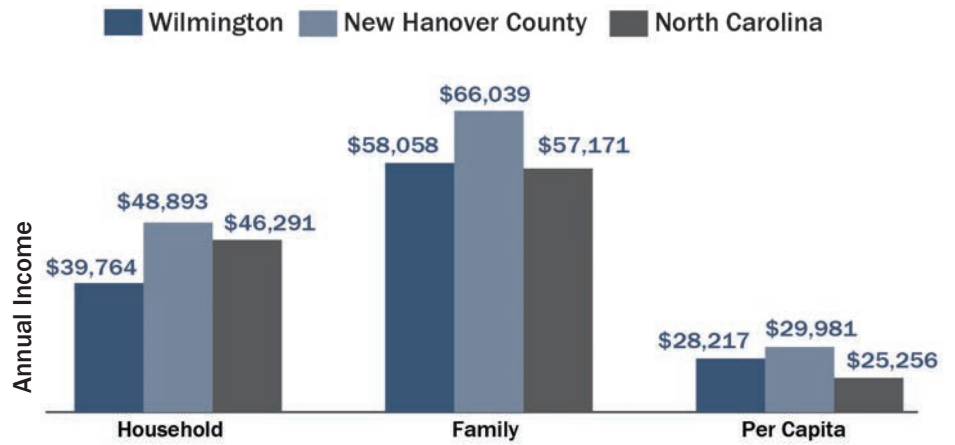
# Economy

## 2.15 Income

### Household, Family, and Per Capita Income by City, County, and State 2010

Of the 10 most populated North Carolina cities, Wilmington ranked fifth for average household income, fourth out of 10 for average family income and fourth out of 10 for average per capita income in 2010. The average household (one or more unrelated persons sharing residence) income within the city was less than that of the county and state.

Source: U.S. Census Bureau



### Average Weekly Income by County and State 2002-2012

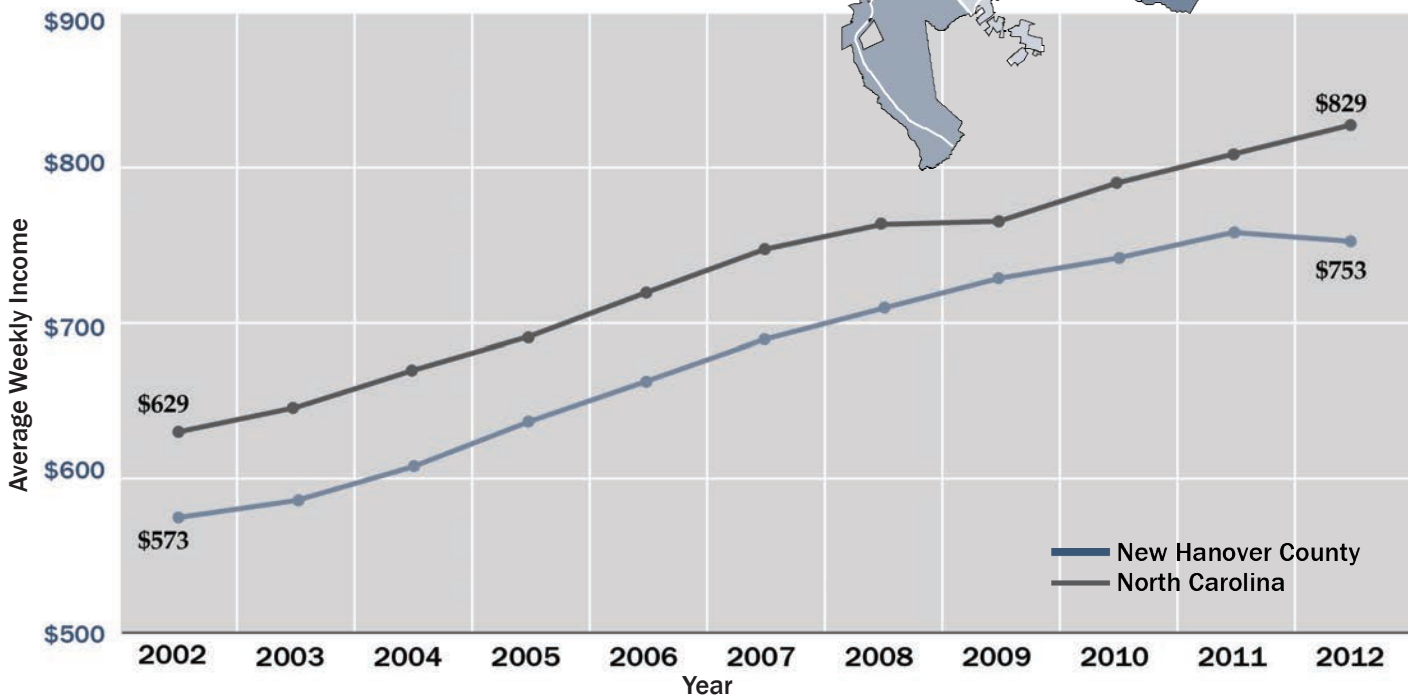
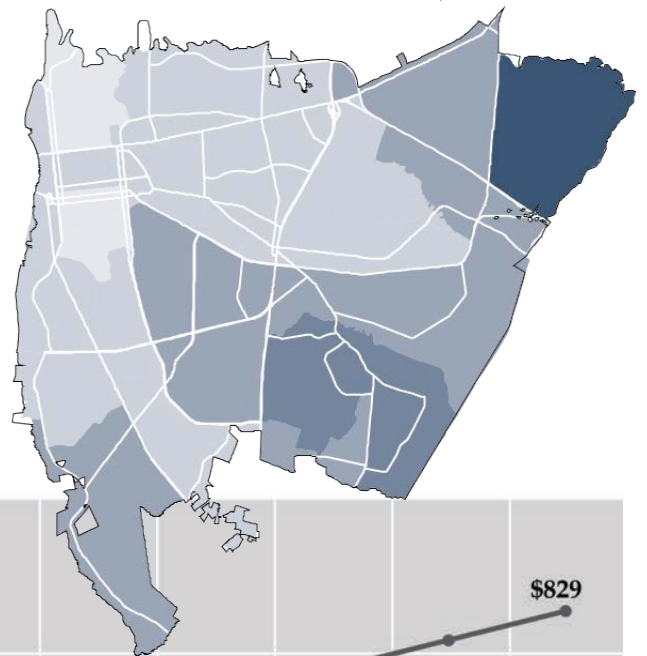
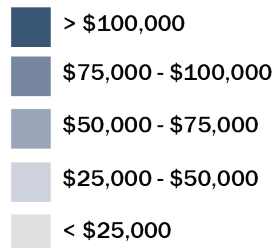
Average weekly incomes within the county and throughout the state increased steadily from 2002 to 2012. The county's average weekly wage leveled off in 2011.

Source: U.S. Bureau of Labor Statistics

### Median Income by Census Tracts 2010

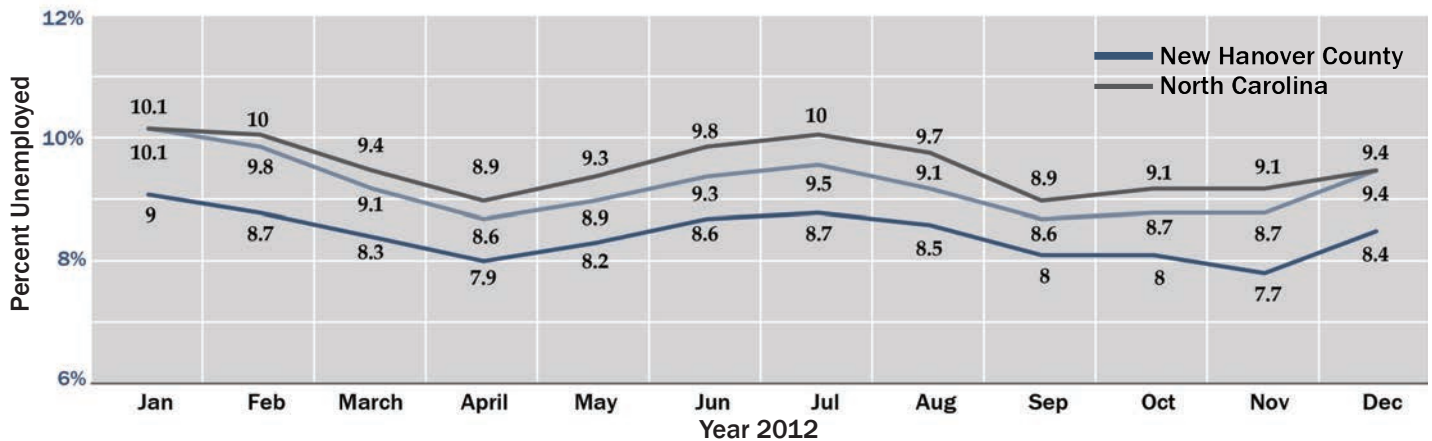
This map depicts the median income levels across the city by census tract.

Source: U.S. Census Bureau





## 2.16 Employment



### Unemployment Rates, 2012 by City, County, and State

Of the 10 most populated North Carolina cities, Wilmington had the fourth highest unemployment rate in 2012. The unemployment rates within the city, county, and state improved slightly in 2012.

Source: NC Employment Security Commission

### Employment by Sector by City, County, and State, 2012

Wilmington's largest employment sector is Education Services, Health Care and Social Assistance. The table to the right displays in more detail Wilmington's employment sectors as compared to the county and the state. The table also depicts how each sector has been trending as a percentage of overall employment since the year 2000.

Source: U.S. Census Bureau

### Area's Largest Employers (1,000+ Employees)

#### New Hanover County, 2010

1. New Hanover Regional Medical Center
2. New Hanover County School System
3. University of North Carolina
4. The Shaw Group
5. New Hanover County
6. Cellco Partnership
7. PPD Development
8. Wal-Mart
9. Cape Fear Community College
10. Corning Inc

Source: NC Employment Security Commission

### Employment Sectors and Trends\*

Employment Sector	Wilmington	New Hanover County	North Carolina
Agriculture, forestry, fishing and hunting, mining	0.2%	0.2%	1.5%
Construction	7.5%	8.0%	7.3%
Manufacturing	5.1%	6.7%	12.8%
Wholesale trade	2.5%	3.0%	2.9%
Retail trade	12.4%	12.1%	11.7%
Transportation and warehousing, utilities	3.6%	3.9%	4.3%
Information	2.3%	2.7%	1.8%
Finance and insurance, real estate and rental and leasing	5.2%	5.3%	6.4%
Professional, scientific, and management, administrative and waste management services	12.3%	12.1%	9.6%
Education services, health care and social assistance	24.8%	23.8%	23.4%
Arts, entertainment, recreation and accommodation and food services	15.9%	13.6%	9.0%
Other services, except public administration	5.8%	5.4%	4.9%
Public administration	2.4%	3.3%	4.4%

Trending Up

Trending Down

No Significant Change

\* Trend based on percentage of overall employment in 2000, 2010, and 2012

## 2.17 Tourism



Source: City of Wilmington



Source: City of Wilmington

### Travel and Tourism Employment (Employees)

	New Hanover County	North Carolina
2007	5,670	190,910
2008	5,510	190,470
2009	5,060	183,800
2010	5,040	183,910
2011	5,100	188,400

Source: NC Department of Commerce

### Travel and Tourism Tax Receipts

	New Hanover County	North Carolina
2007	\$16,690,000	\$529,030,000
2008	\$16,680,000	\$542,280,000
2009	\$14,970,000	\$509,820,000
2010	\$15,720,000	\$543,740,000
2011	\$17,530,000	\$560,950,000

Source: NC Department of Commerce

Travel and tourism employment and the amount of local tax receipts were near their lowest during the Great Recession (2009).



Source: Wilmington International Airport



Source: Wilmington International Airport

### Airport Passenger Volumes Wilmington International Airport

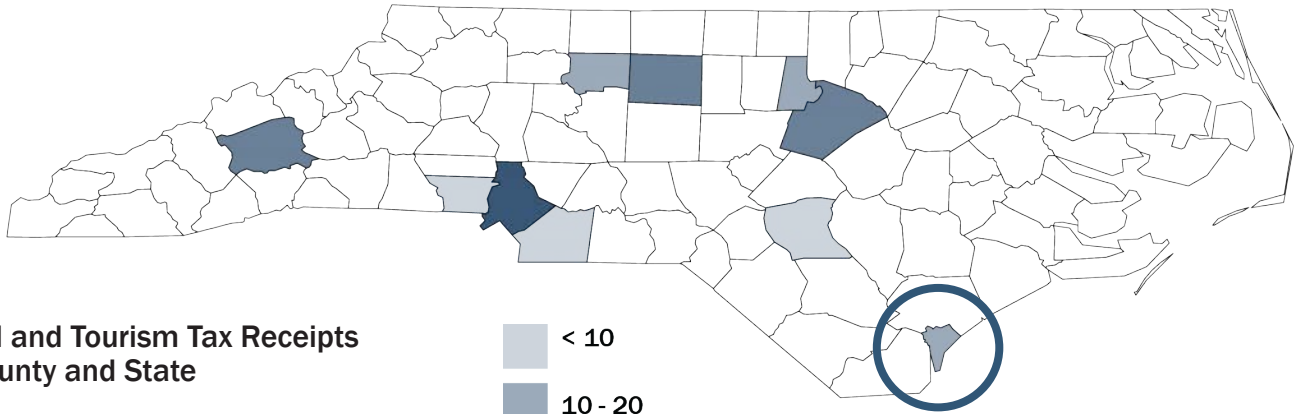
	2009	2010	2011	2012
Enplanements	405,874	412,264	403,836	400,109
Deplanements	401,252	409,676	401,675	395,803

There was a slight increase in enplanements and deplanements in 2010; however, enplanements and deplanements declined overall between 2009 to 2012. Enplanements are projected to increase by over 20% from 2012 to 2020.

Source: Wilmington International Airport

### Daily Non-stop Passenger Destinations Wilmington International Airport

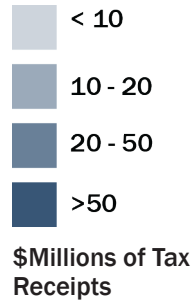
City	Airport Code	Airline
Atlanta	ATL	Delta
Charlotte	CLT	American/US Airways
New York	LGA	American/US Airways
Philadelphia	PHL	American/US Airways



### Travel and Tourism Tax Receipts by County and State 2012

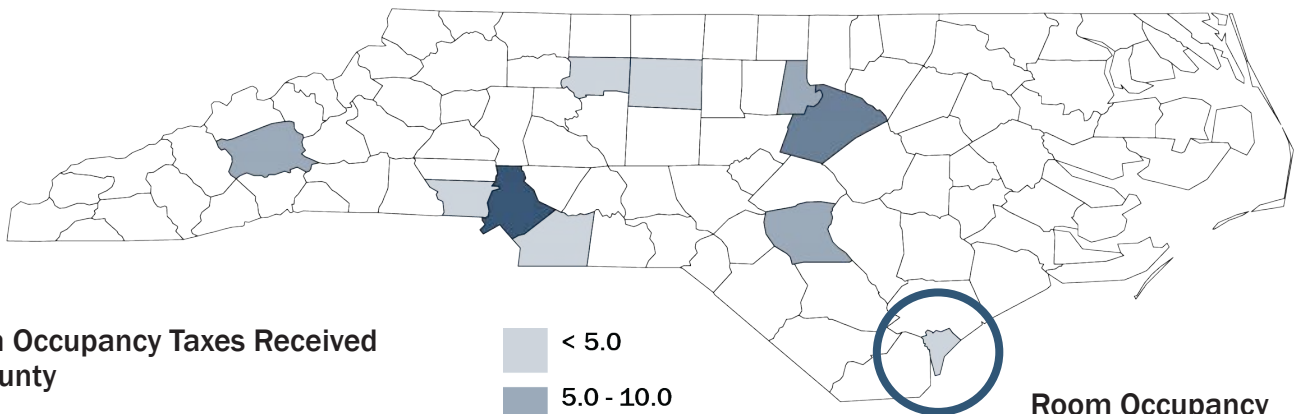
Of the 10 most populated North Carolina counties, New Hanover County ranked sixth highest in total tourism tax receipts in 2012. While there has been a decrease in travel and tourism employment since 2007, local tax receipts have remained steady in the county and have slightly improved across the state.

Source: NC Department of Commerce



### Local Tourism Tax Receipts 2012 (\$ Millions)

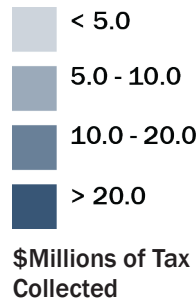
Rank	County	Rate
1	Mecklenburg	\$107.3
2	Wake	\$47.7
3	Buncombe	\$27.4
4	Guilford	\$25.9
5	Durham	\$19.3
6	<b>New Hanover</b>	<b>\$18.4</b>
7	Forsyth	\$12.8
8	Cumberland	\$9.5
9	Gaston	\$3.5
10	Union	\$1.9



### Room Occupancy Taxes Received by County 2011

Of the 10 most populated North Carolina counties, New Hanover County had the third lowest amount of room occupancy taxes collected in 2011.

Source: NC Department of Revenue



### Room Occupancy Taxes Received (\$ Millions)

Rank	County	Rate
1	Mecklenburg	\$28.9
2	Wake	\$15.4
3	Durham	\$7.8
4	Buncombe	\$7.4
5	Cumberland	\$5.0
6	Guilford	\$4.6
7	Forsyth	\$3.9
8	<b>New Hanover</b>	<b>\$3.8</b>
9	Gaston	\$1.1
10	Union	\$0.0

## 2.18 Tax Revenues

### Largest Tax Payers (Taxes Levied) New Hanover County 2010

Duke Energy Progress	\$1,251,486
General Electric	\$1,154,015
Corning	\$971,925
Celanese Corp	\$381,956
ATandT (BellSouth)	\$323,787
Arteva Specialties	\$205,741
Centro Independence LLC (Independence Mall)	\$219,279
River Ventures (PPD)	\$213,616
Global Nuclear Fuel Americas LLC	\$183,812

Source: NC Employment Security Commission

### Taxable Sales County and State 2010-2012

New Hanover County saw an increase in taxable sales of nearly 21% between fiscal years 2009-10 and 2011-12. The state of North Carolina saw an increase in taxable sales of only 9% during the same period of time.

Fiscal Year	New Hanover County	Increase
2009-10	\$2.6 billion	N/A
2010-11	\$2.9 billion	11.5%
2011-12	\$3.2 billion	10.3%

Fiscal Year	North Carolina	Increase
2009-10	\$94.6 billion	N/A
2010-11	\$96.8 billion	2.3%
2011-12	\$102.8 billion	6.2%

Source: NC Department of Revenue

### Garner Economic Target Analysis

In August 2013, the New Hanover County Board of Commissioners retained Garner Economics, LLC to conduct an economic development strategy and action plan to help New Hanover County strengthen existing industries and identify emerging industries.

#### Optimal Targets for New Hanover County

- 1 Life/Marine Sciences Research and Development
- 2 High Value Office Operations
- 3 Precision Manufacturing
- 4 Aircraft Assembly, Modification, and Maintenance



*Additional Information*  
New Hanover County  
Garner Report



*Policies*  
5

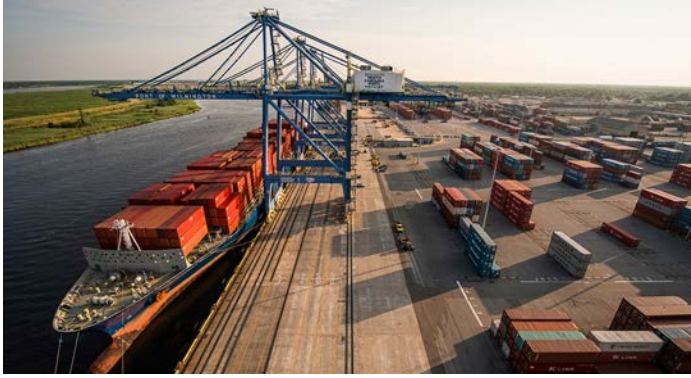


#### *Key Planning Theme*

#### Economic Opportunity

Fostering opportunities for economic growth and development that enhance the concepts of each of the other themes is critical to future prosperity.

## 2.19 State Port



Source: North Carolina State Ports Authority

From its colonial origins, Wilmington emerged as an inland coastal seaport along the Cape Fear River. Maritime industrial operations have played a critical role in the city's economic prosperity and cultural identity ever since. Wilmington's nickname is the Port City, there are many local businesses and organizations that use this name.

The city of Wilmington and its port are located approximately midway between New York City and Miami. Owned and operated by the North Carolina State Ports Authority, the Port of Wilmington offers terminal facilities serving container, bulk and breakbulk operations. Wilmington is one of the few South Atlantic ports with readily available berths and storage areas for containers and cargo. Regional and national highway networks provide surface transportation to and from the Port of Wilmington. CSX Transportation provides daily rail service for boxcar, tanker, and general cargo services.

Source: North Carolina State Ports Authority



Source: Lower Cape Fear Historical Society

### Port History and Relocation

The value of deepwater ports was recognized by the state legislature in 1945 with the creation of the North Carolina State Ports Authority. Its job was to create two competitive ports through the sale of revenue bonds and foster a better atmosphere for the development in North Carolina industry.

In 1949, the General Assembly approved the issuance of \$7.5 million in bonds for construction and improvement of seaports to promote trade throughout the state. Terminals equipped to handle oceangoing vessels were completed at Wilmington and Morehead City in 1952.

In Wilmington, the state-sponsored terminal relocated the bulk of maritime industrial activity south of downtown, an area used for shipbuilding during World War II. The site has undergone numerous expansions and upgrades since then.

Source: North Carolina State Ports Authority

#### PORT STATISTICS:

**26** nautical miles from the open sea

**9** berths with **6,768** feet of wharf frontage

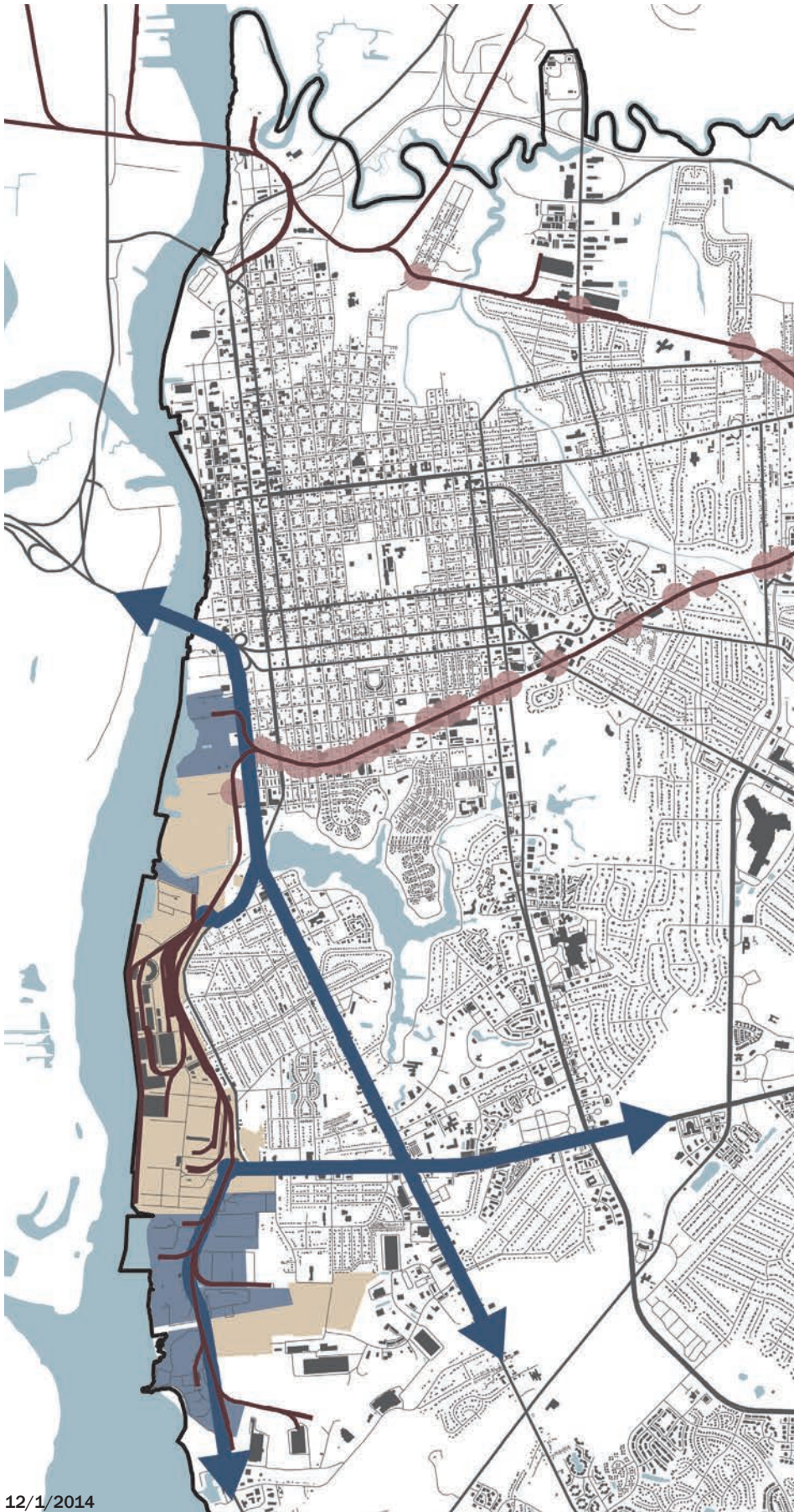
**65** lift trucks with **52,000**-pound capacities

**2** gantry cranes and **9** container cranes

**1,000,000+** square feet of covered storage; **125+** acres of open storage

**150+** acres of land available for development

1  
2  
3  
4  
5  
6  
7  
8  
9



### Port Operations

The map illustrates the extent of the NC State Port Authority-owned properties, active rail lines serving the port, major truck routes entering and exiting the port, and private terminals adjacent to the port.

- NC State Port Properties
- Private Terminals
- Railroad Crossings
- Truck Routes
- Active Rail Lines

12/1/2014

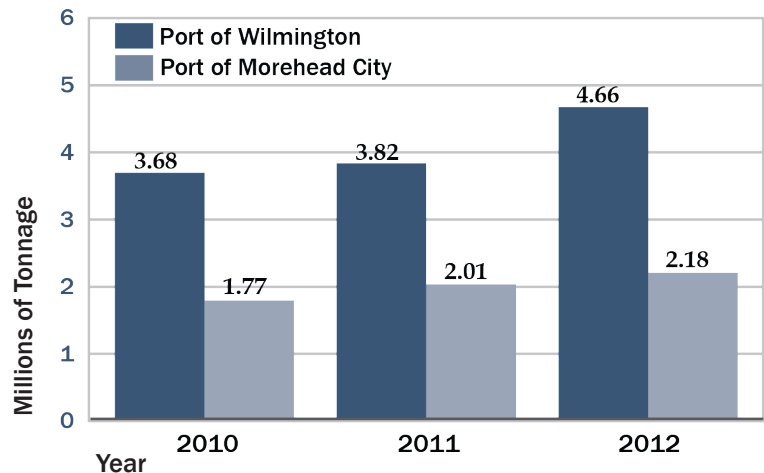
Growth Strategies Report  
p. 46

## Port Volumes, 2010-2012

### (Millions of Tonnage)

Wilmington is home to one of two sea ports serving North Carolina. Wilmington's 2012 tonnage total was more than double that of the port located in Morehead City. It is projected that the amount of bulk tonnage will increase by approximately 15% and breakbulk (several individual items or sized loads) tonnage will increase by over 100% from 2012 to 2020.

Source: NC State Port Authority

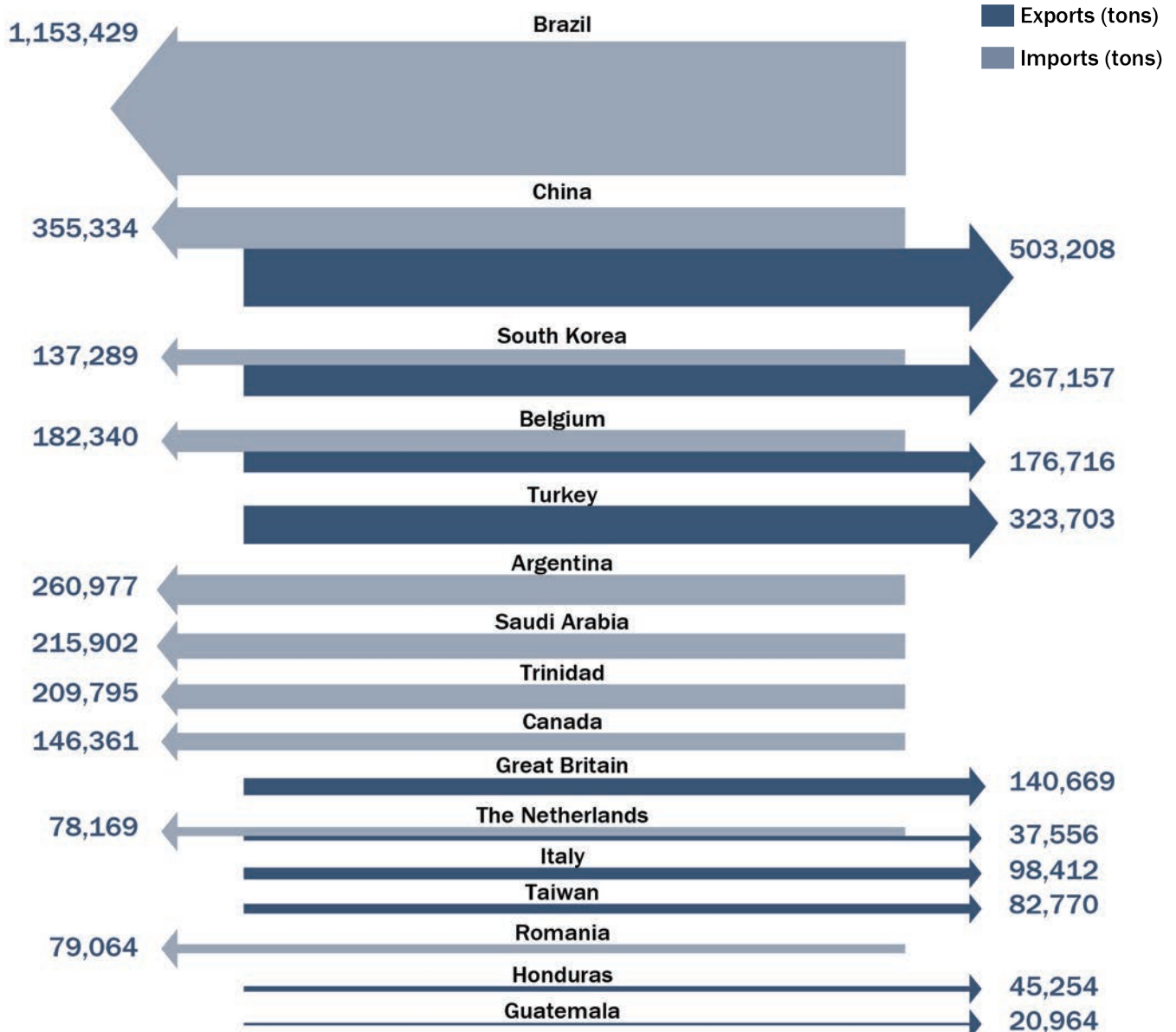


## Primary Trading Partners, 2013-2014

### (Millions of Tonnage)

The chart below shows the volume of imported and exported goods by national trading partner through the Port of Wilmington.

Source: North Carolina State Ports Authority





# 3

## Natural Resources

- 3.1 Water and Wetlands
- 3.2 Watersheds
- 3.3 Flood Zones
- 3.4 Environmental Assets
- 3.5 Water Access

### **Natural Resources**

“The throwing out of balance of the resources of nature throws out of balance also the lives of men.”

-Franklin D. Roosevelt





## 3.1 Water and Wetlands

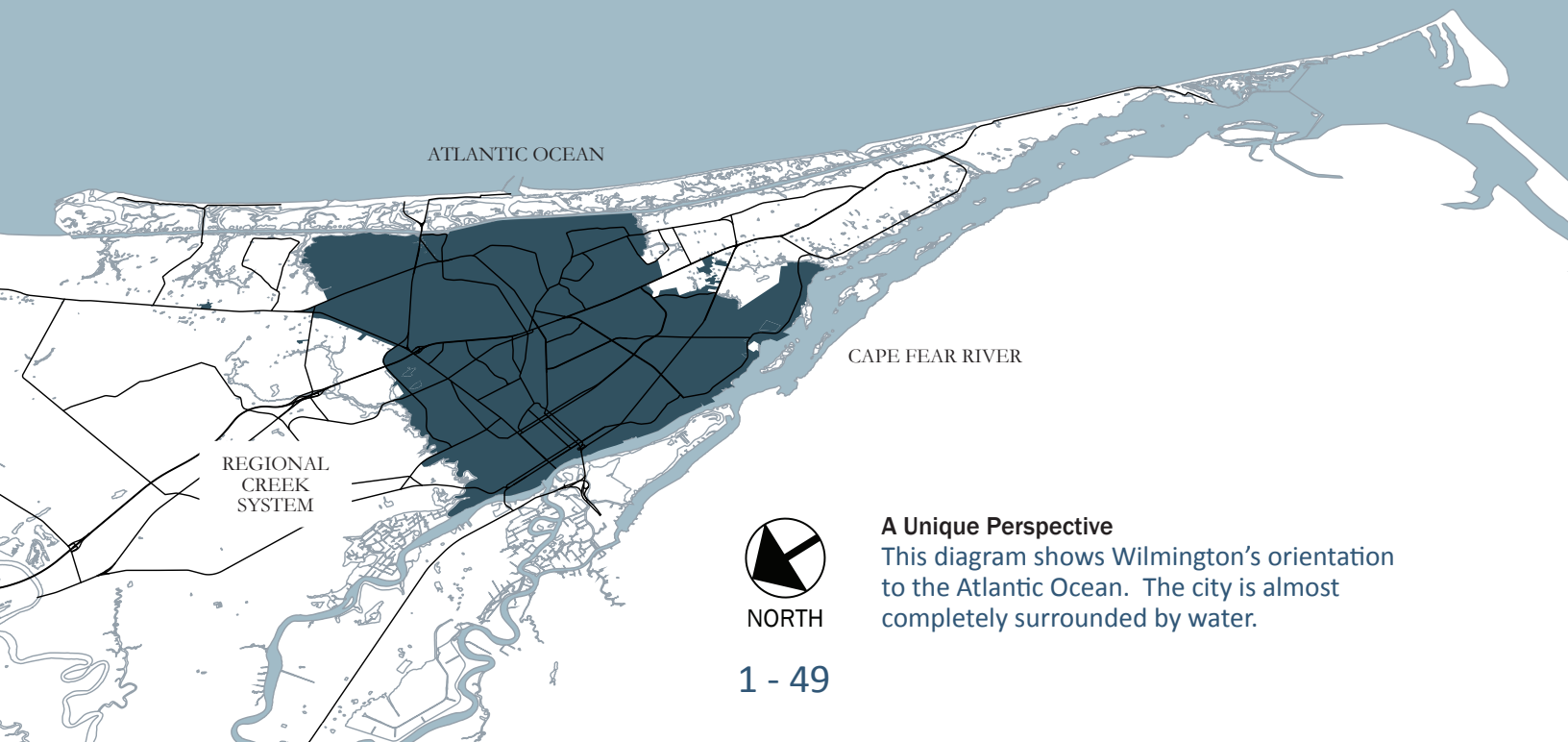
Water plays an important role in the way of life in Wilmington, as the city is bordered by both the Cape Fear River and the Atlantic Intracoastal Waterway. There are also a number of tidal creeks and natural and man-made lakes and ponds found across the city.

Wetlands are a critical component of our water resources, as they remove pollutants from stormwater runoff, feed downstream systems, recharge groundwater supplies, and provide habitat for fish and wildlife. Wetlands may include a swamp, marsh, or bog and can vary greatly due to differences in soils, hydrology, water chemistry, and vegetation.

Source: U.S. Environmental Protection Agency

“We forget that the water cycle and the life cycle are one.”

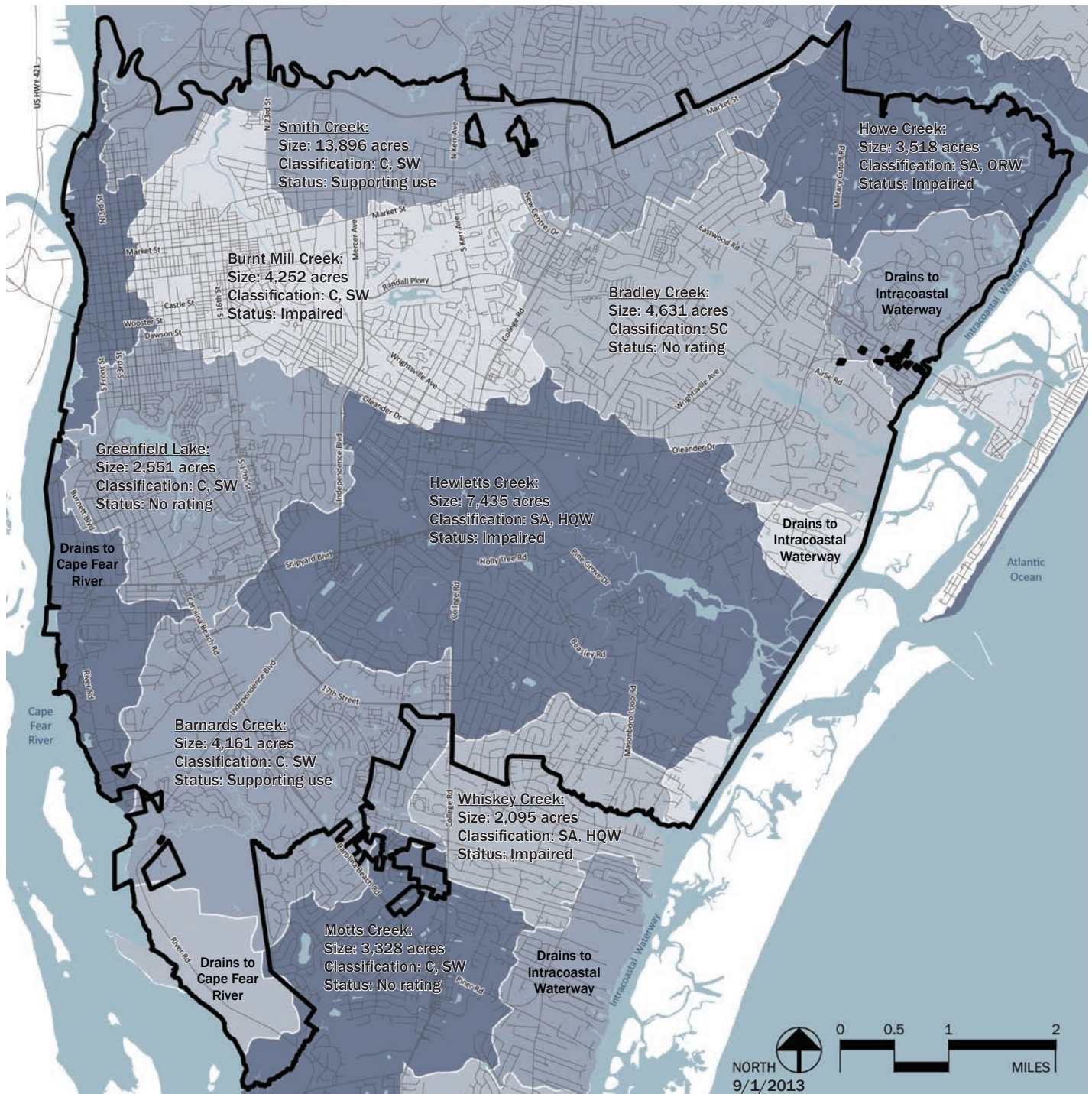
— Jacques Cousteau



### A Unique Perspective

This diagram shows Wilmington's orientation to the Atlantic Ocean. The city is almost completely surrounded by water.

## 3.2 Watersheds

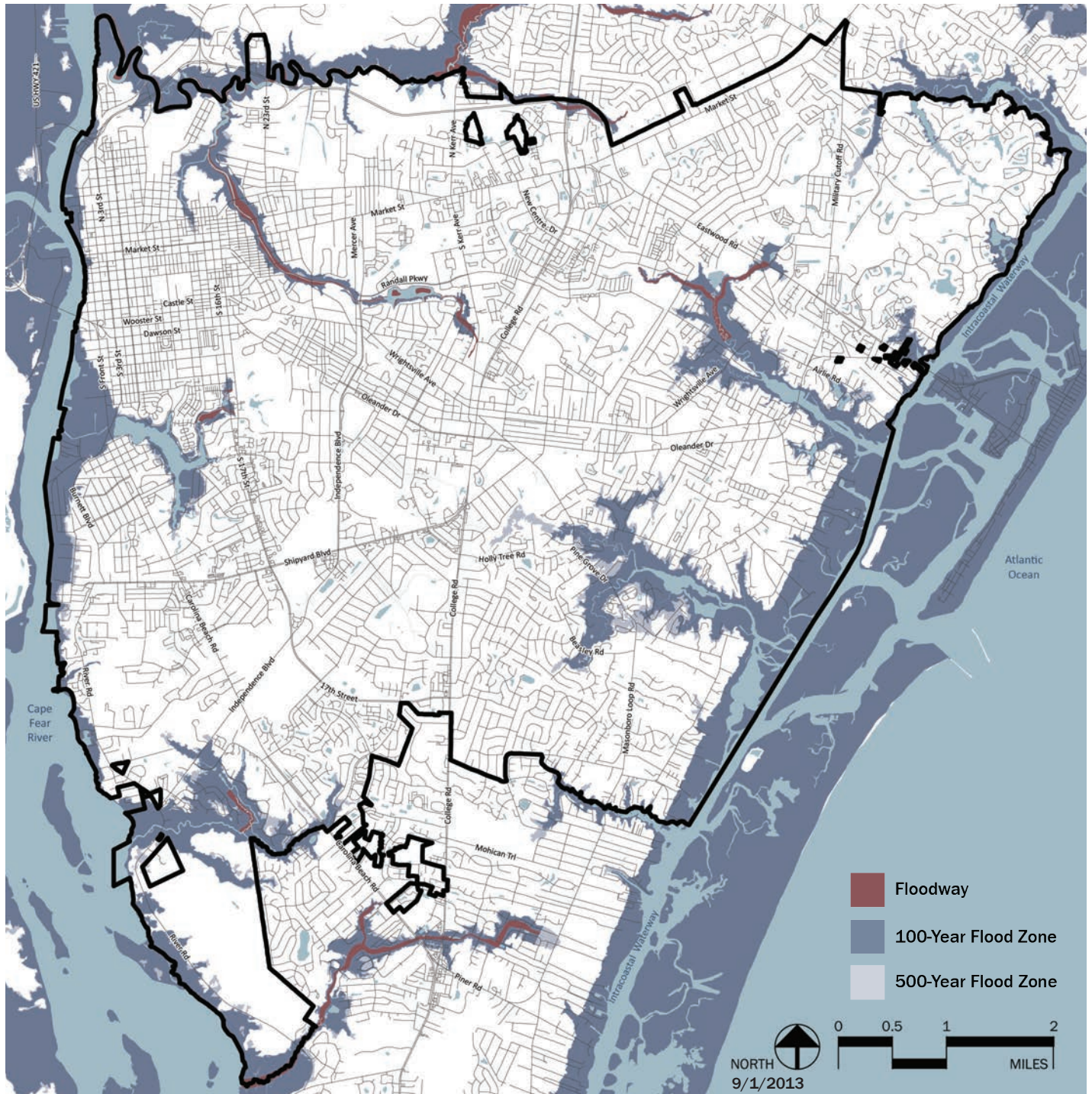


This map depicts the watersheds located within the city. A watershed is the area of land from which all of the water drains to the same place. The N.C. Division of Water Quality applies classifications to waterways that define their intended use for protection. Waterways that are impaired are not meeting their intended use.

### Waterway Classifications

- C - Fresh water, protected for secondary recreation
- SW - Swamp waters, low flow, flat topography
- SA - Salt water, used for shellfishing, primary recreation
- SC - Salt water, protected for secondary recreation
- HQW - Salt water, rated excellent for biological, physical and chemical characteristics
- ORW - Salt water, excellent water quality, national, ecological, recreational significance

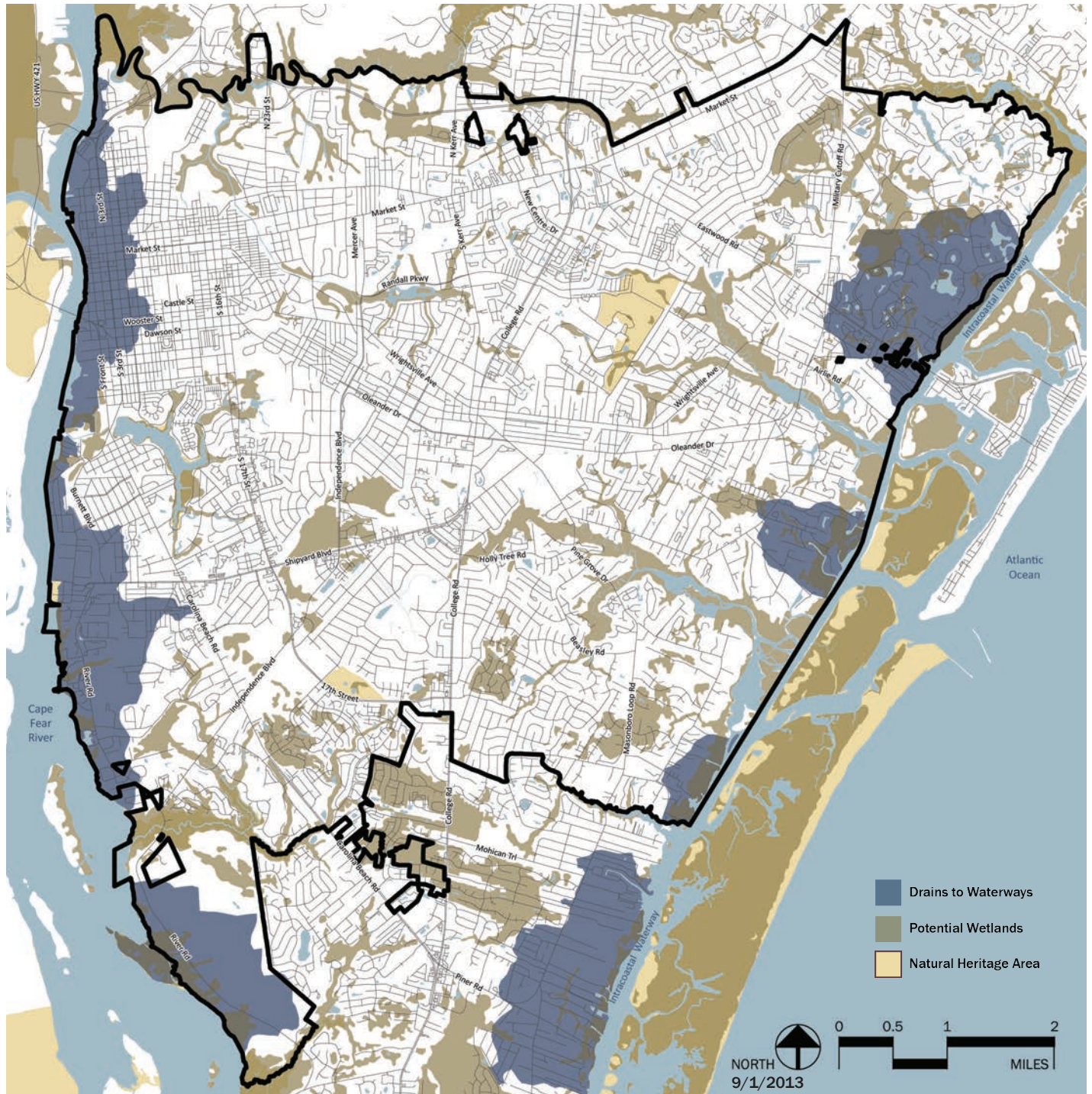
### 3.3 Flood Zones



This map depicts the flood zones that exist at various locations in the city. Flood zones are areas identified by the Federal Emergency Management Agency (FEMA) as being vulnerable to varying levels of risk. A flood zone is the area adjacent to a waterway that has been or may be covered by flood waters. A floodway is the channel of a waterway and parts of the adjacent floodplain that are reasonably required to carry the

flood water of the waterway. There are approximately 1,359 acres of vacant land within the 100-year flood zone and an additional 188 acres of vacant land within the 500-year flood zone. A 100-year flood is an event that has a 1% probability of occurring in any given year, a 500-year flood is an event that has a 0.2% chance of occurring in any given year.

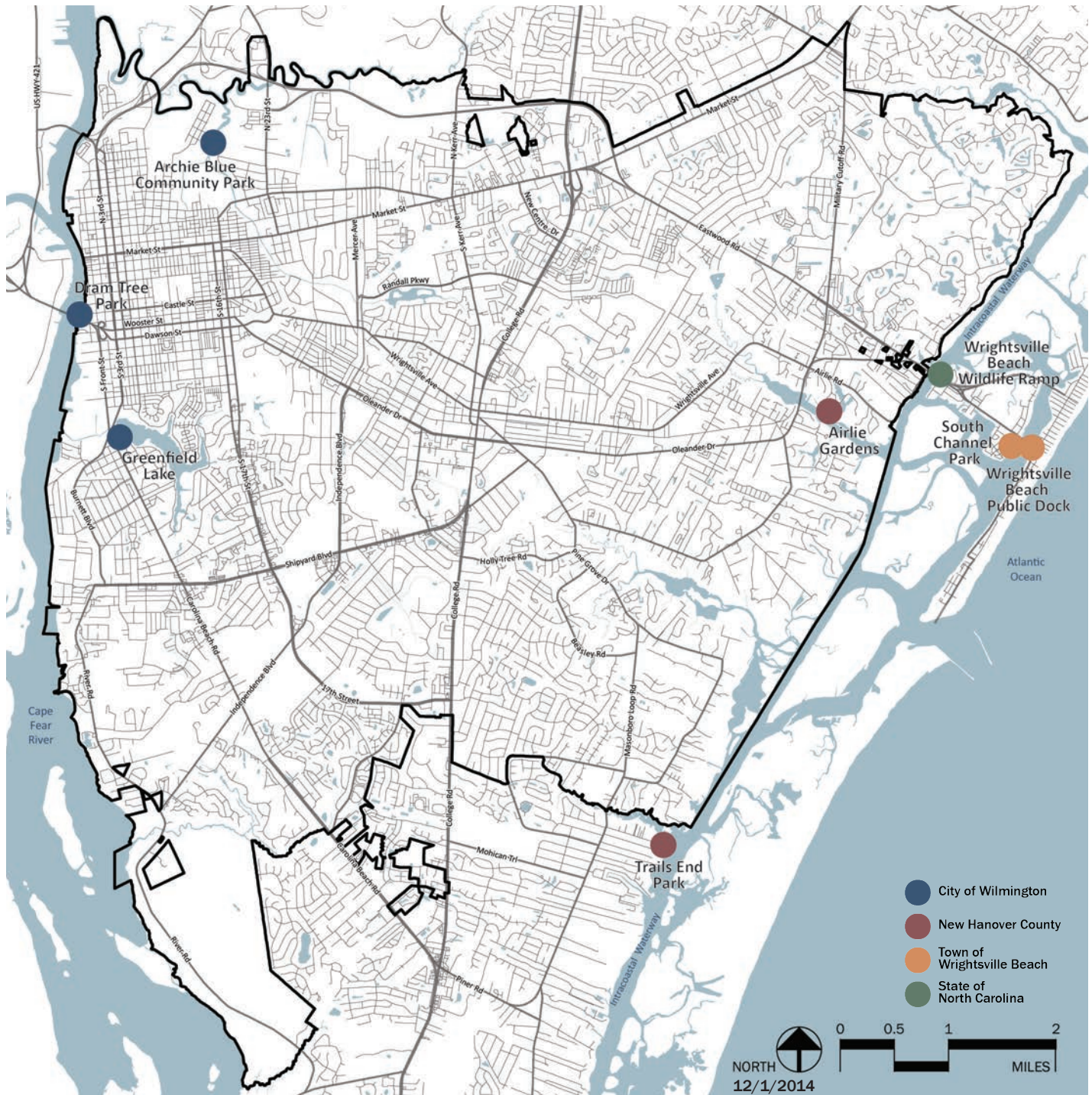
### 3. Environmental Assets



This map identifies various environmental assets and constraints across the city, including watersheds draining to coastal waters and the Cape Fear River. Also identified are potential wetlands and significant natural heritage areas. Significant natural heritage areas are sites of special biodiversity significance. An area's significance may be due to the presence of rare species,

exemplary or unique natural communities, important animal assemblages, or other important ecological features. Examples of significant natural heritage areas in the city include the Alderman Nature Preserve, Greenfield Lake, and the UNCW Longleaf Pine Forest.

### 3.5 Maintained Water Access



This map depicts locations where access to local water bodies is available to the public. The city maintains three public water access sites: one on the Cape Fear River (Dram Tree Park), one on a tributary to Smith Creek (Archie Blue Park), and one at Greenfield Lake. The city currently has over seven miles of frontage along the Atlantic Intracoastal Waterway with no public water access.



# 4 Land Use, Zoning, and Development Potential

## Land Use and Zoning

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- 4.1 Current Land Use
- 4.2 Current Zoning
- 4.3 Rezoning History and Trends

## Development and Redevelopment Factors

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- 4.4 Building Footprints and Unbuilt Areas
- 4.5 Vacant and Buildable Land
- 4.6 Land Values
- 4.7 Areas of Potential Redevelopment
- 4.8 Developable Land and Redevelopment Sites
- 4.9 Historic Districts and Sites
- 4.10 Brownfields

### **Infill Development**

Dorothea Gardens, a New Urban, infill development in historic Boylan Heights neighborhood, exemplifies successful, new construction in a historic district (image opposite, Raleigh).

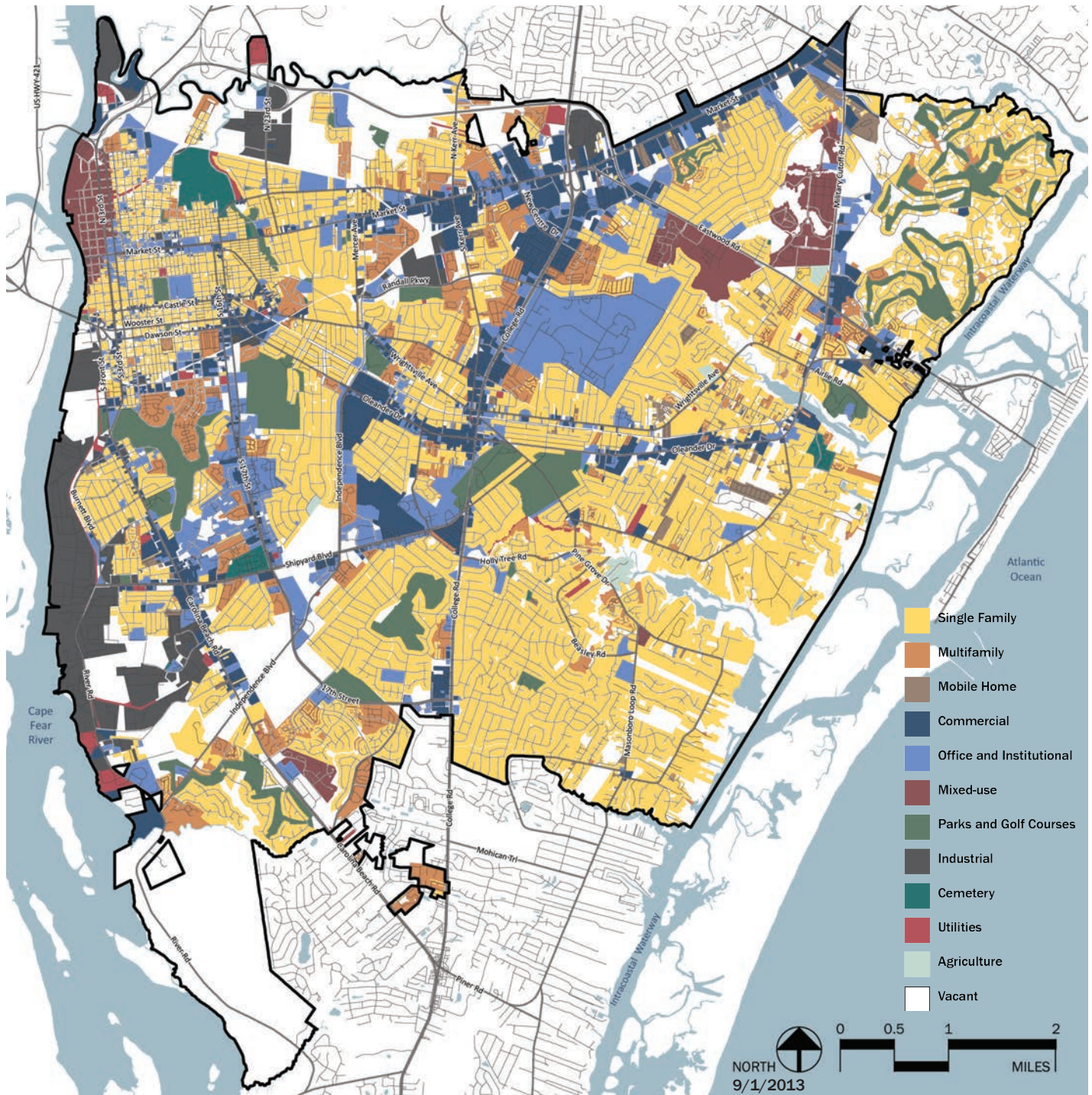
Source: City of Wilmington

“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.”

— Jane Jacobs



# Land Use and Zoning

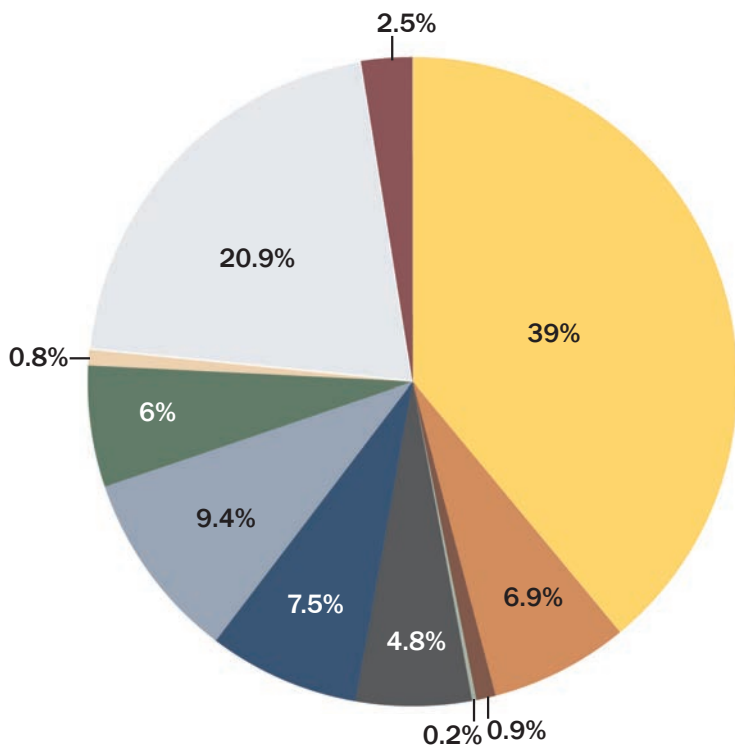


## 4.1 Current Land Use

This map depicts the existing land uses across the city. Land use is different than zoning, as land use indicates the actual use of the property, while zoning defines the type of development permitted. Single-family dwellings make up the largest single land use in the

city. Commercial and office uses are largely confined to major road corridors, while industrial uses are generally located along the river and associated with the state port.





### Current Land Use

Land Use	Acres	Parcels	% of Total Acreage*
Single-family	11,130	31,308	39%
Vacant**	5,959	3,098	20.9%
Office and Institutional	2,694	1,326	9.4%
Commercial	2,148	1,555	7.5%
Multi-family	1,969	786	6.9%
Parks and Recreation	1,714	72	6%
Industrial	1,377	142	4.8%
Mixed-use	726	1,066	2.5%
Mobile Home	268	222	0.9%
Utilities	260	112	0.9%
Cemetery	228	21	0.8%
Agriculture	70	5	0.2%

\* Excluding public rights-of-way and water

\*\* Includes potential wetlands and floodplain



Source (All Images): Google, 2015

### Land Use Patterns

These images reflect some of the different land uses along with associated development patterns located in Wilmington.

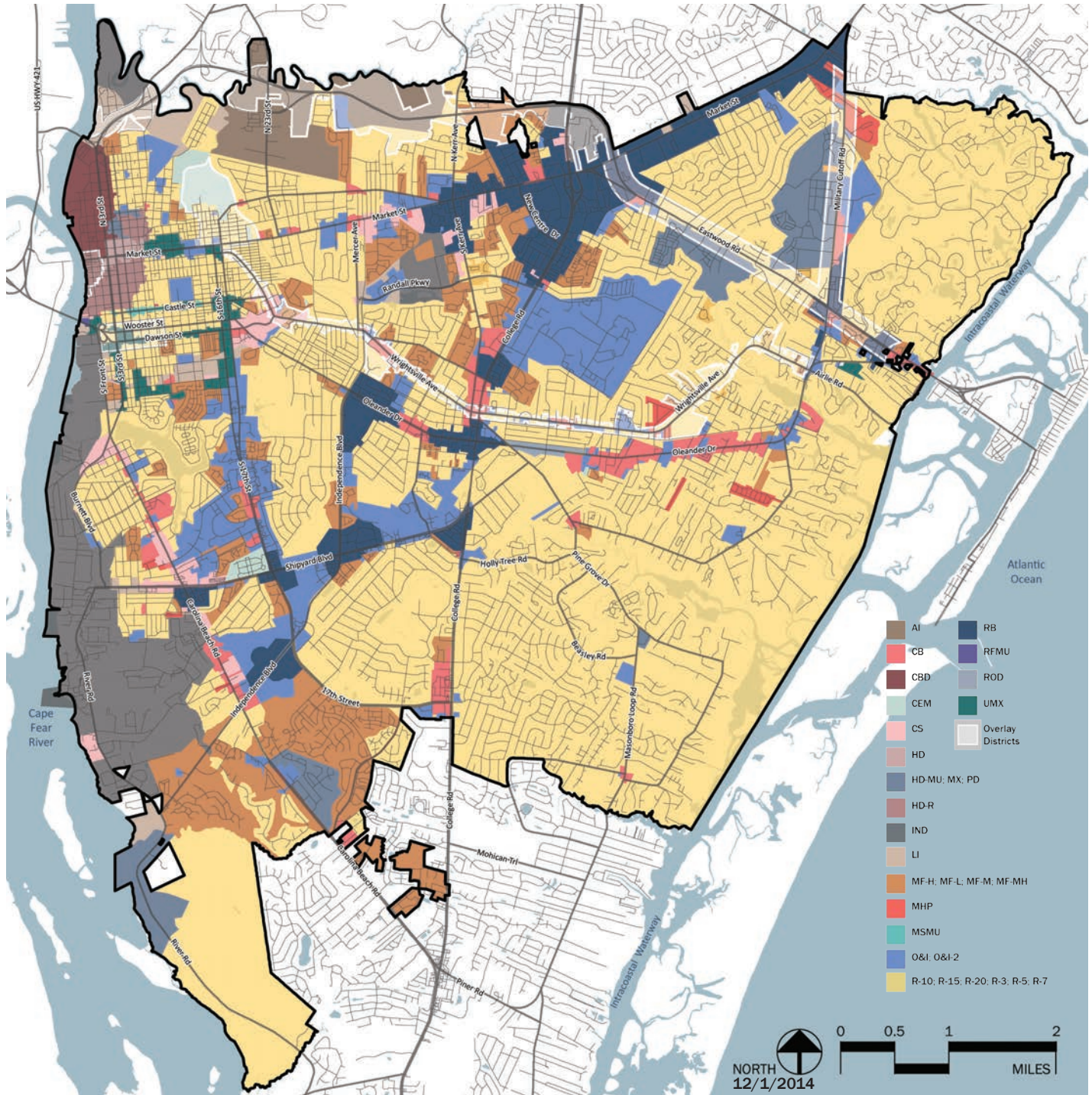
1. Single-family neighborhood off of Kelly Road.
2. Shopping center on South College Road
3. Office park on Sir Tyler Drive



Growth Strategies Report


p. 100

## 4.2 Current Zoning



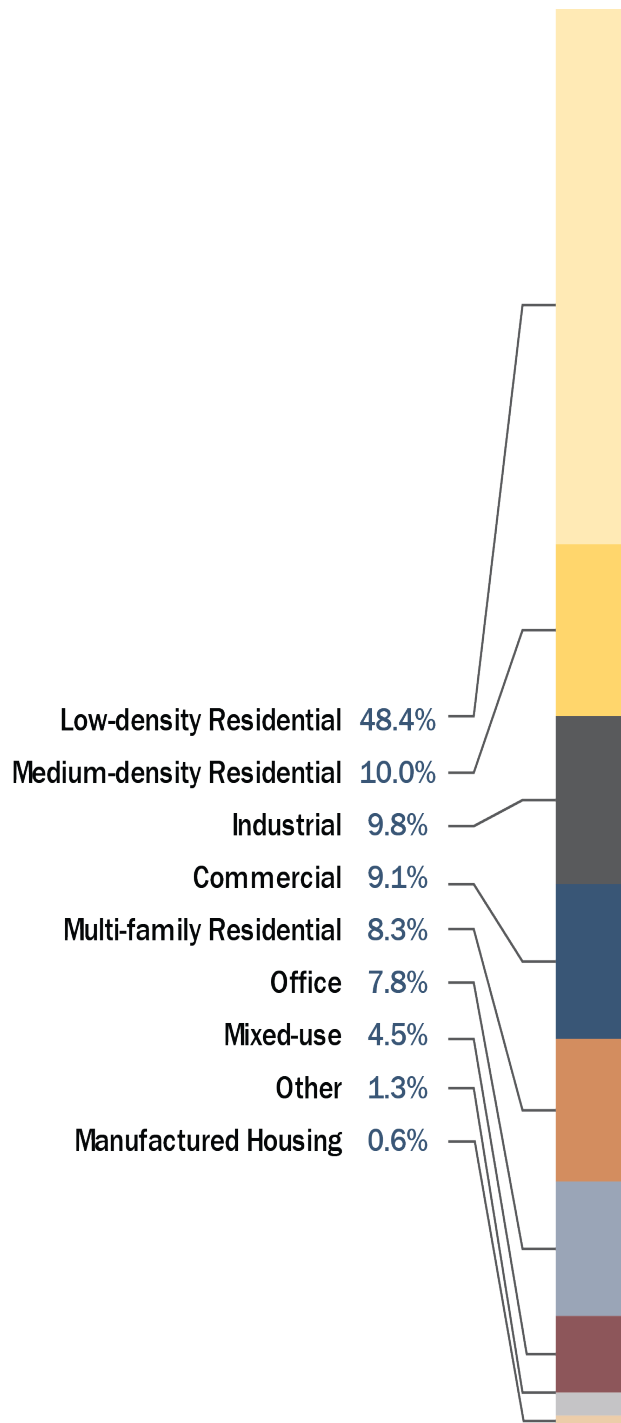
The city of Wilmington has a total of 29 zoning classifications. The majority of the city's land area falls within one of the single-family zoning classifications. Commercial zoning and office zoning are located primarily along major roads and around major intersections. The city's industrially-zoned land is largely found along the river and near the airport.

**Additional Information**

 [Land Development Code](#)

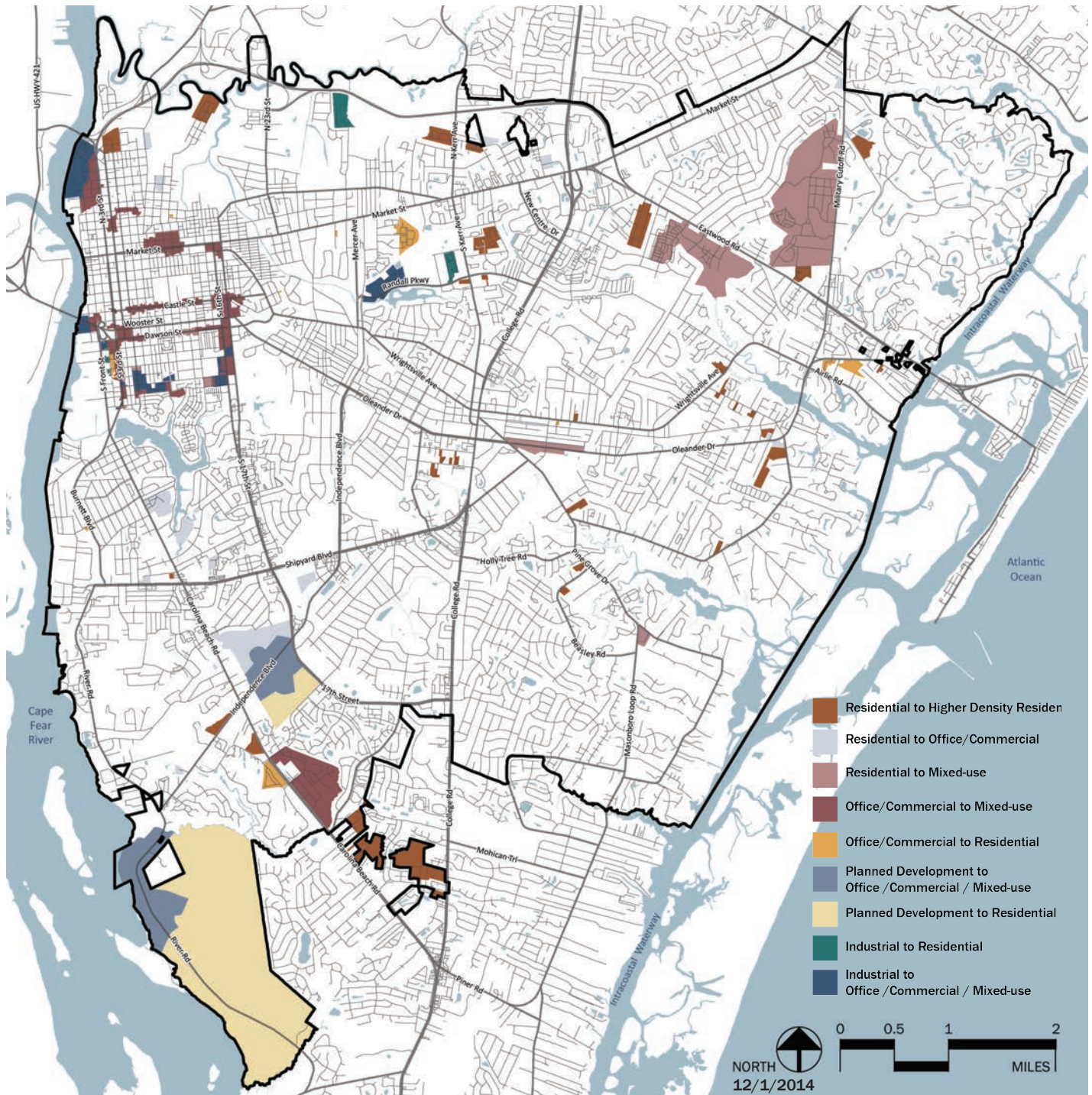
## Current City Zoning Allocation

Nearly half of the current zoning in Wilmington is for low-density, single-family development. While some zoning districts allow for mixed-use development, many do not accommodate it or it is prohibited.



Zone Classification	Abbreviation	% of Total Acreage*
Low-density Residential Districts	R-10 R-15 R-20	48.4%
Medium-density Residential Districts	R-3 R-5 R-7	10.0%
Industrial Airport Industrial Light Industrial	IND AI LI	9.8%
Community Business Regional Business Community Service	CB RB CS	9.1%
Multi family-High Density Multi family-Med High Density Multi family-Low Density Multi family-Med Density	MF-H MF-MH MF-L MF-M	8.3%
Office and Institutional, Small Office and Institutional, Large	Oandl-1 Oandl-2	7.8%
Central Business District Mixed-use Urban Mixed-use Main Street Mixed-use Historic District Mixed-use Riverfront Mixed-use	CBD MX UMX MSMU HD-MU RFMU	4.5%
Cemetery Historic District Historic District Residential Planned Use Development Residential Office Development	CEM HD HD-R PD ROD	1.3%
Mobile Home Park	MHP	0.6%

## 4.3 Rezoning History and Trends



Since 2000, approximately 3,578 acres have been rezoned within the current city limits, including all annexed properties, some of which fall outside of the extent of this map. There were five major trends within this time period. Over 1,200 acres were rezoned from Planned Development (PD) to residential. Approximately 656 acres were rezoned from residential (single- or multi-family) to a mixed-use

zoning classification (e.g. Autumn Hall), 412 acres were rezoned from residential to a higher density residential zoning classification (e.g. Lake Avenue), 388 acres were rezoned from a commercial or office classification to a mixed-use classification (e.g. Fairfield Park), and 233 acres were rezoned from residential (single- or multi-family) to a commercial or office classification (e.g. Barclay West).

## Major Rezoning for Mixed-use Development

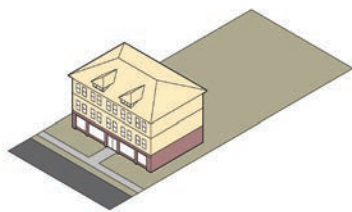
Project	Year	Acres
Mayfaire	2000	395
Autumn Hall	2005	176
Urban Mixed-use (UMX)	2013	371
Barclay West	2013	290
Northern Riverfront	2005	61
Fairfield Park	2001	132
Galleria Shopping Center	2014	13



Autumn Hall Development  
(Wilmington)

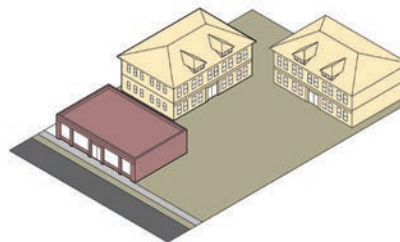
Source: Trask Land Company

## Mixed-use Development Types



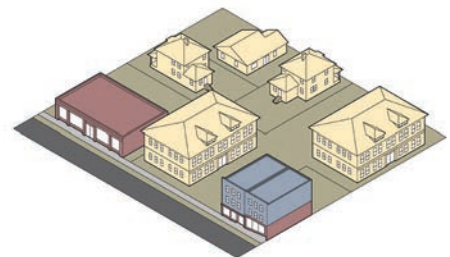
### Vertical Mixed-use

Uses are mixed within the same building, thus being well-integrated. Residential over office or retail is the most common.



### Horizontal Mixed-use

Uses are not mixed within the same building, but are placed next to one another on the same site (or as part of a multi-use area).



### Multi-use Area

Uses are mostly separated, but a variety of uses can be found within a relatively small, walkable area. These may contain vertical mixed-use building types.



### Example

Buildings along Front Street have residential and office uses above retail uses.



### Example

The Forum on Military Cutoff includes a mix of restaurants, stores, and offices side by side.

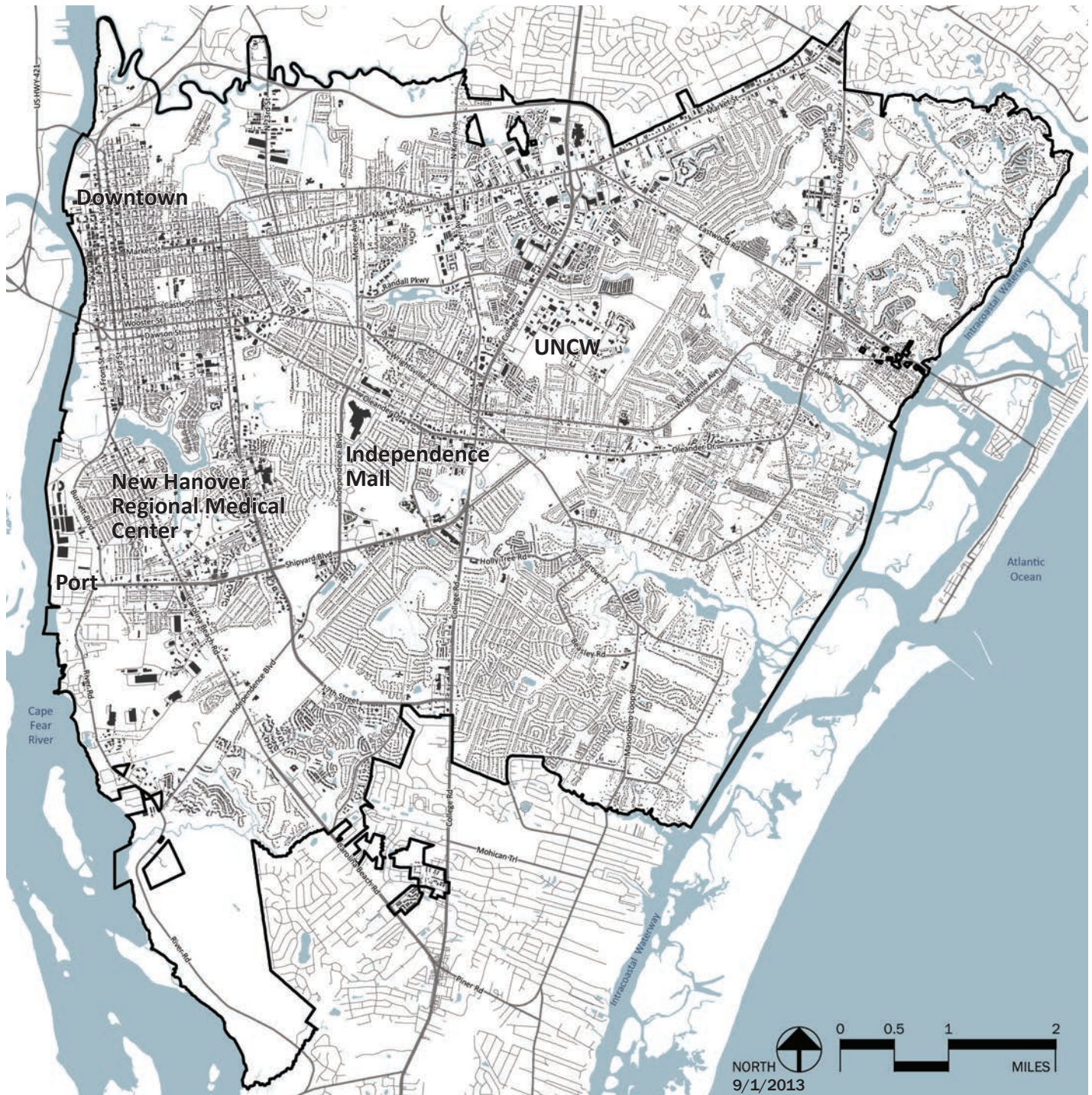


### Example

Mayfaire provides a combination of use types all within a short walk of each other.

Source (All Images): City of Wilmington

# Development and Redevelopment Factors



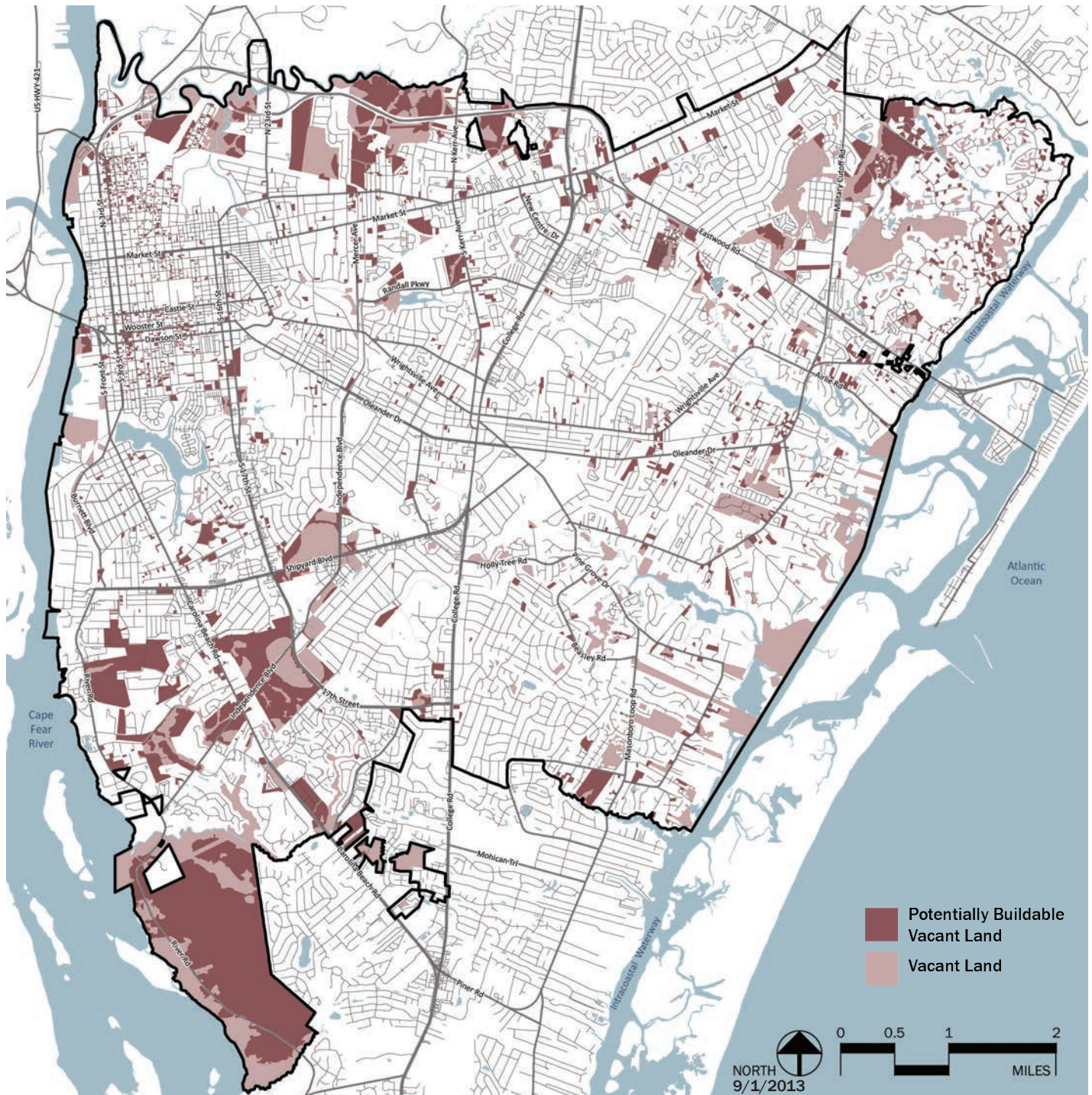
## 4.4 Building Footprints and Unbuilt Areas

This map shows the city's buildings and development pattern, the space between buildings, and the locations of exceptionally large buildings. Independence Mall, New Hanover Regional Medical Center, UNCW and the Port of Wilmington facilities are clearly visible.



Community Pattern Areas

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## 4.5 Vacant and Buildable Land

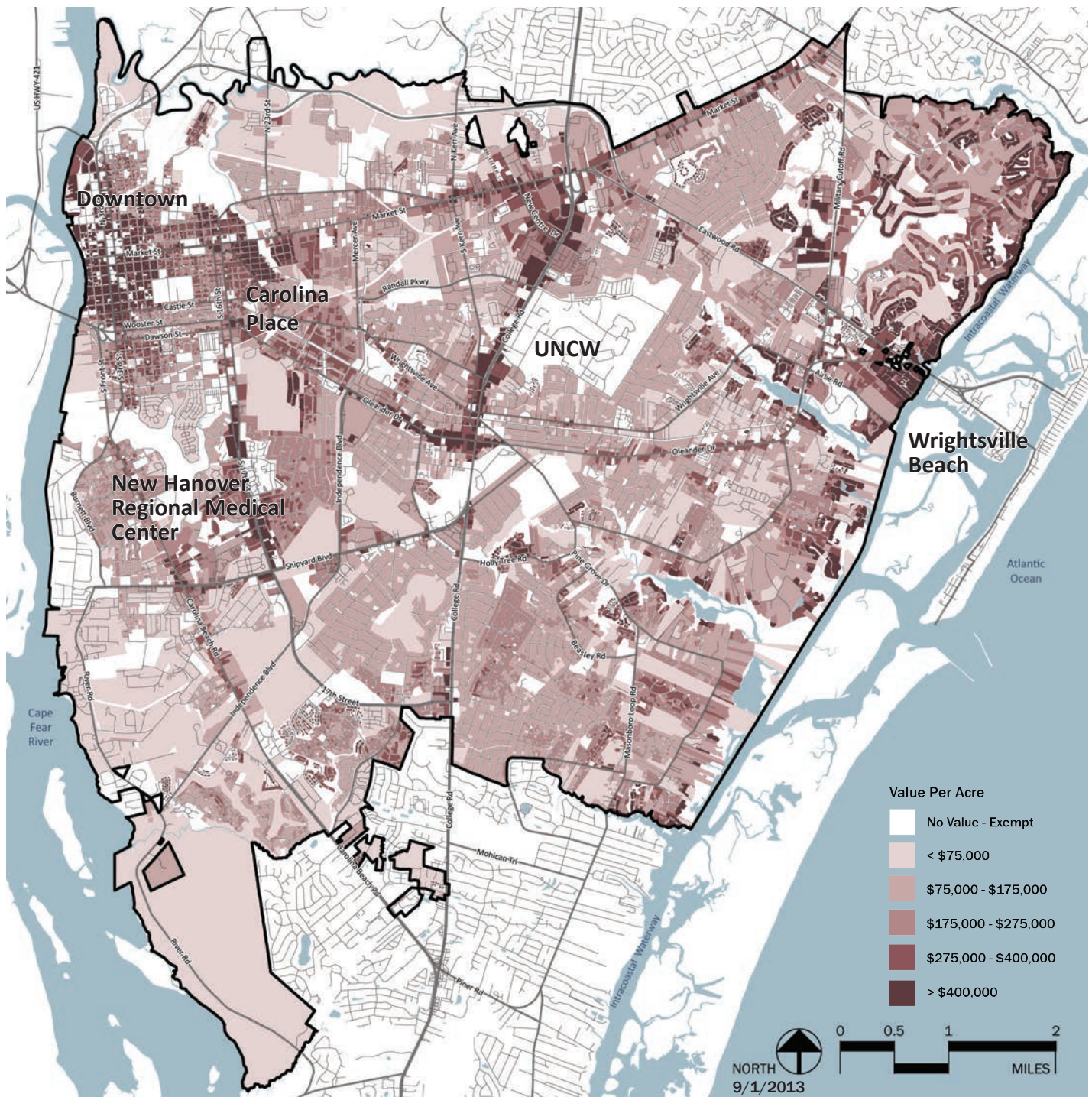
Vacant, buildable land has become a scarce resource within the city. Of the city's 28,484 acres (39,556 parcels) of land, only 6,757 acres (3,519 parcels) are considered vacant. After removing floodplains, wetlands, federally-owned lands, and other potential barriers to development, the remaining potentially buildable land amounts to approximately 3,726 acres, or just 13% of the total land area.



*Environmental Assets*

3.4

## 4.6 Land Values



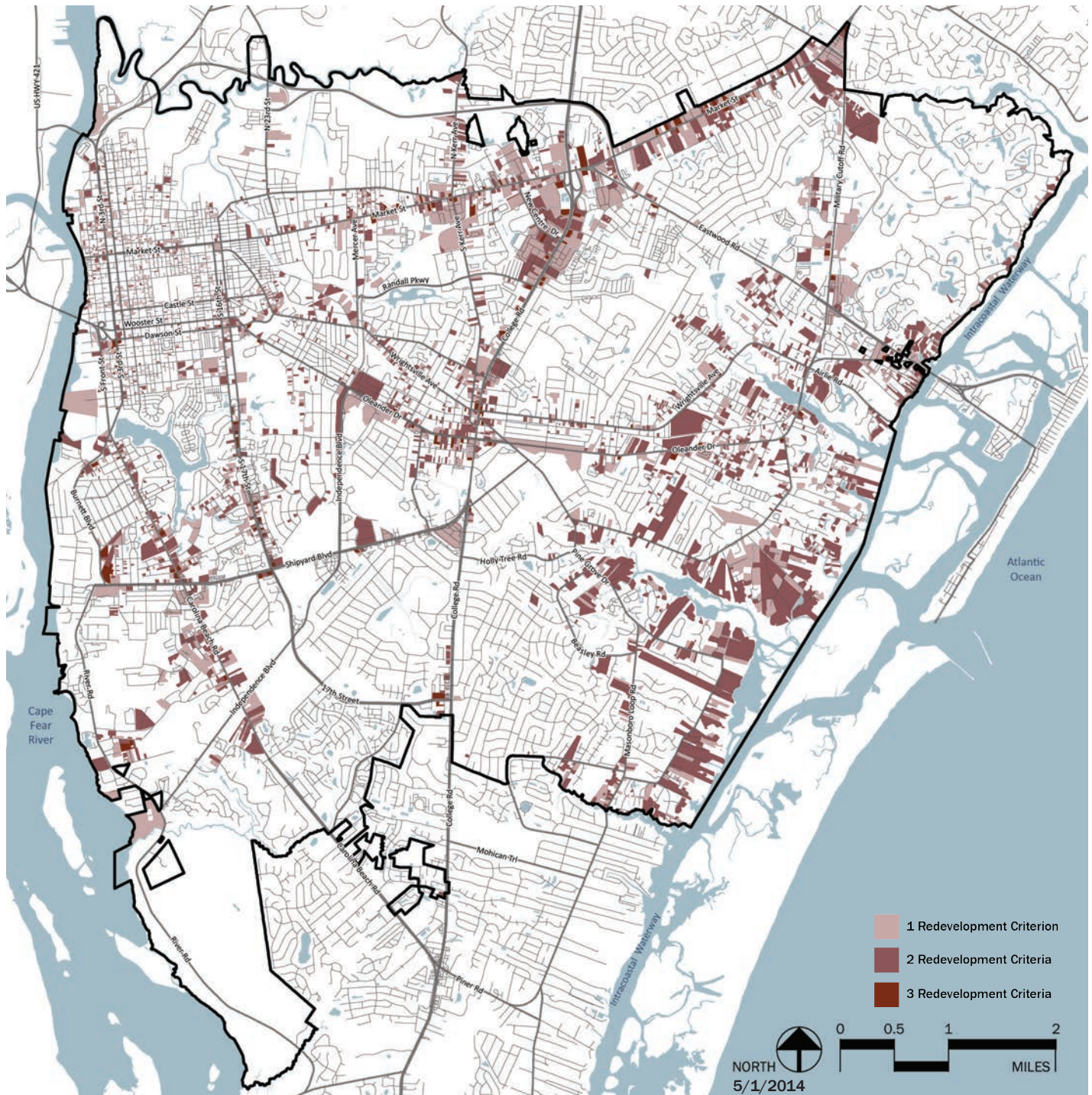
This map reveals land value in terms of dollar value per acre. Each parcel is valued and ranked on the color ramp, with no color (white) indicating no tax value, exemptions, or no data. The value represents land value only, building values are not included. The analysis reveals a strong land value in downtown and around Carolina Place, as well as along heavily-developed

corridors like Oleander Drive and College Road at UNCW, and areas along 17th Street near New Hanover Regional Medical Center.

Source: New Hanover County Tax Department



## 4.7 Areas of Potential Redevelopment



This map depicts potential redevelopment sites within the city. Sites identified as potential redevelopment areas include properties where building value is less than the land value, building lot coverage is less than 10%, and/or parking lot coverage is greater than 50%. Properties are categorized as meeting one, two, or all three of these criteria.

### Suitability Criteria for Redevelopment Sites

- Land value greater than building value
- Building coverage of parcel less than 10%
- Parking lot coverage of parcel greater than 50%

# Suitability and Redevelopment Area Examples

There are approximately 5,800 acres of potentially redevelopable land and 3,600 acres of potentially buildable vacant land in the city. A large percentage of parcels that are suitable for redevelopment and infill development are less than two acres in size.



**Box Set Cross-Reference**

**Policies**

The Policies document contains several illustrations showing redevelopment concepts for a few of these example areas (and site types in general).

## Areas of Potential Growth Details

Potential Redevelopment Areas	Parcels	Acres
Parcels < 2 Acres	3,807	2,034
Parcels > 2 Acres	814	3,795
<b>TOTAL</b>	<b>4,621</b>	<b>5,829</b>
Potentially Buildable Vacant Land	Parcels	Acres
Parcels < 2 Acres	2,610	812
Parcels > 2 Acres	200	2,800
<b>TOTAL</b>	<b>2,810</b>	<b>3,613</b>



### Underinvested Gateway Areas

Gateway areas include under-utilized sites with large surface parking lots and small building footprints.



### Low Lot Coverage / Under-utilized Land

Under-utilized sites include parcels with building footprints that are less than 10% of the total lot area.



### Post-industrial Areas with "Main Street" Potential

Older commercial corridors and industrial areas that have buildings that are no longer in use that can be repurposed and retrofitted to meet modern demands for commercial and mixed-use space.



### Excessive Surface Parking Lots

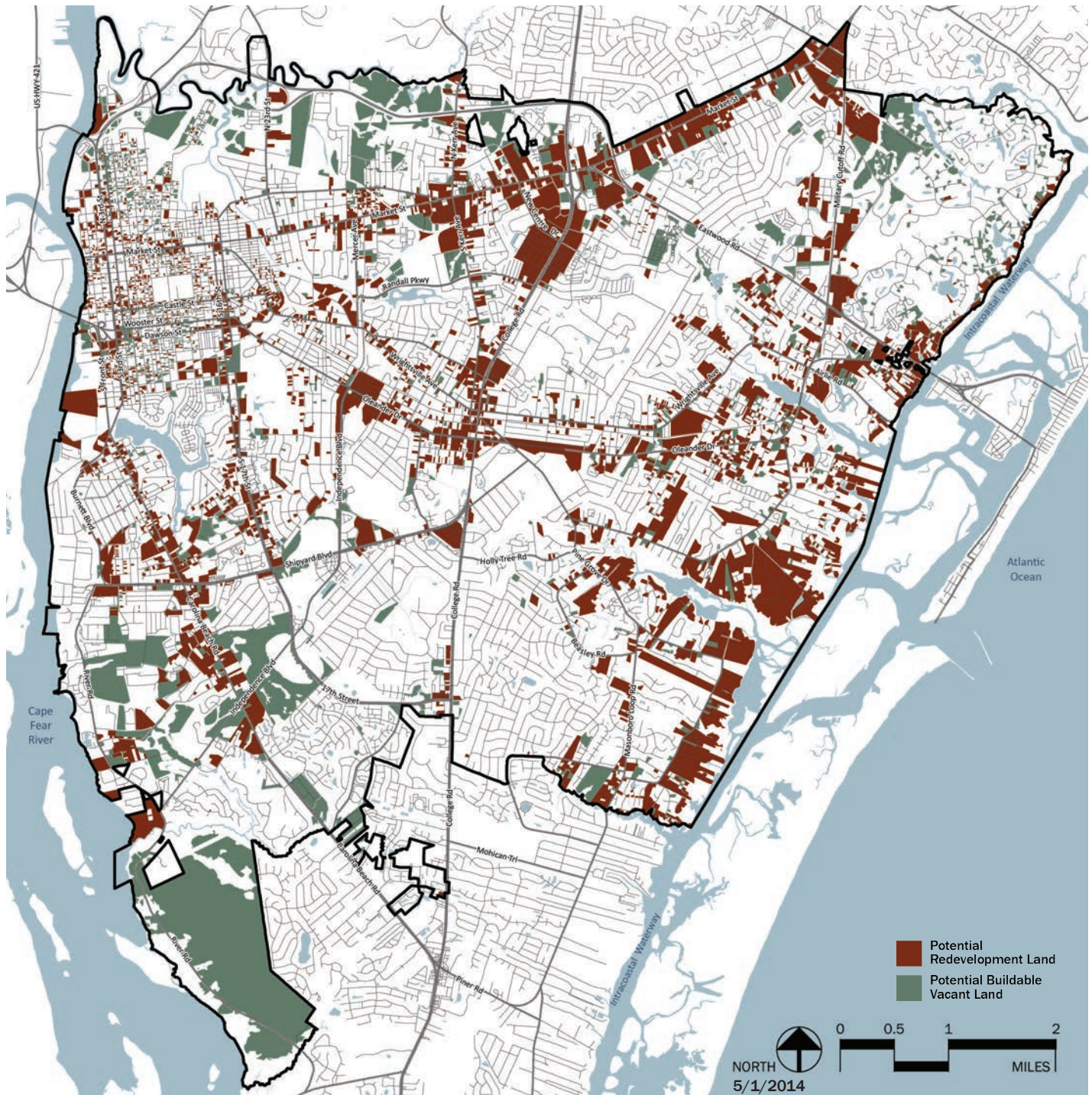
Sites where surface parking exceeds 50% of the total lot area can be suitable for creative infill and redevelopment.

1. South 3rd Street at Dawson and Wooster streets
2. Starway flea market off Carolina Beach Road

3. Former Coca-Cola bottling facility on Princess Street
4. K-mart on South College Road

Source (All Images): Google, 2015

## 4.8 Developable Land and Redevelopment Sites Combined



This map depicts potential redevelopment parcels and likely buildable vacant land within the city. The vast majority of these sites are less than two acres in size. These smaller parcels are typically found within already urbanized areas.

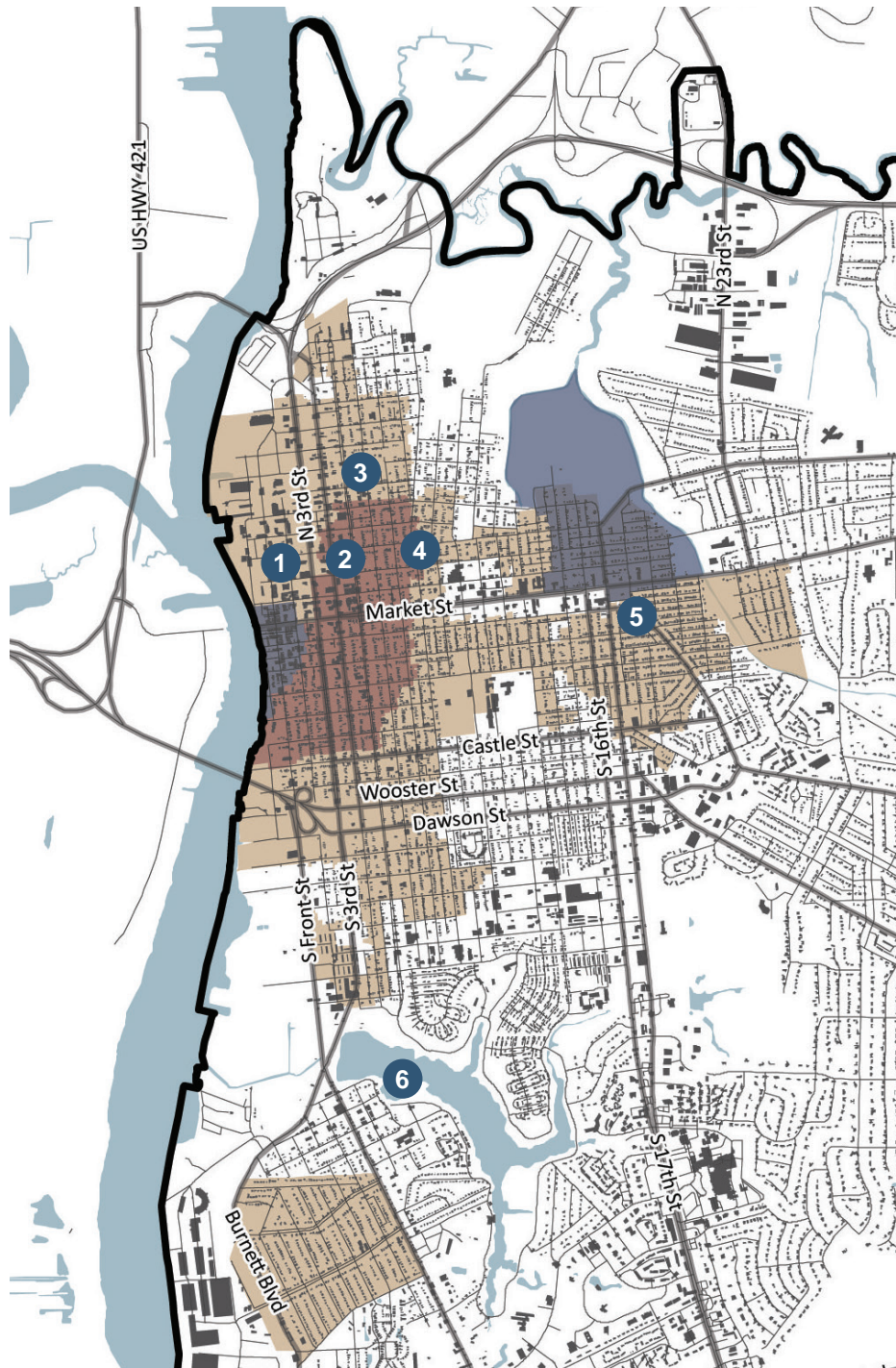


**Box Set Cross-Reference**

**Growth Strategies Maps**

The growth strategies use this and other analysis to designate and describe the future growth patterns of the city.

## 4.9 Historic Districts and Sites



This map depicts the city's existing locally designated historic districts, historic district overlays, designated historic landmarks, and areas that are included in the National Register of Historic Places.

- National Register of Historic Places Districts
- Local Historic Districts
- Historic District Overlay
- # Local Historic Landmarks (see next page)

### Greater Downtown, Sunset Park, and Brookwood Historic Districts

The National Register of Historic Places identifies a large portion of the Greater Downtown as well as the Sunset Park neighborhood as historically significant.



12/1/2014

#### National Register of Historic Places

The National Register of Historic Places is the nation's official list of buildings and districts worthy of preservation due to their architectural and historic significance. Wilmington has eight districts listed on the National Register of Historic Places.

#### Local Historic Landmarks

Landmark designations may apply to individual buildings, structures, sites, or objects that are found to have historical, architectural, archaeological, or cultural value.

#### Local Historic Districts

Local districts are designated by City Council following a recommendation from the Historic Preservation Commission (HPC). Design review by the HPC is required for exterior alterations to properties located within local historic districts.

## Designated Historic Landmarks



**1** Efrid's-Einstein Department Store



**2** Lazarus-Hill-Devine House



**3** North sixth Street Harry Forden Bridge



**4** Chestnut Street Presbyterian Church



**5** Fire Station No. 5

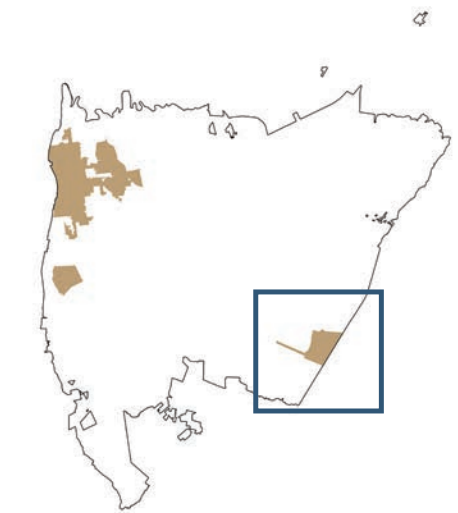
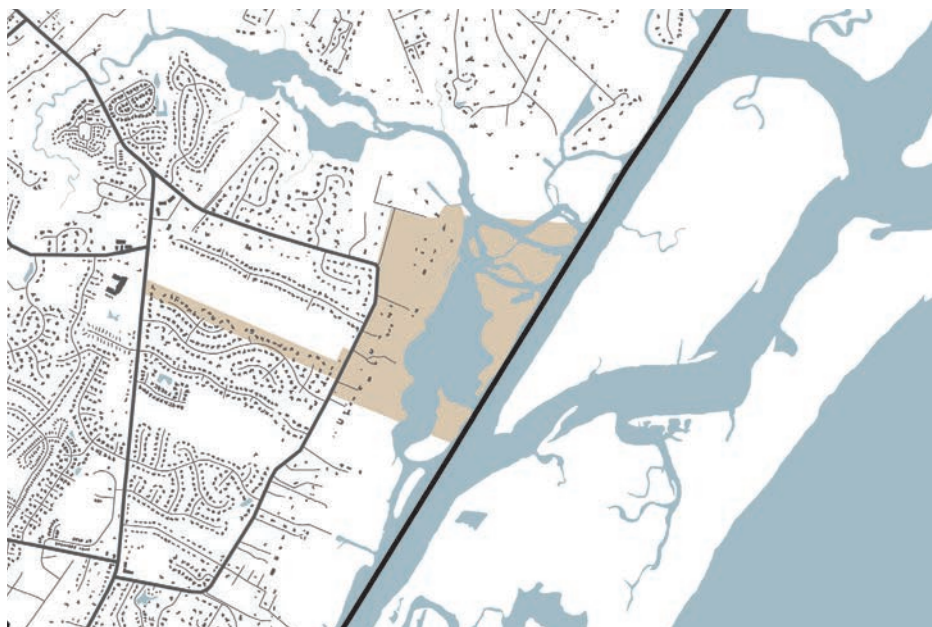


**6** Greenfield Lake Park and Gardens

Source (All Images): City of Wilmington

## Masonboro Sound National Register Historic District

This map depicts the National Register Historic District that is located along Masonboro Sound. This area of the city is recognized for the historical significance of the tidewater estates located along the Intracoastal Waterway.



 National Register of Historic Places Districts

 Policies  
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## 4.10 Brownfields



A brownfield is a property that has been abandoned or is under-used because of known or potential environmental contamination. As part of an Environmental Protection Agency (EPA)-funded grant, the city has identified 60 potential brownfield sites within a study area total 130 acres. The intent of the city's brownfields program is to put those properties back into productive use

■ Potential Brownfields  
■ Brownfields Study Area

9/1/2013



### Brownfields Redevelopment: Northern Riverfront Area

The northern downtown riverfront was once the industrial center of the city and included lumberyards, shipping terminals, warehouses, and was the headquarters for the Atlantic Coast Line Railroad. When the railroad offices left in 1960, all buildings were abandoned and left to deteriorate.

Federal and state grants were used to reduce uncertainty and liability exposure, thus facilitating the cleanup and redevelopment of vast tracts of contaminated land.



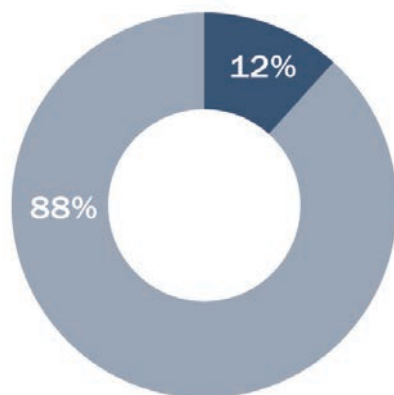
#### Additional Information

City of Wilmington Brownfields Programs

Source (All Images): City of Wilmington

### Acres of Brownfields Sites in the 2011 Study Area

Of the 60 inventoried sites in the 2011 brownfields study area, seven were larger than five acres (12% of the total number of sites). Sites larger than five acres are more suitable for large-scale redevelopment projects, whereas smaller sites require more strategic intervention.



■ Sites Larger than 5 Acres  
 ■ Sites Less than 5 Acres

## Phase I and II Environmental Assessments

Environmental assessments are performed on sites that were previously used for commercial purposes to identify any environmental issues that may exist, such as hazardous waste contamination.

A Phase I Environmental Assessment is a vital part of commercial and industrial real estate transactions where potential contamination is a concern. The primary goal of a Phase I assessment is to determine the previous ownership and use of the property and uncover evidence of the environmental condition of the site. The Phase I assessment includes a records review, site reconnaissance, and interviews to uncover this evidence. Phase I assessments do not include any sampling or chemical analysis but make a recommendation as to whether a Phase II Environmental Assessment should be performed.

Phase II Environmental Assessments include site-specific sampling and chemical analysis to characterize the occurrence, distribution, nature, and extent of hazardous compounds in the soil and/or groundwater at the site. Phase II assessments generally provide the necessary information to determine if cleanup activities are warranted on the property.



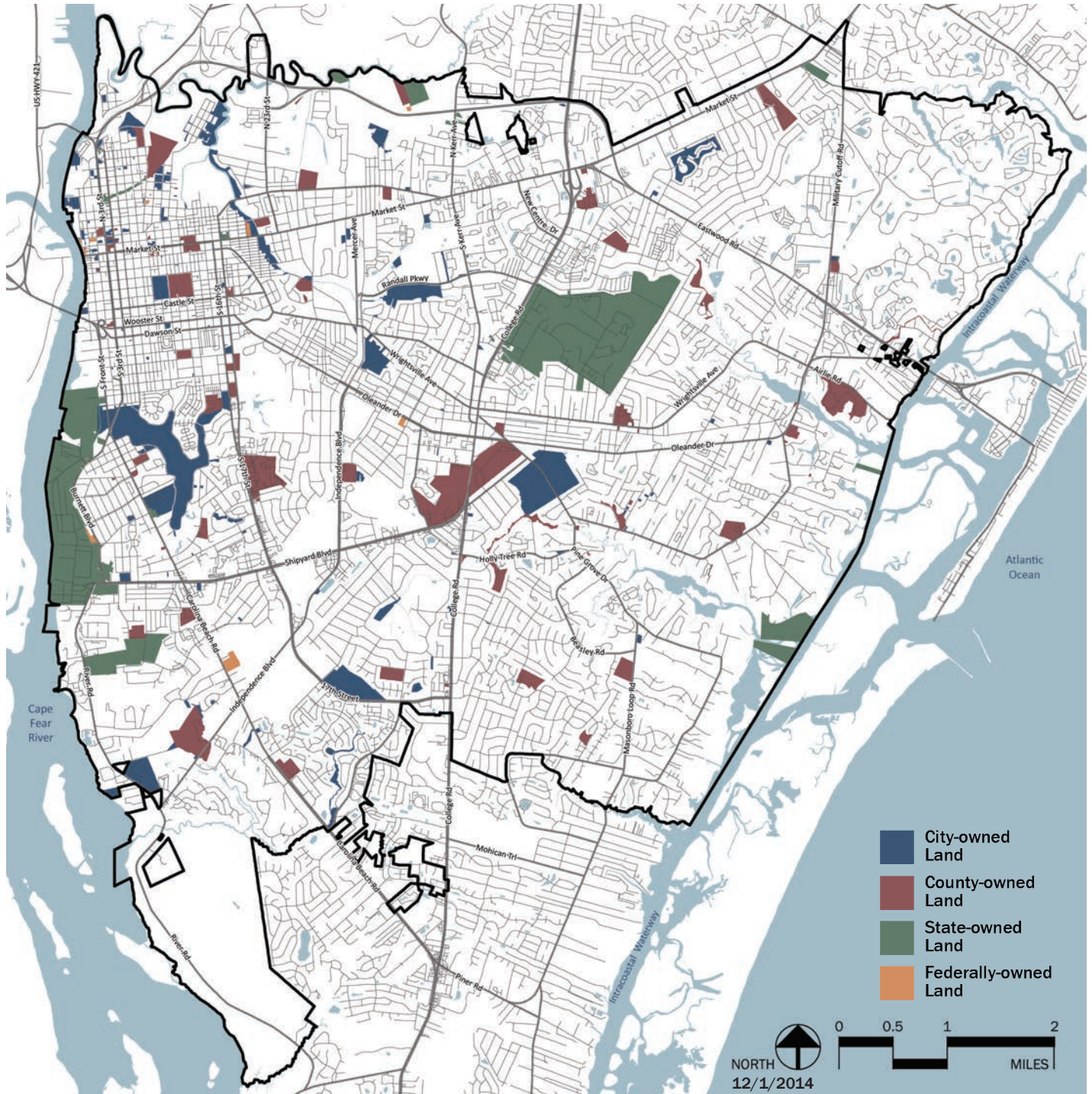
# 5 Public Land, Facilities, and Services

- 5.1 Public Property
- 5.2 Parks and Open Spaces
- 5.3 School Recreation Facilities
- 5.4 Public Safety Infrastructure - Police
- 5.5 Public Safety Infrastructure - Fire and EMS
- 5.6 Water Supply
- 5.7 Wastewater Treatment

**Public Service**  
“Nobody can do everything,  
but everyone can do something.”  
-Author Unknown



# 5.1 Public Property

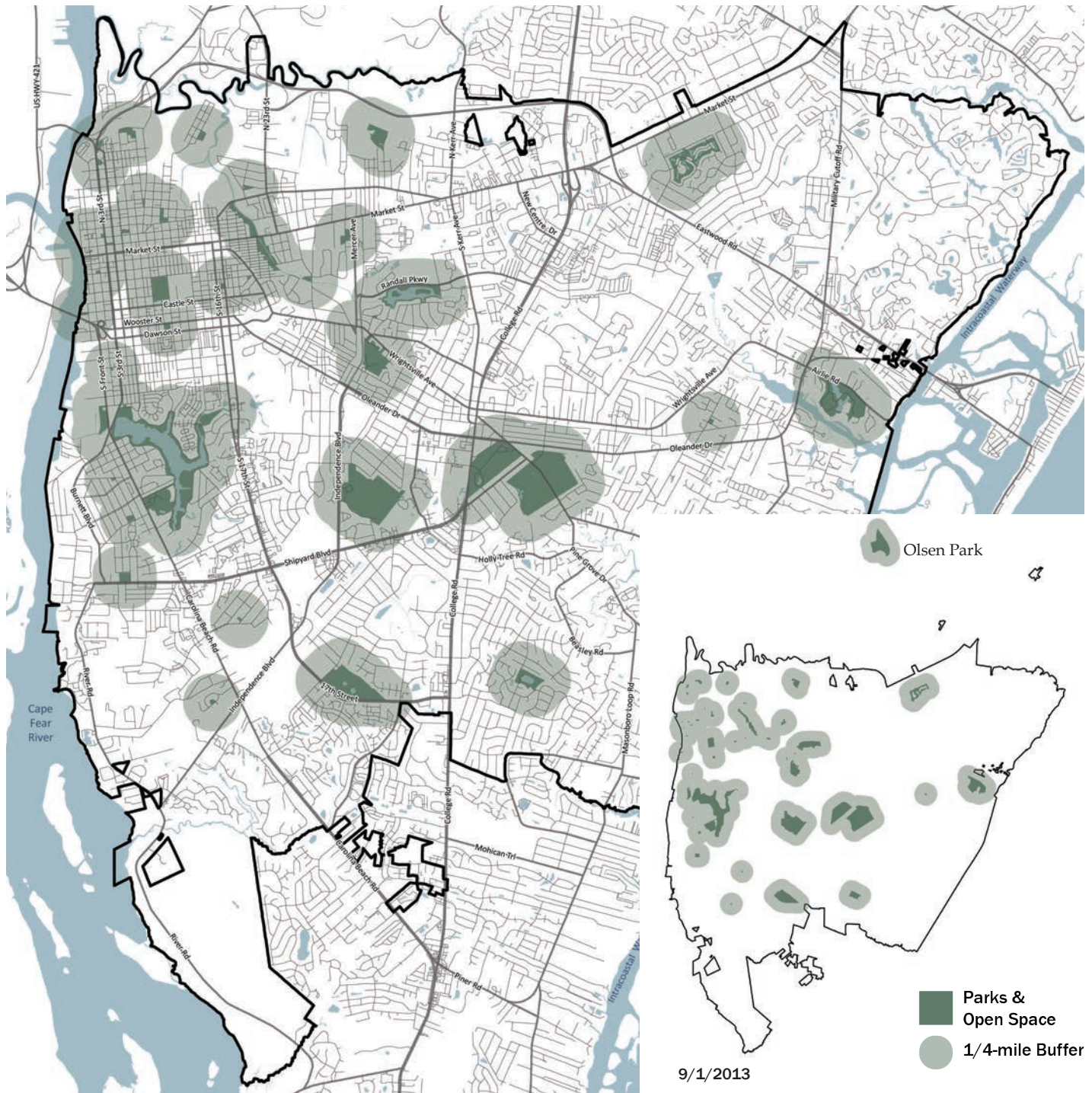


This map depicts all of the publicly-owned land within the city limits. There are a total of 3,228 acres (509 parcels) of publicly-owned land located in the city.

### Public Property Details

Owner	Parcels	Acres
City-owned Land	256	990
County-owned Land	150	848
State-owned Land	90	1,367
Federally-owned Land	13	23
<b>Total</b>	<b>509</b>	<b>3,228</b>

## 5.2 Parks and Open Spaces



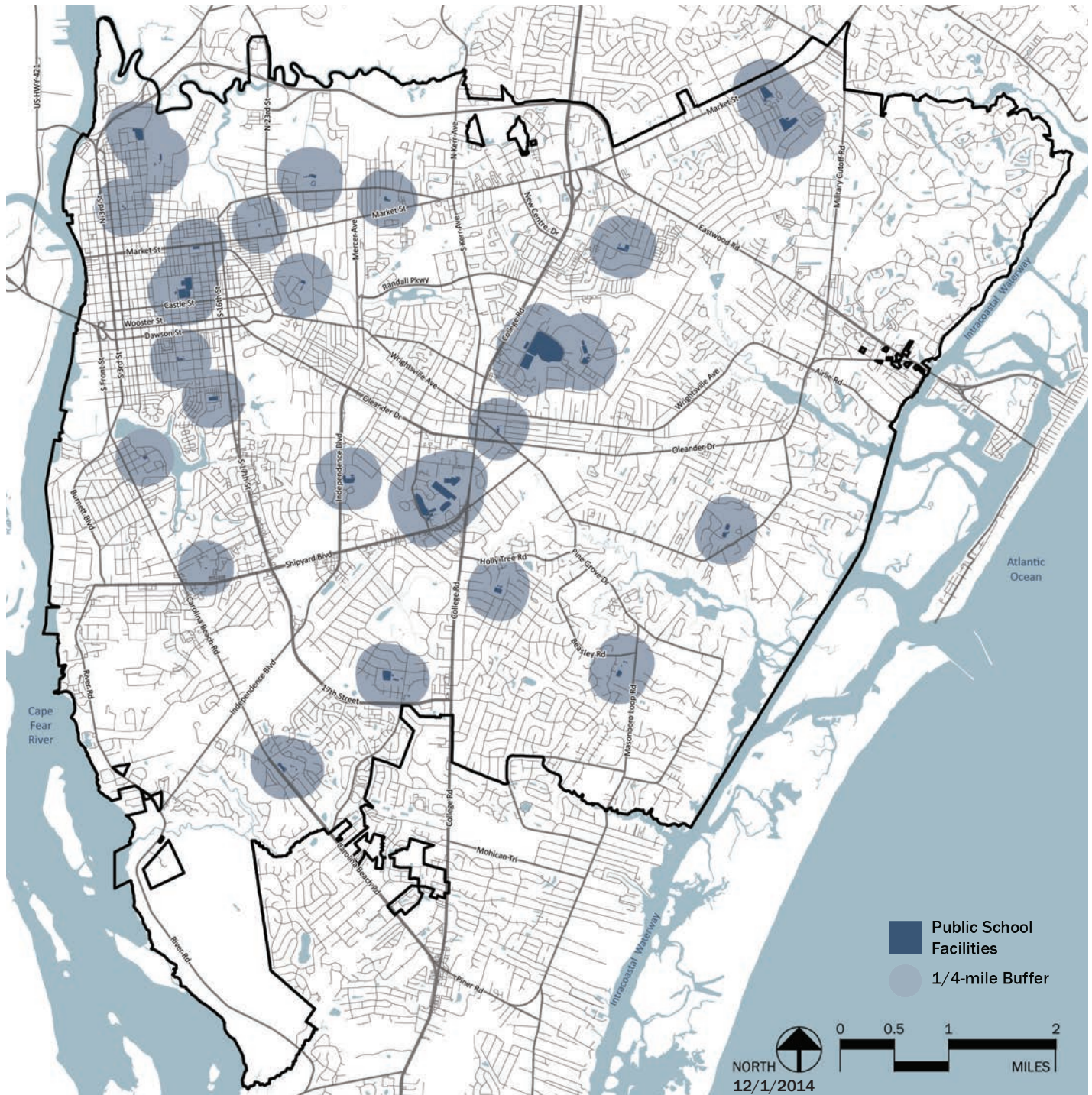
The city maintains 743 acres of public parks and green space, including 89 acres in Olsen Park, which is a city-county park outside city limits. The county maintains three parks (totaling 135 acres) within the city limits. Public parks vary in size and are designed to provide open space and areas for recreational activities and entertainment. There are less than seven acres of park area per 1,000 people in the city. The National Recreation and Park Association (NRPA) recommends 10 acres minimum of park area per 1,000 residents.

### Park Level of Service (LOS) Details Per Capita

Park Type	City Acres	Standard*	City LOS
Mini	22.8	0.25 ac. per 1,000	0.21
Neighborhood	77.1	1 ac. per 2,000	1.5
City-wide	643.6	2.5 ac. per 2,000	12.1

\* City of Wilmington Parks, Recreation, and Open Space Master Plan

## 5.3 School Recreation Facilities

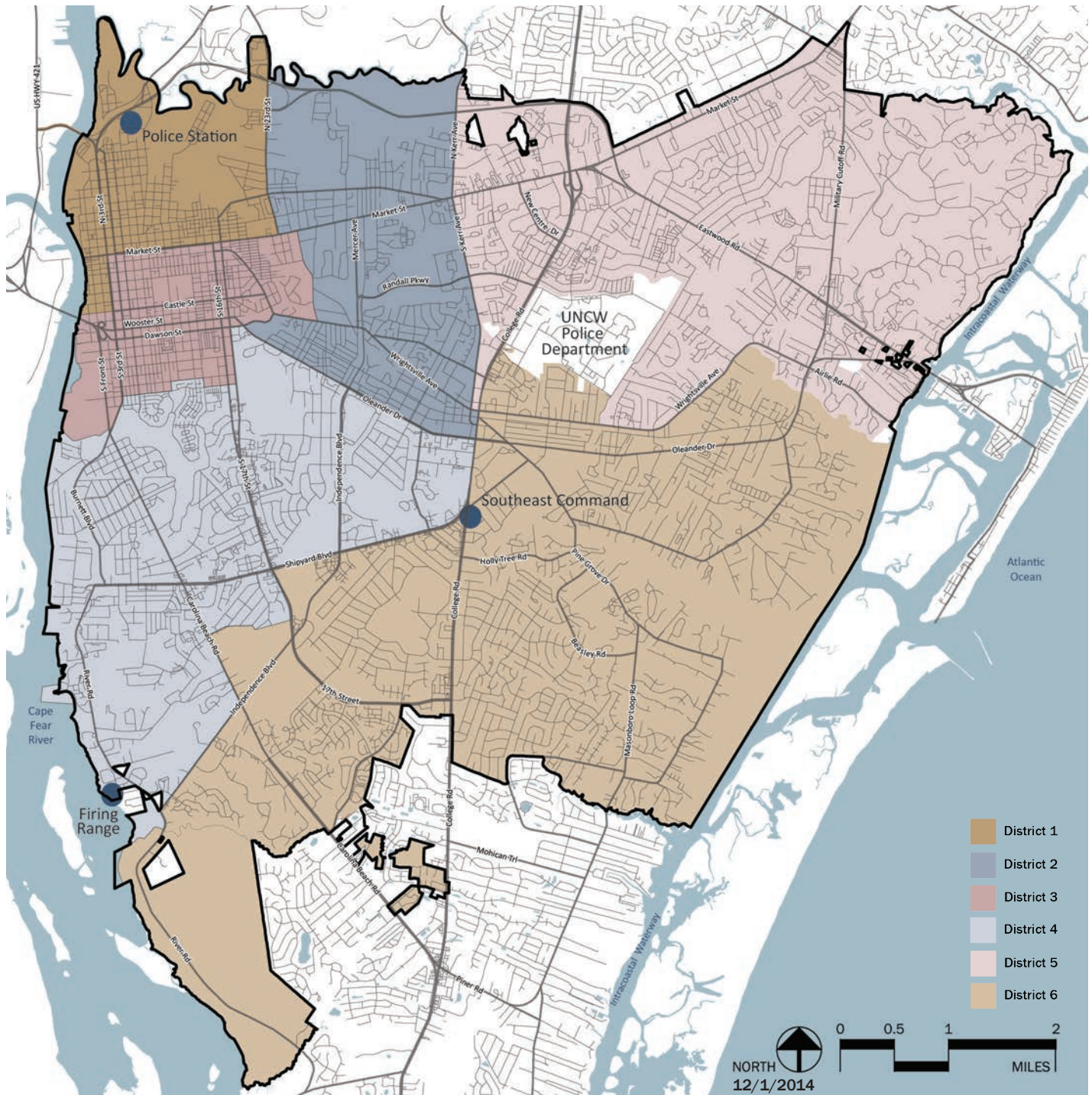


This map depicts all of the facilities located on public school campuses that may provide additional recreational opportunities while schools are not in session. There are approximately 137 acres of school facilities located within the city, ranging from small playgrounds to large athletic fields.



Source: City of Wilmington

## 5.4 Public Safety Infrastructure - Police

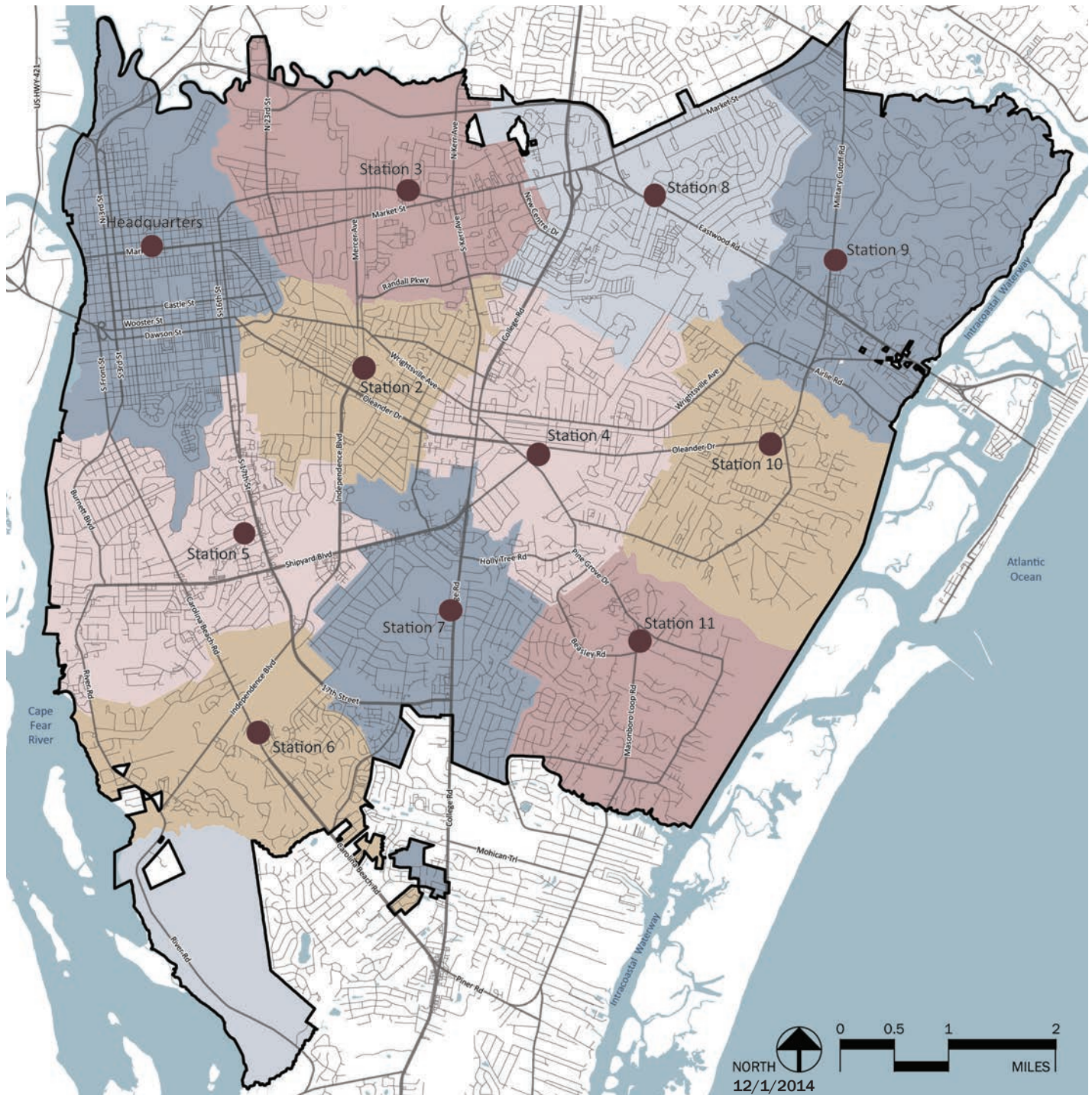


This map depicts the city's Police Department facilities and police districts. There are six police districts. Districts 1-4 are part of the Northwest Patrol and Districts 5 and 6 are part of the Southeast Patrol. The Northwest Patrol includes the Downtown Task Force and mounted police unit. The Southeast Patrol includes the Police Operational Response Team, which consists of SABLE (Southeastern North Carolina Airborne Law Enforcement), canine, marine patrol, school liaison officers, traffic unit, and collateral teams. There are currently 256 sworn officers in the department.



Source: City of Wilmington

## 5.5 Public Safety Infrastructure - Fire and EMS

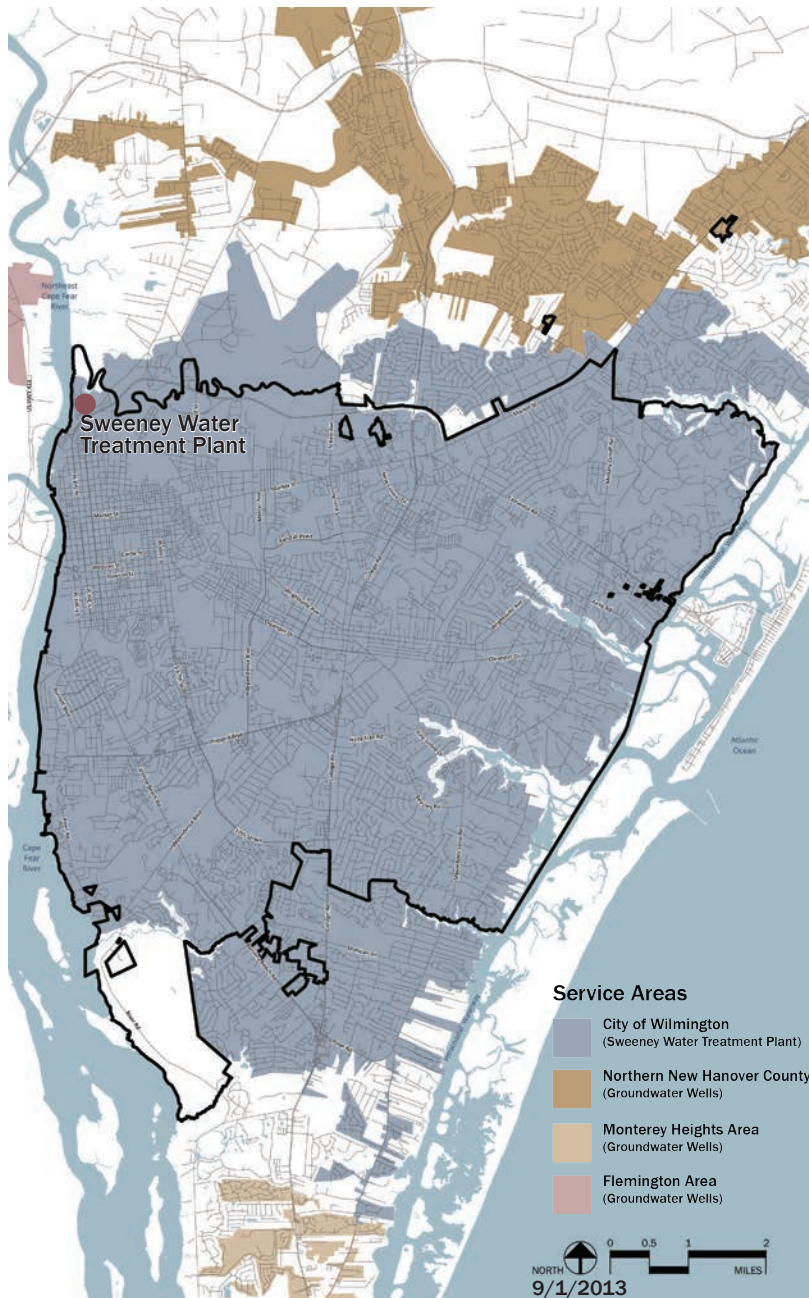


This map depicts the city’s fire stations and fire districts. The Wilmington Fire Department is made up of four main divisions: Administration, Operations, Support Services, and Fire and Life Safety. The department currently has 11 engines, two trucks, one heavy rescue, two fireboats, and other apparatus such as brush trucks and a mobile air unit. The Insurance Services Office (ISO) has given the department a Class 2 insurance rating. Insurance ratings range from Class 10, which generally means no fire protection, to Class 1, the highest rating.



Source: City of Wilmington

## 5.6 Water Supply



The Cape Fear Public Utility Authority processes and distributes approximately 16 million gallons of drinking water daily. The authority collects and processes surface water from the Cape Fear River, north of Lock and Dam #1 in Bladen County, and ground water from underground aquifers.

Source: Cape Fear Public Utility Authority



### Sweeney Water Treatment Plant

The Sweeney Water Treatment Plant supplies water to the largest water distribution system operated by the Cape Fear Public Utility Authority. The plant draws surface water from the Cape Fear River and processes and distributes this water within the city limits as well as in parts of Ogden, Monkey Junction, and Kings Grant in unincorporated New Hanover County.

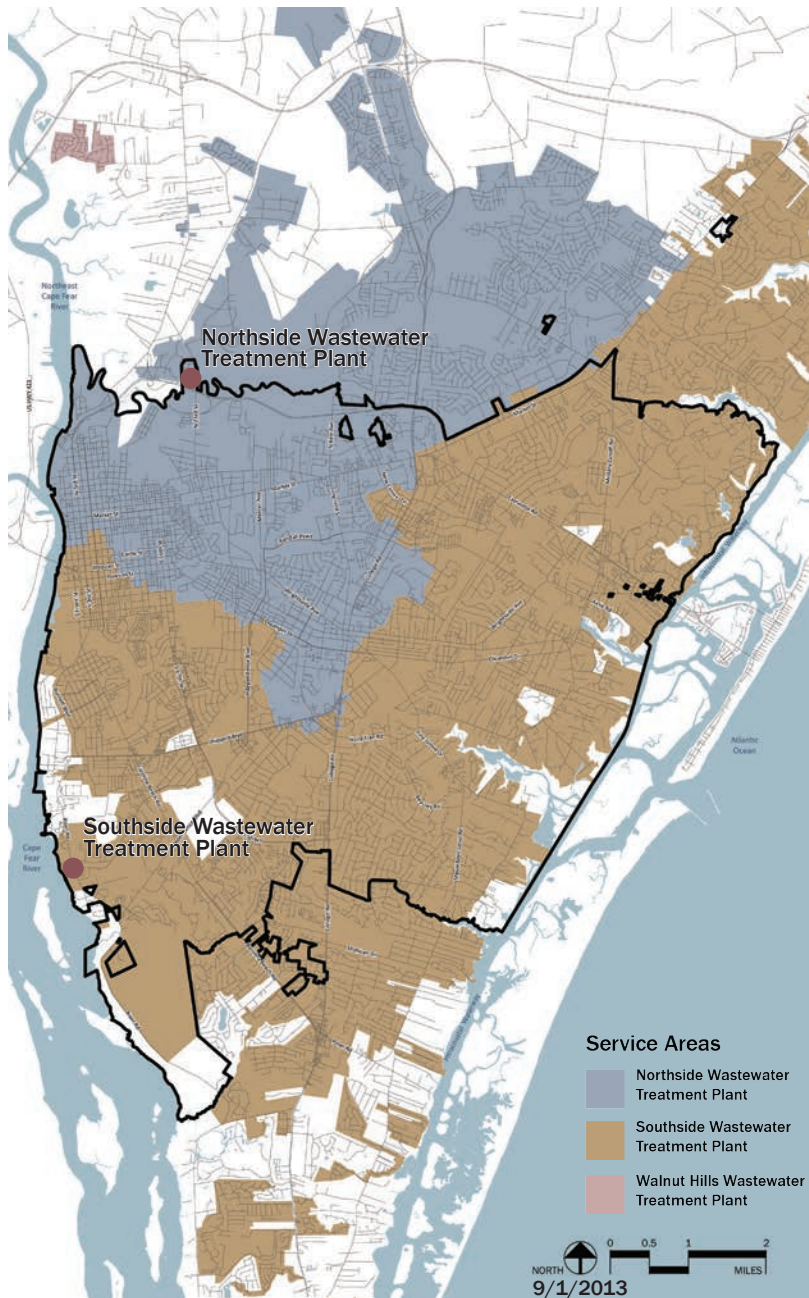


### Groundwater Wells

The Cape Fear Public Utility Authority supplies groundwater to three separate water distribution systems in the unincorporated areas of New Hanover County. The largest system supplies treated water to portions of northern New Hanover County while the two smaller systems supply treated water to the Flemington area off of Highway 421 and the Monterey Heights area off of Carolina Beach Road.

Source (All Images): City of Wilmington

## 5.7 Wastewater Treatment



The Cape Fear Public Utility Authority operates three wastewater treatment plants: the James A. Loughlin (Northside) Wastewater Treatment Plant, the McKean Maffitt (Southside) Wastewater Treatment Plant, and the Walnut Hills Wastewater Treatment Plant. The Northside plant has the capacity to treat up to 16 million gallons of wastewater per day and the Southside plant has the capacity to treat up to 12 million gallons of wastewater per day. The Walnut Hills Wastewater Treatment Plant, located in northwestern New Hanover County, was placed in service in 1970 and has a treatment capacity of 100,000 gallons per day.

Source: Cape Fear Public Utility Authority



### Northside Wastewater Treatment Plant

The Northside Wastewater Treatment Plant was originally put into service in 1970 as an 8 million-gallon per day treatment facility. After a \$80 million upgrade in 2009, the plant now has a 16 million-gallon per day treatment capacity.

Source: City of Wilmington



### Southside Wastewater Treatment Plant

The Southside Wastewater Treatment Plant was put into service in 1972 as a 6 million-gallons per day treatment facility. It was later expanded and the capacity increased to 12 million-gallons per day to serve New Hanover County and the Town of Wrightsville Beach.

Source: Google, 2015



#### Policies

6.1

6.8

8.1.7



# 6 Housing

- 6.1 Housing Overview
- 6.2 Public and Assisted Housing
- 6.3 Housing Affordability

## Housing

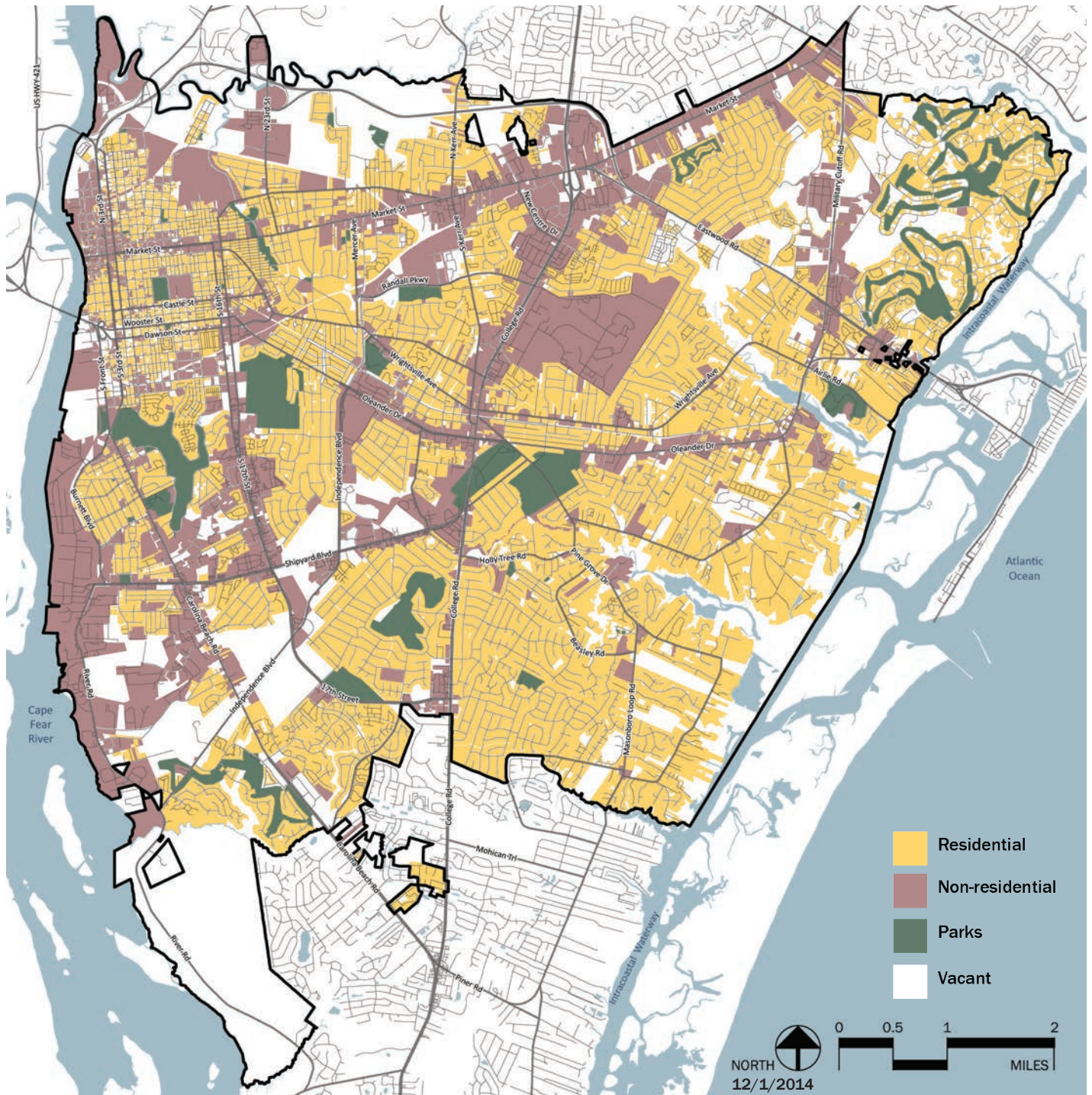
“The [Department of Housing and Urban Development’s] opportunity agenda is striving to shape a housing market that values, respects and welcomes all Americans.”

-Julian Castro, Secretary

Source: HUD.gov



# 6.1 Housing Overview



This map depicts residential and non-residential land uses, parks, and vacant lands within the city limits. Approximately 46% of the land within the city is currently in residential use.

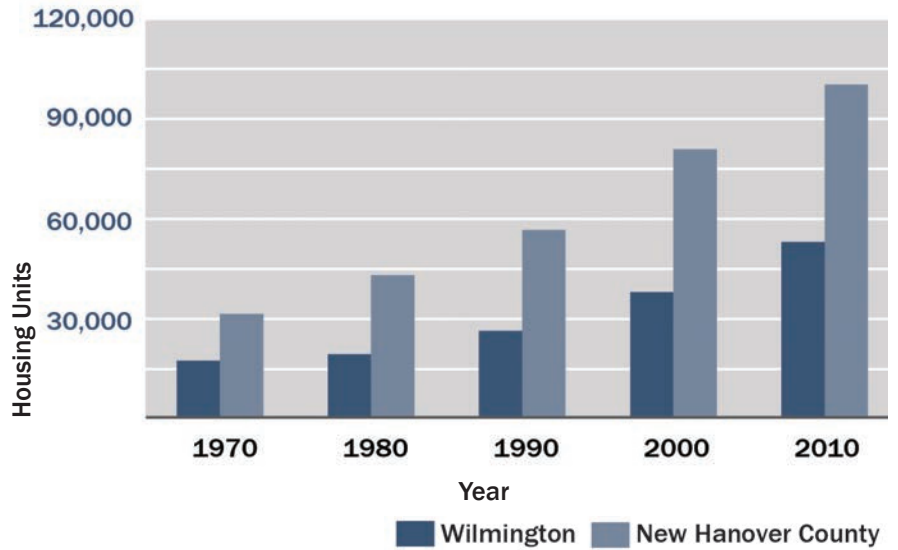
 **Policies**  
3

 **Community Pattern Areas**  
8

## Total Housing Units by City and County 1970-2010

The total number of housing units within both the city and county nearly tripled between 1970 and 2010. This increase in housing paralleled growth in population. Total housing units for New Hanover County include units located within the city.

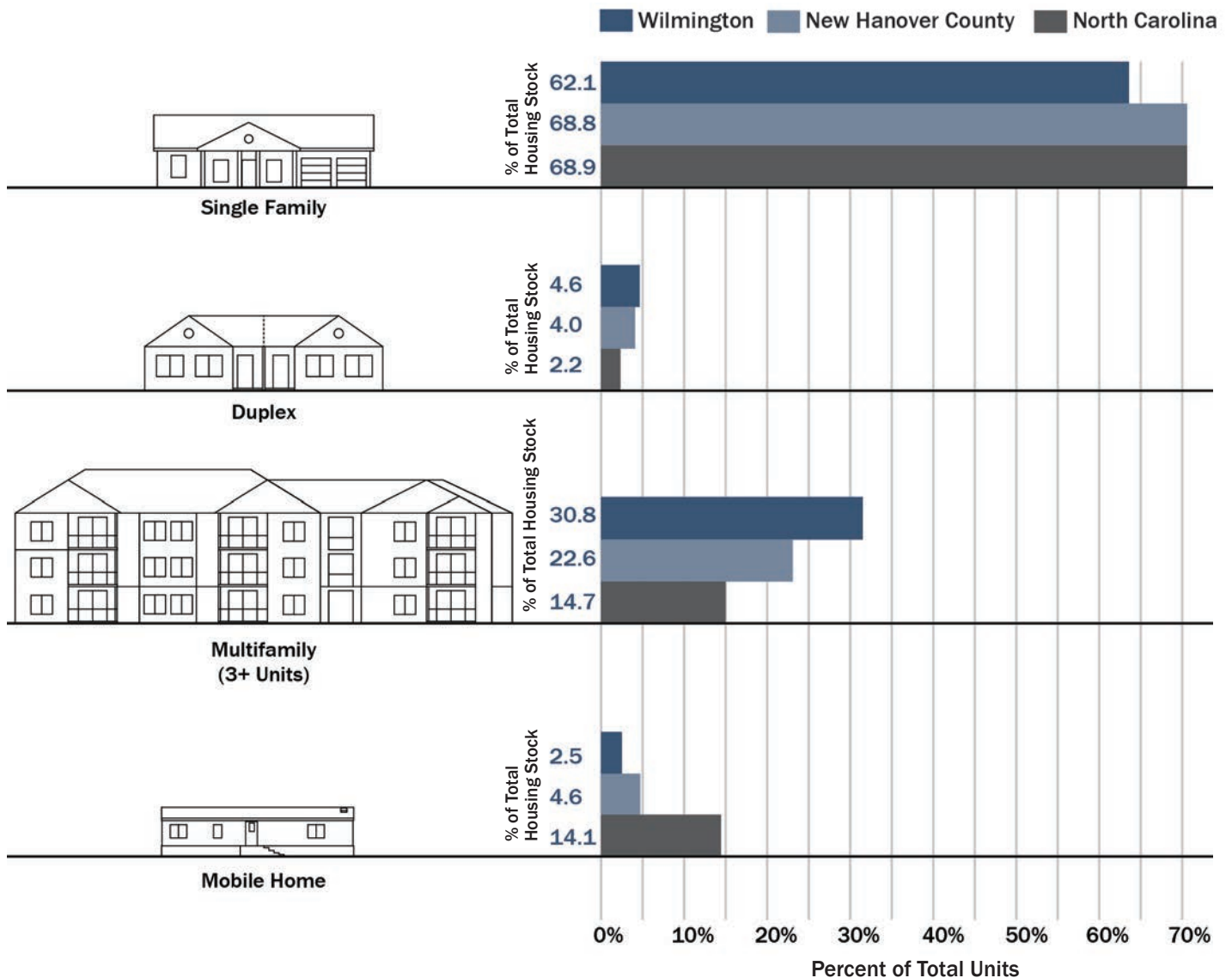
Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development



## Housing Types by City, County, and State 2007-2011 5-year Estimate

The largest portion the city's housing stock is made up of single-family units (62%). Multi-family units make up the second largest portion of the housing stock, at nearly 30% of the total. Between 2012 and 2014, there were 29 multi-family and townhome projects released for construction, which included nearly 3,000 residential units.

Source: U.S. Census Bureau and U.S. Department of Housing and Urban Development

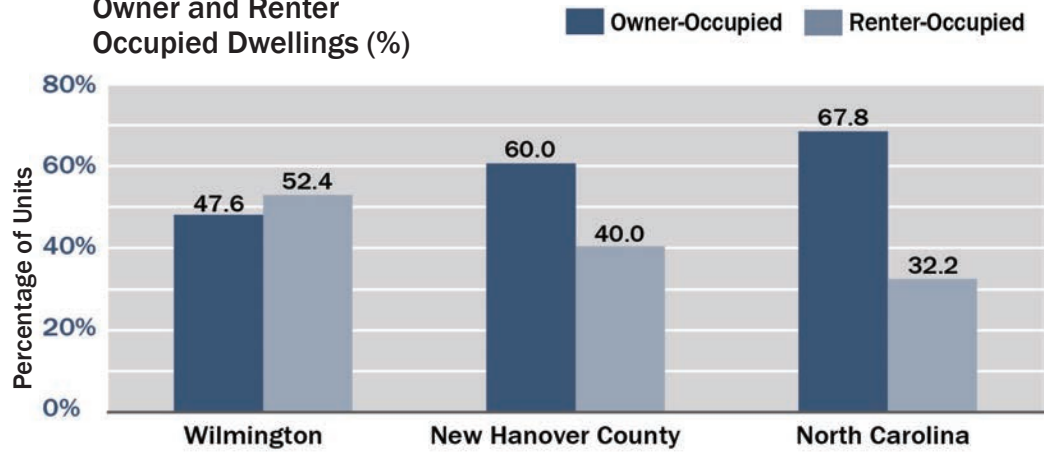


## Housing Tenure by City, County, and State 2007-2011 5-year Estimate

Of the 10 most populated North Carolina cities, Wilmington had the ninth lowest percentage of owner-occupied dwellings. Unlike the county and state, the majority of housing in Wilmington is renter-occupied. Recent U.S. Census Bureau estimates indicate that the percentage of renter-occupied housing has increased further in recent years.

Source: U.S. Census Bureau

### Owner and Renter Occupied Dwellings (%)

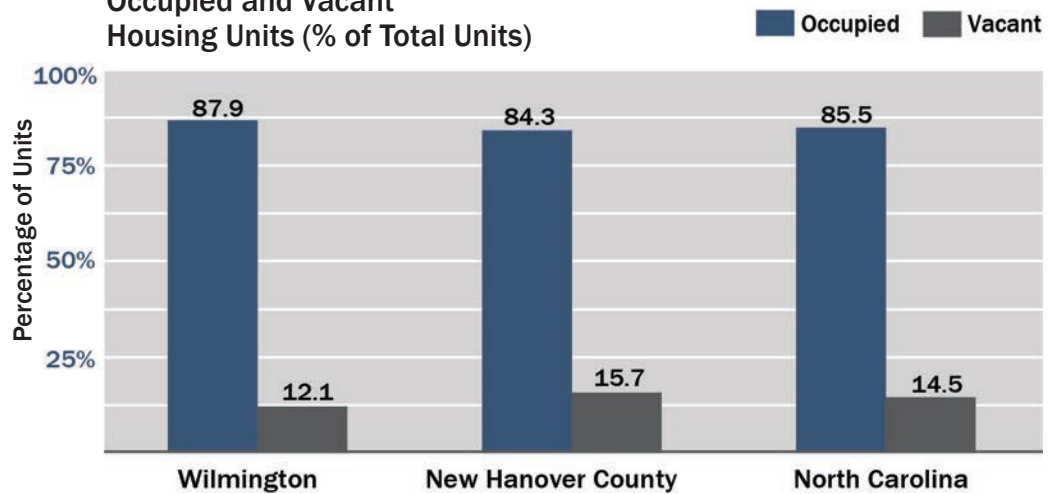


## Housing Occupancy and Vacancy by City, County, and State 2007-2011 5-year Estimate

Of the 10 most populated North Carolina cities, Wilmington ranked sixth highest in occupancy rates. The city has an occupancy rate of nearly 88%, which exceeds that of the county and state.

Source: U.S. Census Bureau

### Occupied and Vacant Housing Units (% of Total Units)



## Wilmington:

2.2		\$822	\$\$\$\$\$\$\$\$\$!	\$236,100	
-----	--	-------	---------------------	-----------	--

## New Hanover County:

2.3		\$863	\$\$\$\$\$\$\$\$\$!	\$227,500	
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## North Carolina:

2.5		\$744	\$\$\$\$\$\$\$\$\$!	\$152,700	
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## United States:

2.6		\$905	\$\$\$\$\$\$\$\$\$!	\$186,200	
-----	--	-------	---------------------	-----------	--

= 1 Person

= \$100

= \$50,000

### Average Persons per Household (2010)

Of the 10 most populated North Carolina cities, Wilmington had the ninth lowest average household size in 2010. Wilmington's average household size is also smaller than that of the county and the state.

Source: U.S. Census Bureau

### Median Rent per Month (2007-2011)

The median rent in Wilmington is typically less than the county but greater than that of the state. Of the 10 most populated North Carolina cities, Wilmington ranked fifth in average rent.

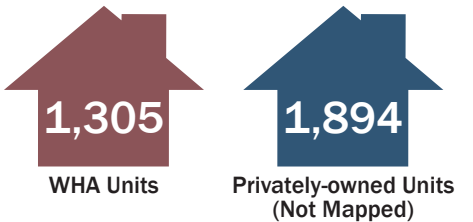
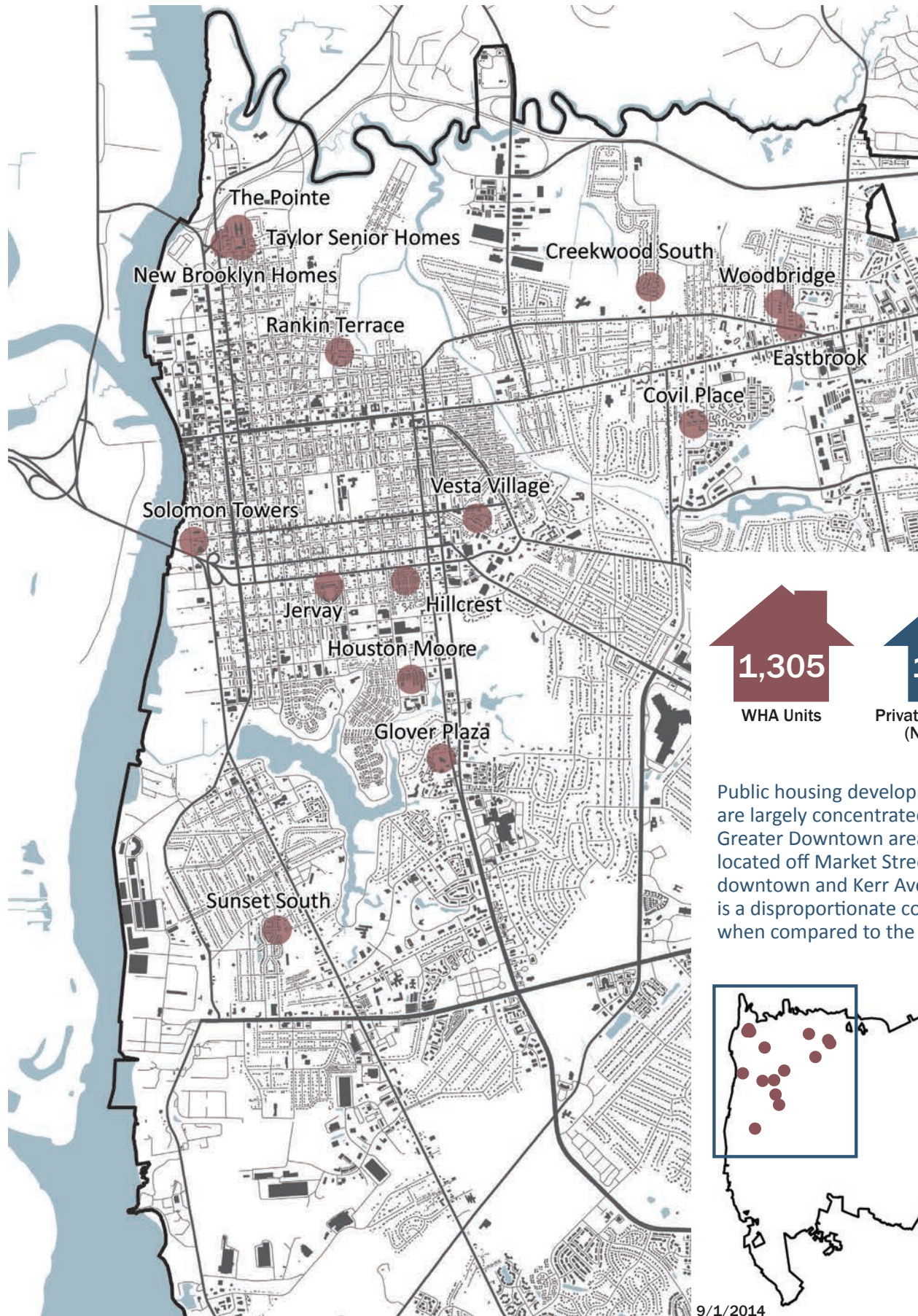
Source: U.S. Census Bureau

### Median Home Values (2010)

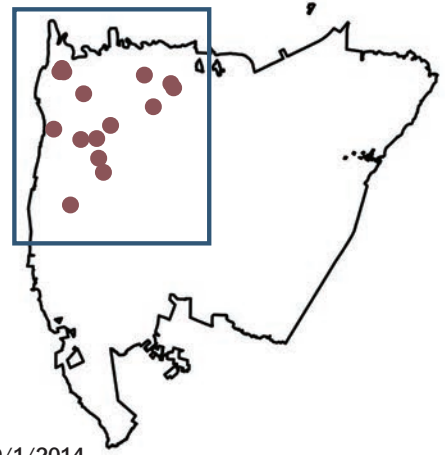
Of the 10 most populated North Carolina cities, Wilmington had the second highest average home value in 2010. Home values in Wilmington and New Hanover County generally exceed the average values for both the state and nation.

Source: U.S. Census Bureau

## 6.2 Public and Assisted Housing



Public housing developments are largely concentrated in the Greater Downtown area, with some located off Market Street between downtown and Kerr Avenue. This is a disproportionate concentration when compared to the entire city.



## Publicly Subsidized Housing

Publicly-subsidized housing provides an affordable housing option for many. Publicly-subsidized housing units include both properties that are owned and/or managed by the Wilmington Housing Authority (WHA) and privately-owned properties that accept or receive some type of public subsidy.

The Wilmington Housing Authority currently manages a total of 22 properties with a total of 1,305 residential units. As of August, 2014, there were a total of 2,528 residents living in WHA properties and 879 people on the waiting list for housing. The housing authority also issues Housing Choice Vouchers (Section 8) that offer rental assistance for families. As of August, 2014, there were 1,958 vouchers and 1,000 people on the waiting list for vouchers. There are currently 1,894 privately-owned housing units in the city that accept Home Choice Vouchers and/or some other type of public subsidy.

Source: Wilmington Housing Authority, City of Wilmington Community Services Department



## Wilmington Housing Authority Properties

Property	Units
Covil Place	14
Creekwood South	198
Eastbrook	32
Glover Plaza	75
Hillcrest	256
Houston Moore	150
Jervay	66
New Brooklyn	48
Rankin Terrace	77
Solomon Towers	151
Sunset South	20
Taylor Senior Homes	96
The Pointe	48
Vesta Village	43
Woodbridge	24
Scattered Site Housing	7

## 6.3 Housing Affordability

### Affordable Housing in Wilmington

Census data for 2006-2010, compiled by HUD, reveals that 43% of households in Wilmington pay more than 30% of gross income for housing, and over 20% of households are paying 50% or more of their income for housing. Further, the data show that only 9% of existing rental units are affordable to renters earning 30% or below of the area median income, and only 21% of existing rental units are affordable to renters earning 50% of area median income. Likewise, for owner households earning 80% of the area median income, only 14% of the existing housing stock is affordable.

Source: U.S. Census Bureau; <http://egis.hud.gov/cpdmaps/> (5/12/14)



**Historic workforce housing**

Source (All Images): City of Wilmington



**New construction workforce housing**

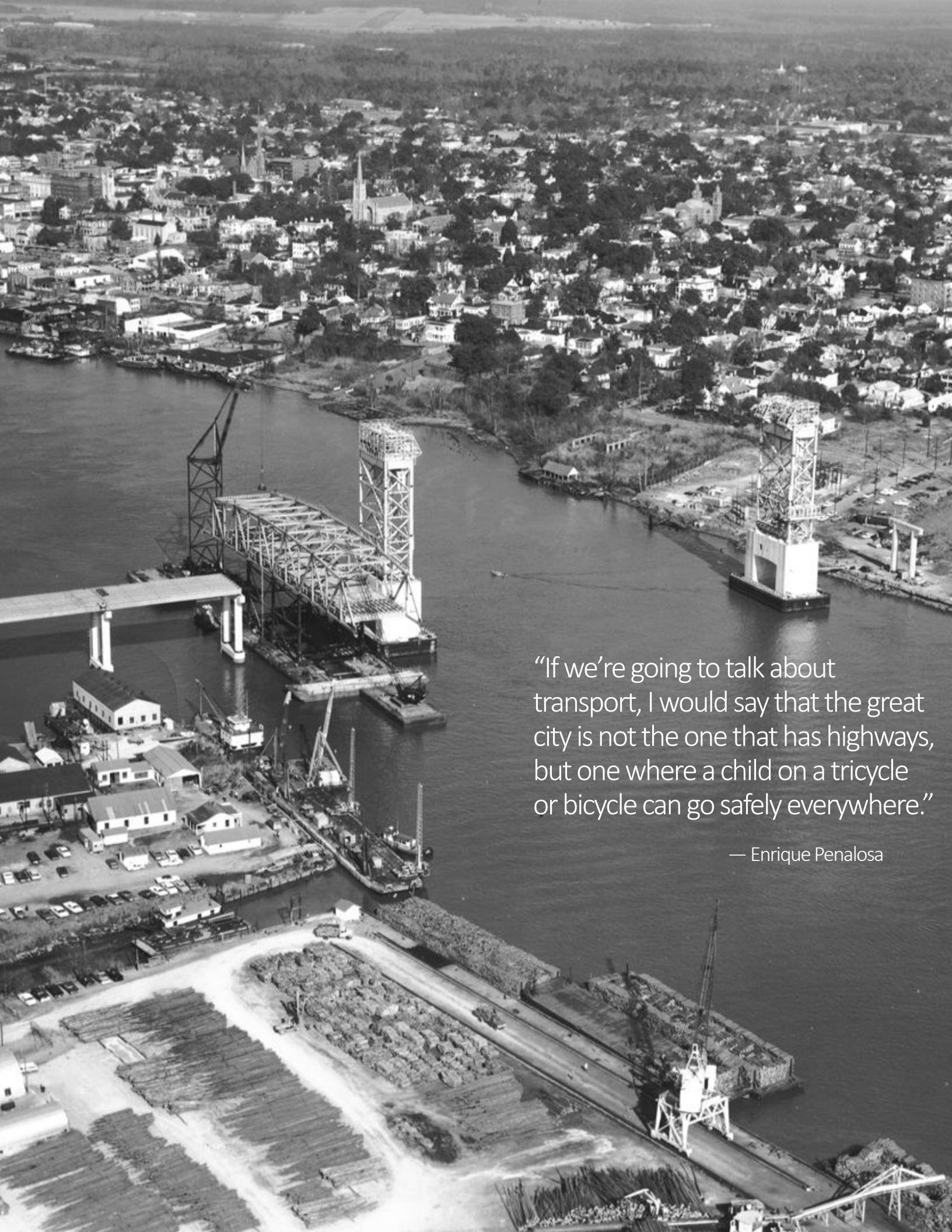


# 7 Transportation

- 7.1 Roadway Network
- 7.2 Traffic Volumes
- 7.3 State, City, and Private Streets
- 7.4 Gateways and Scenic Corridors
- 7.5 Parking
- 7.6 Sidewalks
- 7.7 Bike Facilities
- 7.8 Bicycle and Pedestrian Crashes
- 7.9 Historic Streetcar Network
- 7.10 Bus Transit

**Cape Fear Memorial Bridge**  
Image (opposite) of Cape Fear  
Memorial Bridge during construction.

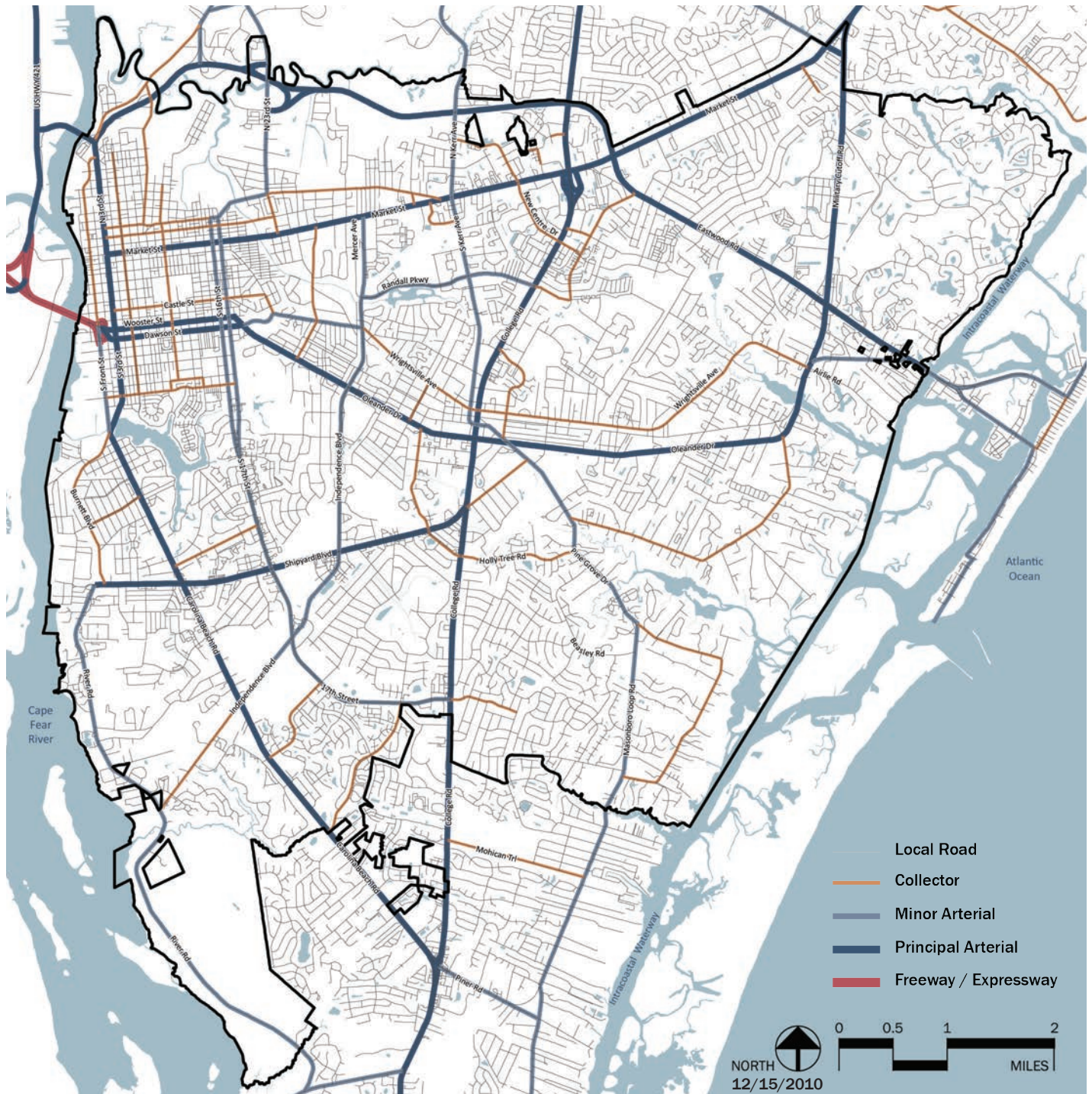
Source: Historical Society of Lower Cape Fear



“If we’re going to talk about transport, I would say that the great city is not the one that has highways, but one where a child on a tricycle or bicycle can go safely everywhere.”

— Enrique Penalosa

# 7.1 Roadway Network



This map depicts the roadways that are part of the city’s transportation network. Roadways are identified by their functional classification based on state and federal standards. Functional classifications identify the particular role a roadway has in moving vehicles through the transportation network. Each has a different expectation for how the road is designed. This includes city and state maintained roads.

Source: Federal Highway Administration

## Roadway Characteristics

Type	Typical Daily Trips
Collector	1,100 - 6,300
Minor Arterial	3,000 - 14,000
Principal Arterial	7,000 - 27,000
Freeway/Expressway	13,000 - 55,000

Source: Federal Highway Administration





### Local Streets

Local streets account for the largest percentage of all roadways in the city in terms of mileage. They are not intended for use in long-distance travel, except at the origin or destination of the trip, due to their provision of direct access to abutting land. Local streets are often designed to discourage traffic traveling through local neighborhoods.



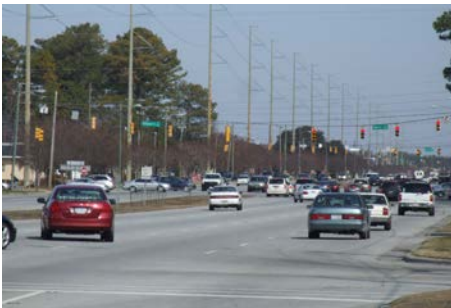
### Collector Streets

Collector streets serve a critical role in the roadway network by gathering traffic from local streets and funneling them to the arterial network. Collector streets serve both land access and traffic circulation functions in residential, commercial, and industrial areas, travel through residential neighborhoods, distribute trips between local streets and arterials, and include higher speeds and more signalized intersections than local streets.



### Minor Arterials

Minor arterials interconnect and augment the principal arterial network. Minor arterials provide service for moderate length vehicle trips, distribute traffic to smaller geographic areas, and provide greater access to land than principal arterials.



### Principal Arterials

Principal arterials carry the highest proportion of vehicle trips within the city. Principal arterials connect the city with the surrounding region, serve major activity centers, and interconnect urban and rural areas.



### Freeways/Expressways

Freeways and expressways are very similar to interstates as they are designed to maximize the free flow of vehicles. Freeways and expressways do not provide access to adjacent land uses and typically have directional travel lanes that are separated by landscaped or hardscaped median. Their access is limited to on- and off-ramps.

### Brick Streets, Alleys, and other Special Streets

Wilmington has a variety of uniquely-designed streets. These have interesting features that affect their functionality and character. In the Greater Downtown area, many of the streets are paved with historic brick. Some of these brick streets are fully exposed, while others are completely or partially covered by asphalt. Downtown also has a robust system of alleys. Some alleys are used primarily for service and automobile access, while others are pedestrian pathways.



Source (All Images): City of Wilmington



Growth Strategies Report

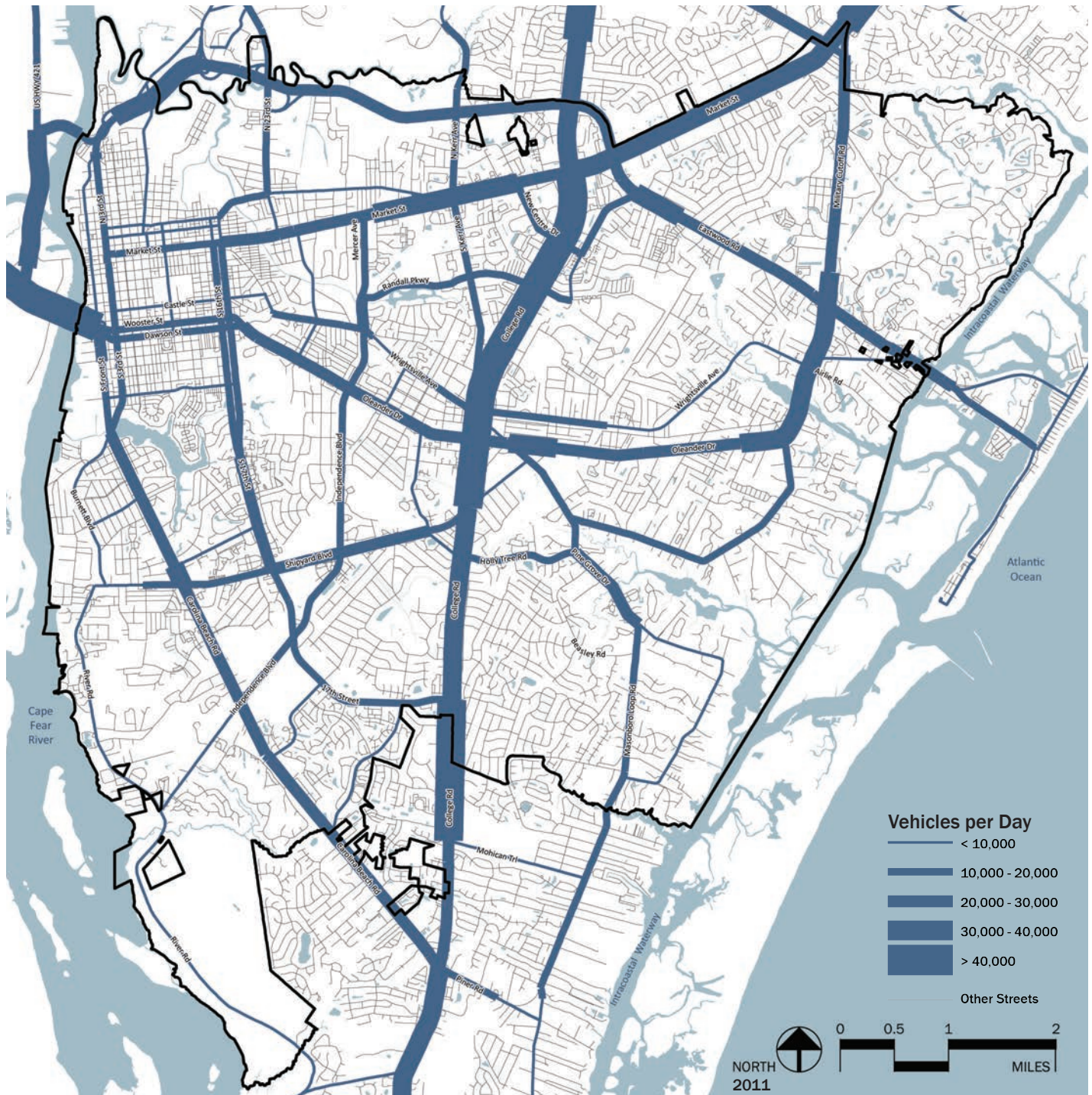
p. 32-39



Policies

2

## 7.2 Traffic Volumes



This map illustrates traffic volumes on major roadways. The width of the roadway on the map indicates the volume of traffic that the roadway carries.

Source: Wilmington Metropolitan Planning Organization, Annual Average Daily Traffic Volume, 2011

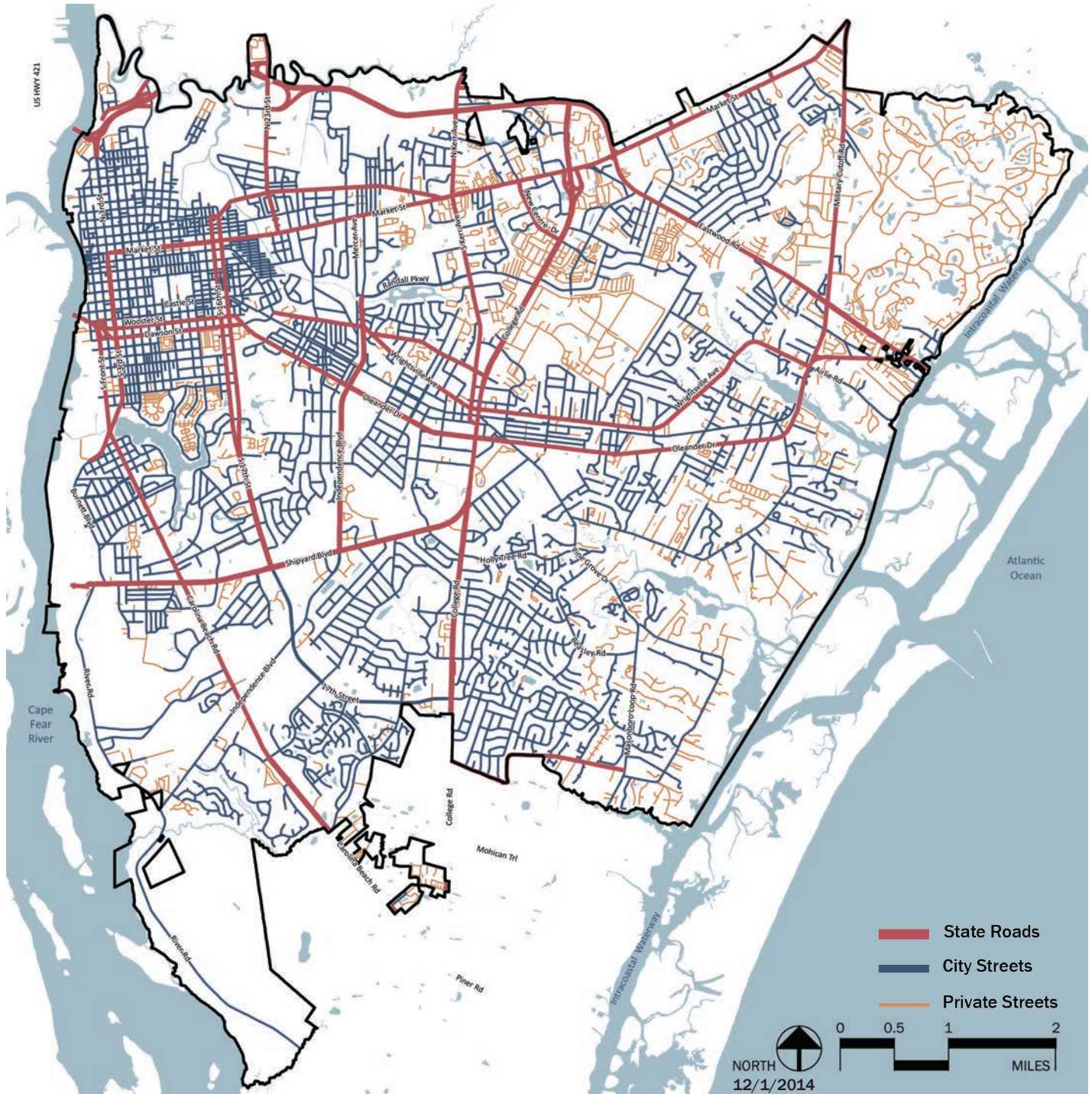


### Key Planning Theme

## Getting Around

Diverse modes of transportation are needed for an inclusive, connected community.

## 7.3 State, City, and Private Streets



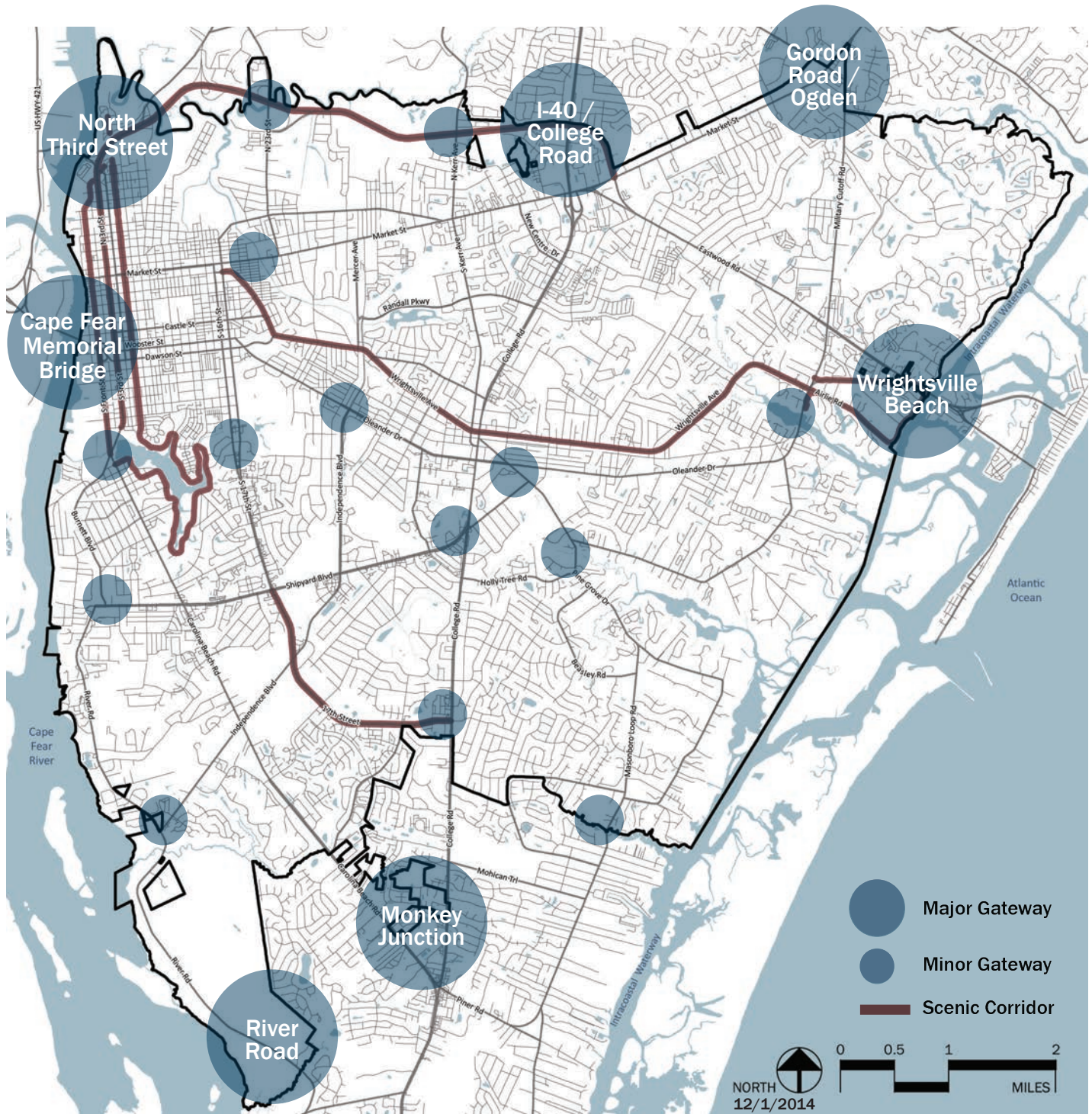
This map identifies each roadway in the city as being either state-maintained, city-maintained, or privately-maintained. Roadways and their rights-of-way can be publicly- or privately-owned. Public streets are maintained by NCDOT or the city's Public Services Department depending on their ownership. State roads must be constructed to state standards, which can sometimes conflict with local design guidelines

and plans. Private streets must comply with the city technical standards, but their maintenance is the responsibility of the private property owner.



**Box Set Cross-Reference**  
Growth Strategies Maps

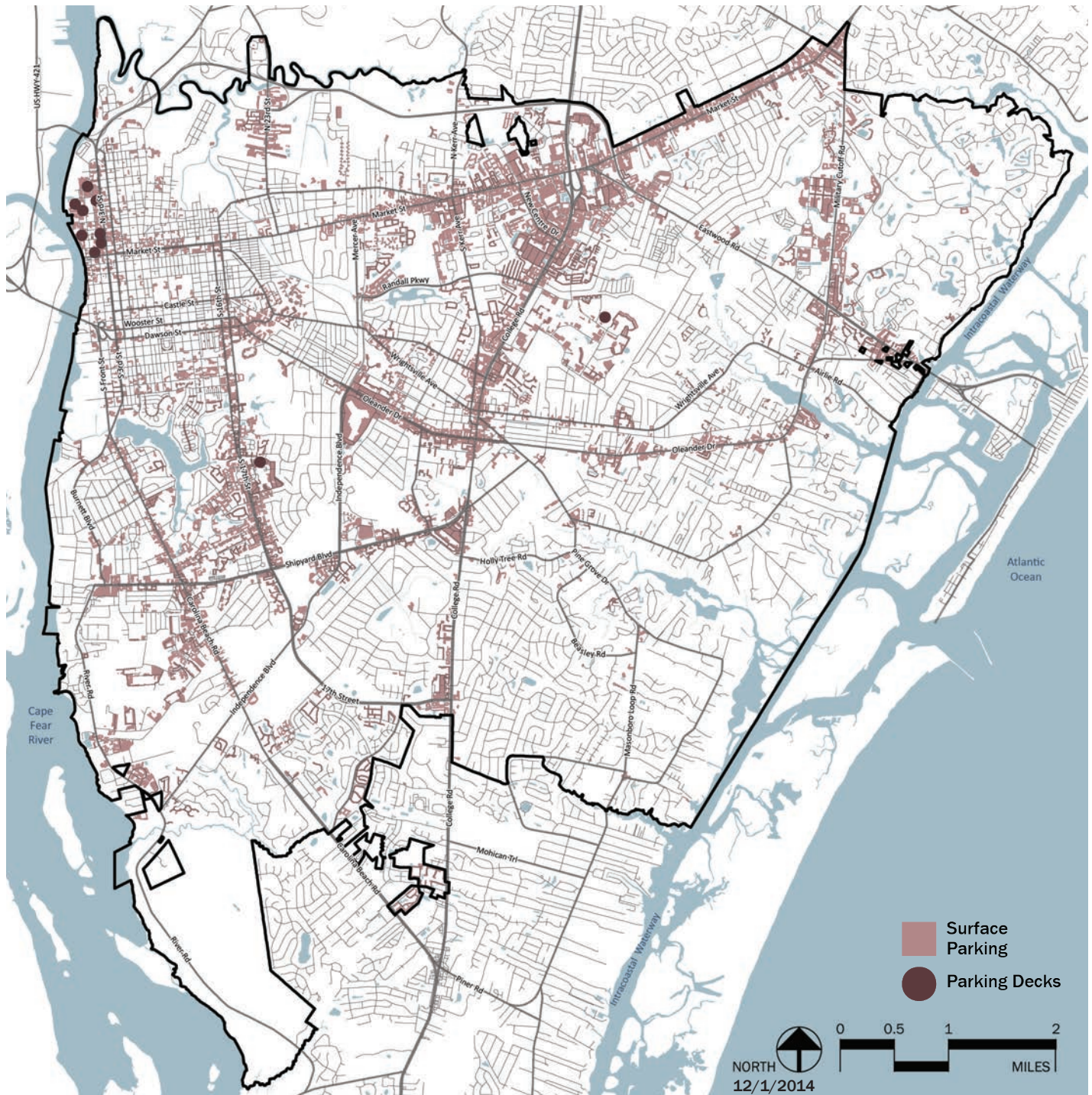
## 7.4 Gateways and Scenic Corridors



This map depicts the city's major and minor gateways and some scenic corridors. Scenic corridors are defined by special views, significant natural features, and tree-lined streets. Scenic corridors also include roadways that have been designated as a Scenic Byway, such as Airlie Road and portions of Front Street, fifth Avenue, and Lake Shore Drive. Gateways are points of transition into, and out of, a specific area. The physical environment of these locations provide people

with a sense of this change in place. Major gateways handle large amounts of traffic and are significantly sized areas where transition from one place to another occurs. Minor gateways are smaller in scale and regional significance, but they provide important local transition points.

## 7.5 Parking



This map depicts existing surface parking lots and structured parking facilities (parking decks) within the city. There are approximately 2,076 acres of land dedicated to surface parking, roughly 6% of the city's total land area. There are 10 parking decks in the city, eight of which are located in the downtown core. Two parking decks are located downtown at Cape Fear Community College, one at the Wilmington Convention Center, one at PPD, one on Water Street,

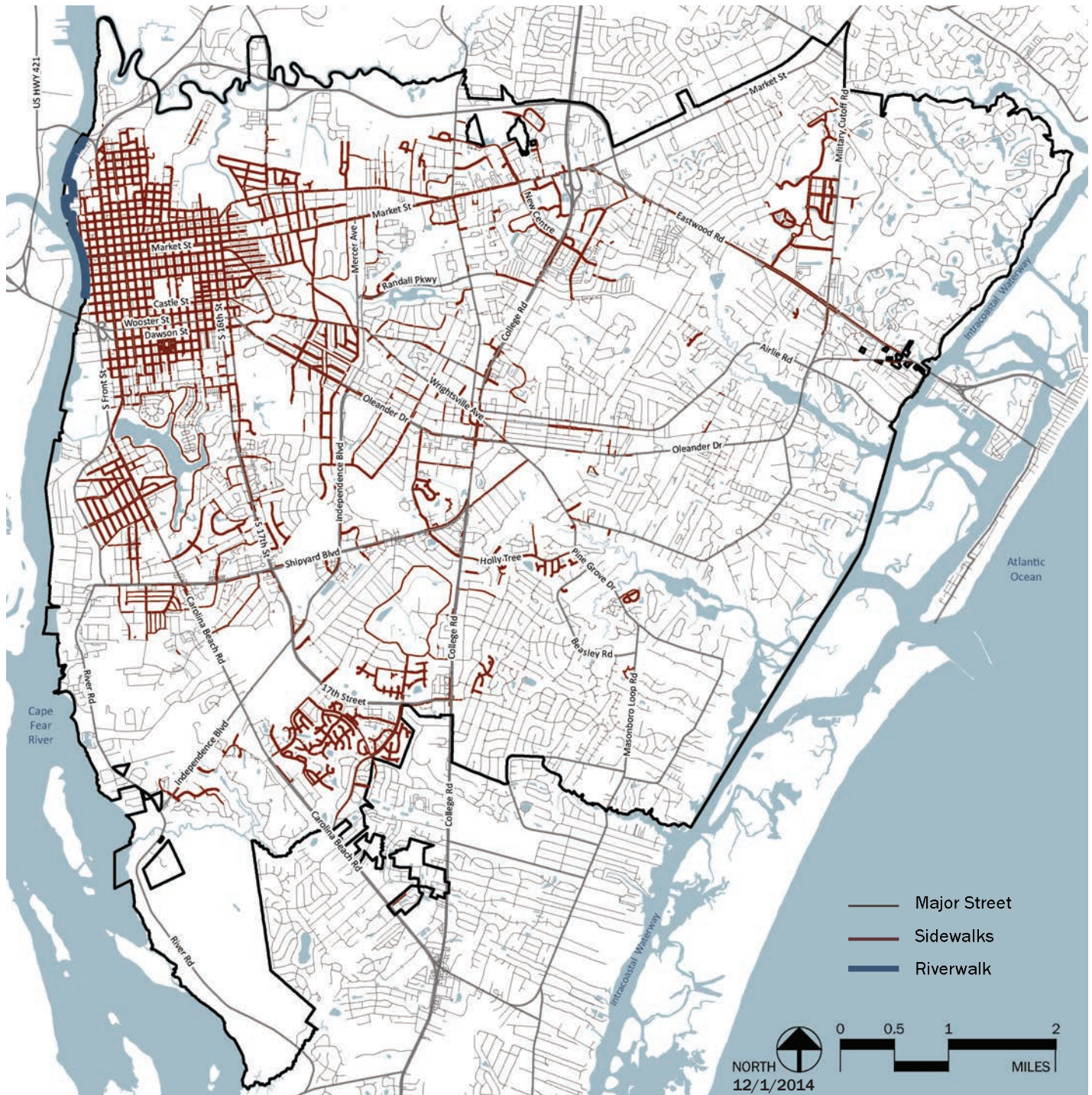
and three off of second street. There are also parking decks at the New Hanover Regional Medical Center campus on S. 17th Street and at UNCW. There are an estimated 334,928 off-street parking spaces in the city, excluding single-family driveways and garages. This translates into roughly four parking spaces per registered vehicle in the city.



*Land Use, Zoning, and Development Potential*

4.7

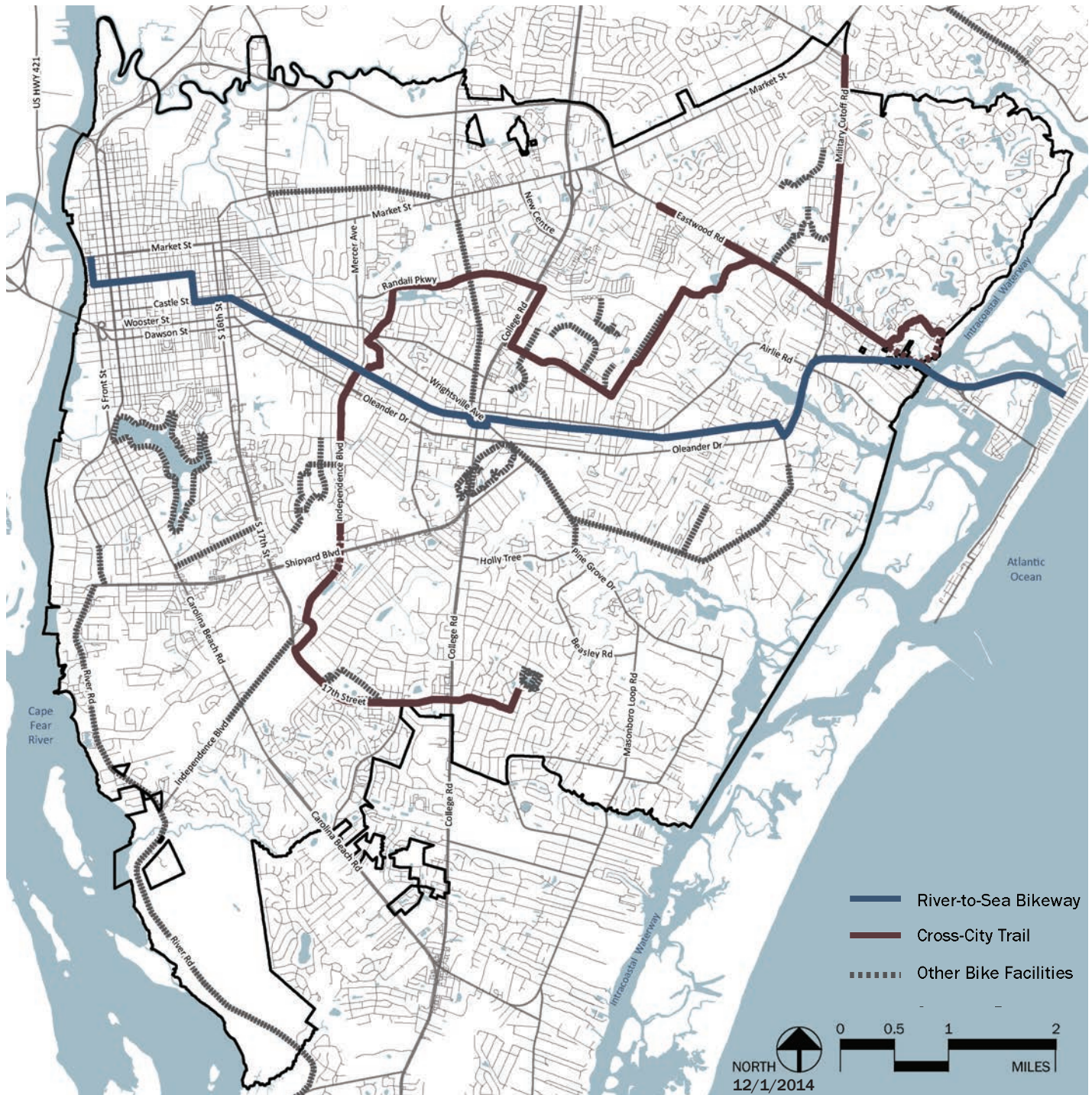
## 7.6 Sidewalks



This map depicts the existing sidewalk network within the city. The network is largely complete within the downtown area, with most block having sidewalks. The Greater Downtown area has a robust pedestrian network. The sidewalk network is lacking east of

Seventeenth Street, with some exceptions in new developments and more cohesive neighborhoods. Many major corridors and suburban neighborhood streets do not have sidewalks.

## 7.7 Bike Facilities



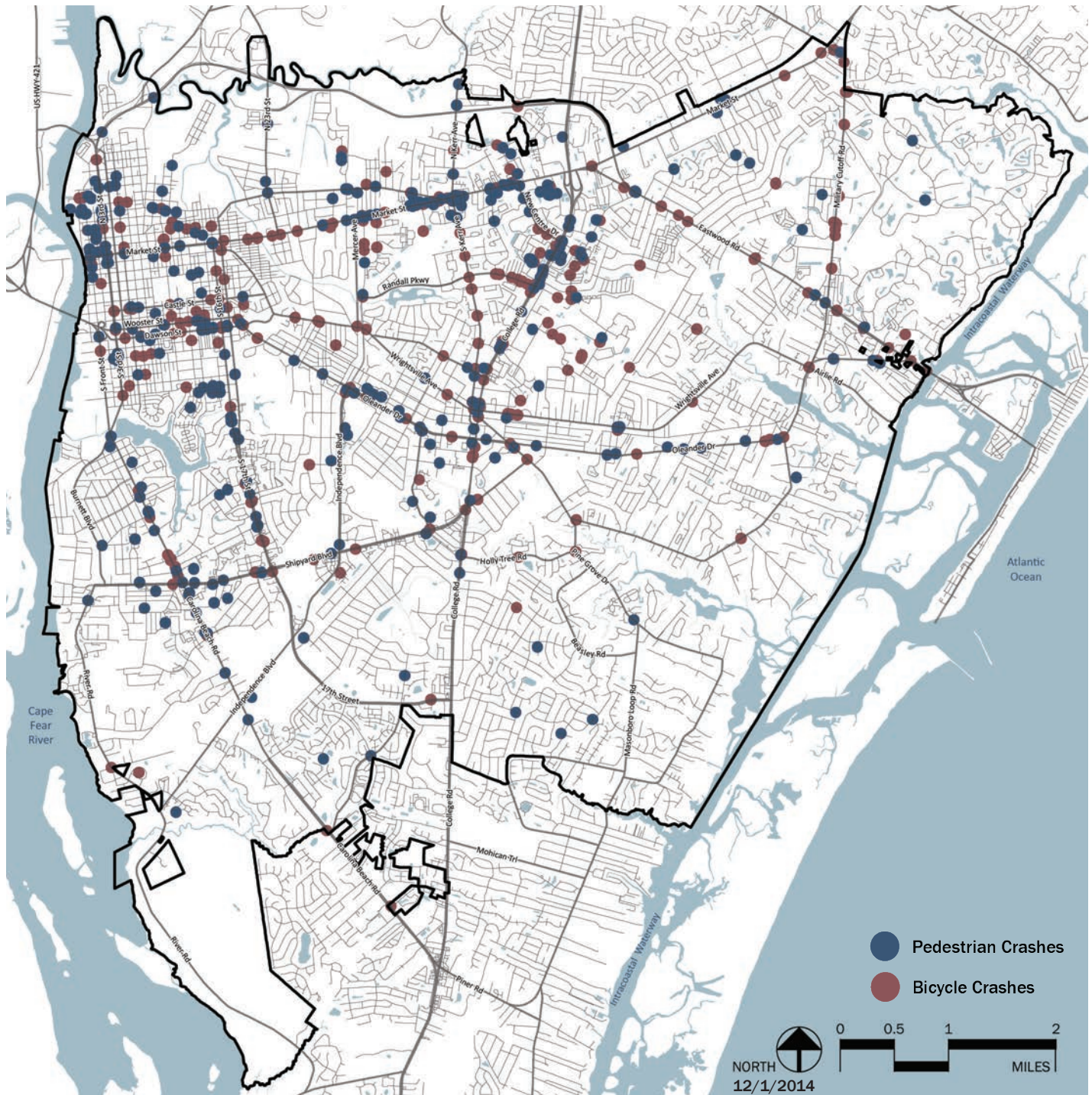
The map shows the existing bike trails and facilities throughout the city including, but not limited to, the Gary Shell Cross-city Trail, the River to the Sea Bikeway, and the Cape Fear Historic Byway. Other facilities are shown, including on-street bike lanes and designated bike routes.



*Growth Strategies Report*

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## 7.8 Bicycle and Pedestrian Crashes

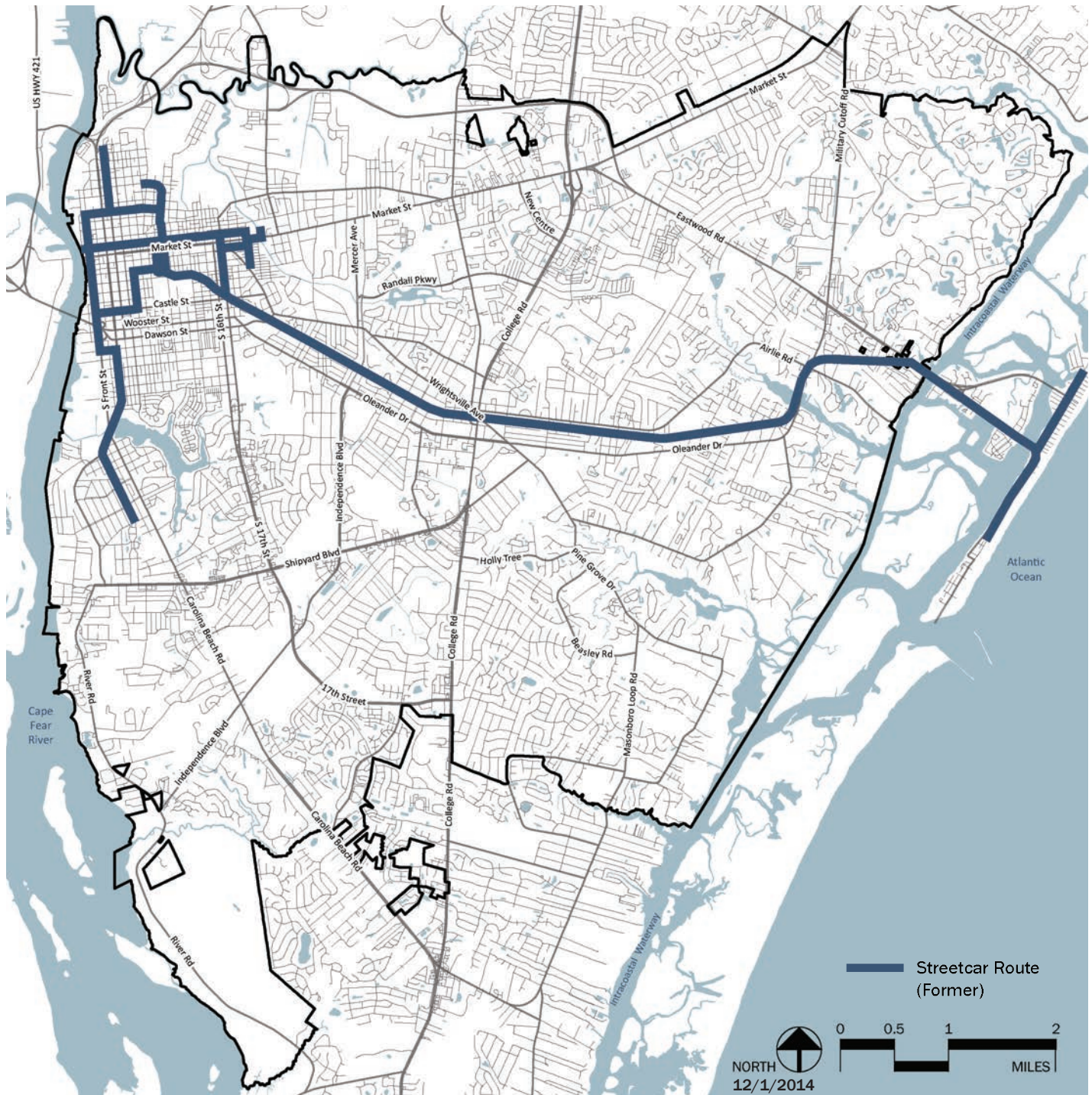


This map depicts pedestrian and bicycle crashes that occurred in the city between 2007 and 2012. During this time, there were a total of 335 vehicle crashes involving pedestrians, with an average of 56 crashes per year. Further, there were a total of 274 vehicle crashes involving cyclists, with an average of 46 crashes per year. Higher concentrations of pedestrian and bicycle crashes with vehicles occurred in the Greater Downtown and along major road corridors, particularly at major intersections.





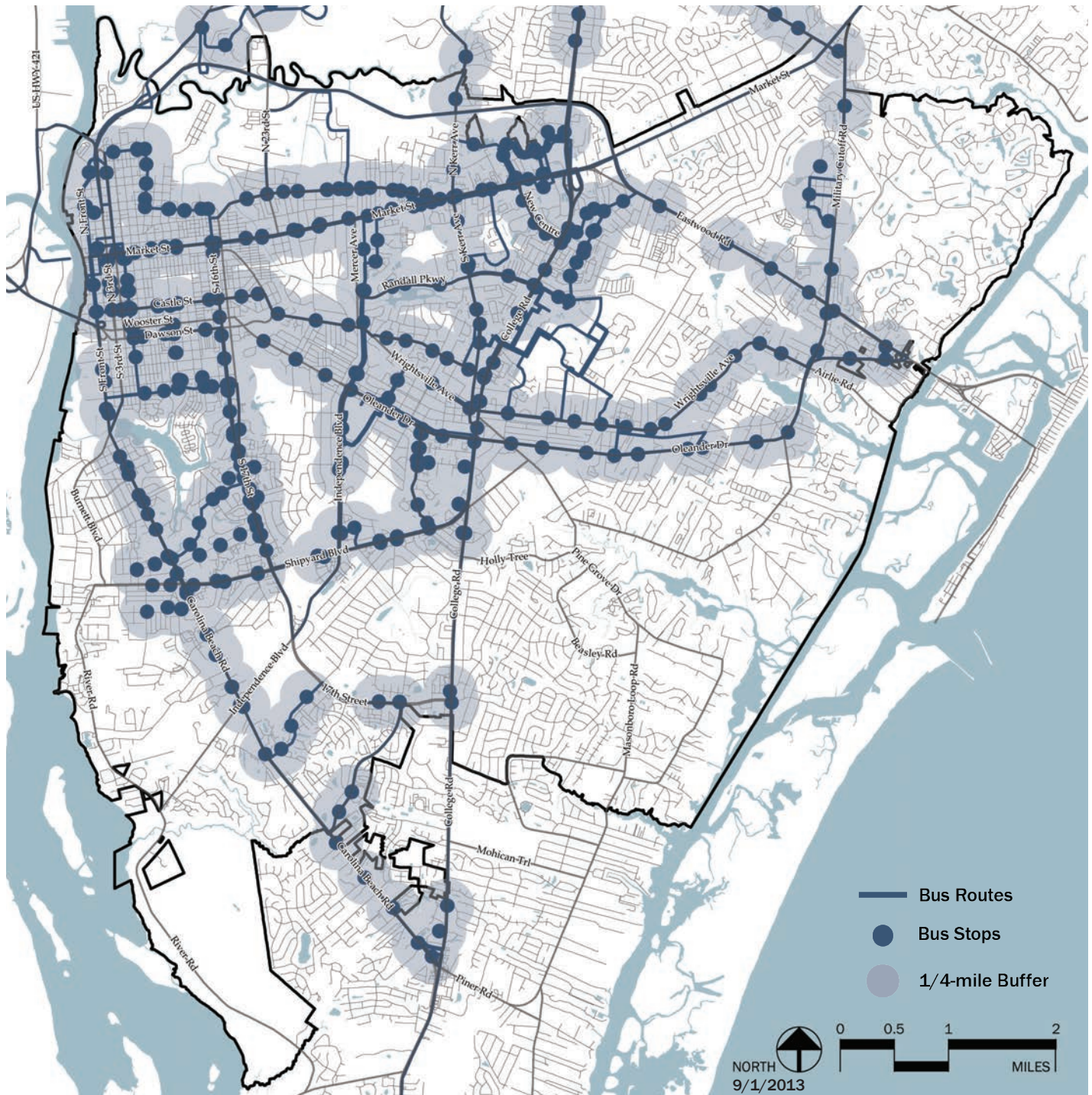
## 7.9 Historic Streetcar Network



This map shows the location of Wilmington’s historic street car network that traversed the city from downtown to Wrightsville Beach. The city’s lines were extended to accommodate growth of suburbs on the city’s northern edge. With this came the opportunity for trolleys to encourage new neighborhoods along the street car route. The electric streetcar eventually served a total of twenty waiting stations. Currently, residents have voiced interest in reestablishing this streetcar system.



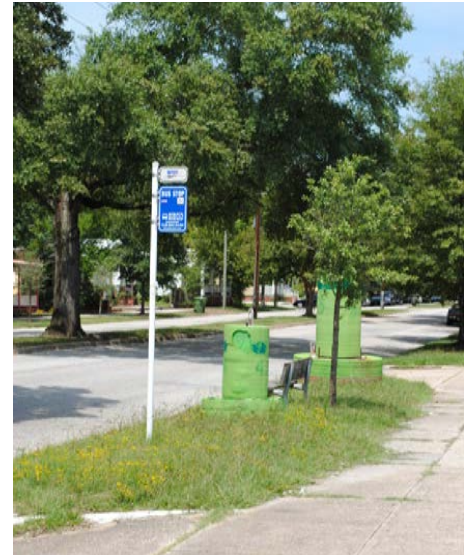
## 7.10 Bus Transit



The transit system in Wilmington is operated by Cape Fear Public Transit Authority, known as WAVE Transit. This map depicts existing transit (bus) routes and transit stops within the city limits. The map also includes a 1/4-mile buffer around each transit stop location, which represents the typical distance a person is willing to walk to a transit stop location. The white areas on the map indicate areas outside of the 1/4-mile buffer.

### Choice Ridership

Choice ridership refers to people who choose to use public transit instead of some other means of transportation that may be available to them. Making transit a more attractive transportation option by improving run times, transit stop conditions, and the pedestrian network around transit stops can increase choice ridership and the viability of the overall public transit system.



Source (All Images): City of Wilmington

### Transit Stop Conditions

There are 481 bus stops within the WAVE Transit system. Most bus stops do not provide benches or shelters and are located along busy roadways without sidewalks. These uncomfortable conditions may discourage transit ridership.

The images on this page show various types of amenities at WAVE transit stops. Most stops are a simple pole fixed into the ground with a sign showing the route designation and stop location. Other stops include a bench or shelter. The vast majority of stops have neither shelter, nor bench for riders to use while waiting for the bus.



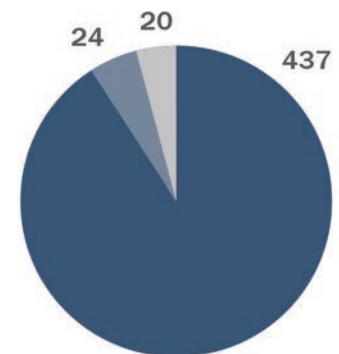
*Growth Strategies Report*

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*Additional Information*



*Wilmington Metropolitan Planning Organization  
Cape Fear Transportation 2040 Plan*



### Bus Stops with Facilities

- No Shelter or Bench
- Benches without Shelter
- Shelter and Bench



# 8

## Community Pattern Areas

### Patterns

- |   |  |
|---|--|
| <b>8.1</b> Historic Urban Center                  | <b>8.15</b> Automobile-oriented Commercial Strips        |
| <b>8.2</b> Traditional Urban Neighborhoods        | <b>8.16</b> Suburban Office and Business Areas           |
| <b>8.3</b> Traditional Shopfront Corridors        | <b>8.17</b> Suburban Commercial Centers                  |
| <b>8.4</b> Streetcar-era Suburbs                  | <b>8.18</b> Neo-traditional Suburban Town Centers        |
| <b>8.5</b> Assorted Semi-urban Fabric             | <b>8.19</b> Neighborhood Industrial Transition Areas     |
| <b>8.6</b> Second-ring Suburbs                    | <b>8.20</b> Hospital and Medical Office Transition Areas |
| <b>8.7</b> Postwar Ranch and Late-century Suburbs | <b>8.21</b> Large-scale Industrial Areas                 |
| <b>8.8</b> General Contemporary Suburbs           | <b>8.22</b> Academic/Institutional Campus                |
| <b>8.9</b> Compact Clustered Suburbs              |  |
| <b>8.10</b> Waterfront-oriented Suburbs           |  |
| <b>8.11</b> Intracoastal Tidewater Estates        |  |
| <b>8.12</b> Semi-rural Areas                      |  |
| <b>8.13</b> Semi-urban Multi-family Development   |  |
| <b>8.14</b> Mid-century Standardized Housing      |  |

**Oleander Drive**  
 Traditional, suburban neighborhood development patterns are found throughout Wilmington, even near busy transportation corridors (image opposite).

Source: City of Wilmington



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

— Jonathon Barnett

# Urban Form Glossary

This chapter uses uncommon terms to describe various characteristics of the built environment. The following definitions may be helpful while reading about Wilmington’s Community Pattern Areas.

**Adaptive reuse** – the extensive alteration, restoration, and/or renovation of an existing structure or building so that it will serve a new purpose.

**Articulation** – Detailing of building mass, location or orientation of fenestration, and design of building elements.

**Buffer** – open spaces, landscaped areas, fences, walls, berms, or any combination thereof used to physically separate or screen one use or property from another so as to visually shield or block noise, light, or other nuisances.

**Building orientation** – the direction a building faces on a parcel.

**Character** – the image of a community or area as defined by such factors as its built environment, natural features and open space elements, type of housing, architectural style, infrastructure, and the type and quality of public facilities and services.

**Circulation** –  
1. The traffic pattern through an area or building. 2. In a building or site, a scheme providing for a smooth, economical, and functional flow of traffic.

**Compatibility** – the size, form, and character of a building element relative to other elements around it as to avoid abrupt or severe differences.. This may be determined by the size and proportion of windows in a building façade are usually related to one another, the spaces between them, and the scale of surrounding buildings.

**Connectivity** – the density of connections in path or road network and the directness of links. A well-connected road or path network has many short links, numerous intersections, and minimal dead-ends (cul-de-sacs). As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations, creating a more Accessible and Resilient system that reflects Complete Streets principles.

**Context** – the particular history, pattern, style and other surrounding aspects of a given location.

**Cul-de-Sac** – a circular area at the end of a dead end street to allow cars to turn around, designed so children can play on the street, with little or no through-traffic.

**Curvilinear (streets)** – a system of streets that is curved, as opposed to straight.

**Drive-through** – a retail business, bank or restaurant designed to permit its patrons to receive services while they remain in their automobiles.

**Enclosure (sense of)** – an experience in which a pedestrian feels sheltered with a semi-private realm. Buildings, trees, landscaping and street widths are all factors in creating a sense of enclosure

**Façade** – the exterior wall of a building exposed to public view or that wall viewed by persons not within the building.

**Fenestration** – the arrangement of windows in a building.

**Frontage** – the land area in between the street and the building. The relationship between the street, site frontage and building façade defines the frontage condition.

**Human Scale** – the quality of the physical environment which reflects a sympathetic proportional relationship to human dimensions and which contributes to the

citizen’s perception and comprehension of the size, scale, height, bulk and/or massing of buildings or other features of the built environment.

**Infill development** – the construction of a building on a vacant parcel located in a predominately built-up area. The local zoning regulations determine whether the new building fits harmoniously into the neighborhood.

**Intersection density** – the number of street intersections in a given area, which determines the quality of the overall street network. A low intersection density results in areas with large blocks and few route choices, which reduces its walkability.

**Linear** – urban development elements having, or organized as, a thin, elongated form. Buildings arranged along a roadway may have a linear arrangement.

**Lot Coverage** – a measure of intensity of land use that represents the portion of a site that is covered by buildings, parking or impervious surfaces, depending upon the desired factor being measured.

**Mass** – the combination of the three dimensions of length, height, and depth which give a building its overall shape; a building is often composed of many masses, hence the term massing, which is often used to describe the form or shape of structures.

**Modulation** – variation in the plane of a building wall, often used to provide visual interest.

**Network** – a system of interconnecting streets and other pathways that represent a system for a given area. A network can be well-connected or sparsely connected, depending on the size of city blocks.

**Node** – a place where activity and routes are concentrated, usually where an intersection or dense grouping of buildings are located.

**Ornate** – made in an intricate shape or decorated with complex patterns.

**Pattern** – the distribution of forms over a given space in a discernibly regular manner.

**Pedestrian orientation** – the characteristics of an area where the location and access to buildings, types of uses permitted on the street level, and storefront design are based on the needs of persons on foot.

**Public Realm** – the public and semi-public spaces of the city, especially the street spaces of the city from building face to the opposite building face (including the façade, front yard, sidewalk and streets) and open space such as parks and squares.

**Redevelopment** – any new construction on a site that has pre-existing uses. Variations of urban redevelopment include infill development, constructing with a denser land usage, and adaptive reuse.

**Rhythm (street)** – the level of consistency and compatibility in mass, scale, orientation and other form-based qualities along a street.

**Right-of-Way** – a strip of land, including the space above and below the surface, that is platted, dedicated, condemned, established by prescription or otherwise legally established for the use of pedestrians, vehicles, or utilities.

**Scale** – the sense of proportion or apparent size of a building or building element as created by the placement and size of the building in its setting; scale usually applies to how the sense is perceived in relation to the size of a human being and refers to the apparent size, not actual size, since it is always viewed in relationship to another building or element.

**Setback** – the minimum distance from the property line at which a building must be built.

**Street Wall** – a condition where buildings consistently line or front onto the edge of a street. Best achieved where buildings have consistent setbacks built out to the sidewalk.

**Streetscape** – the distinguishing elements and character of a particular street as created by its width, degree of curvature, paving materials, design of the street furniture, pedestrian amenities and setback and form of surrounding buildings.

**Transition** – an area where one pattern area or type of development site borders another.

**Uniformity** – having an overall sameness, homogeneity, or regularity.

**Urban form** – the shape and structure of a city, influenced by many natural and human made factors.

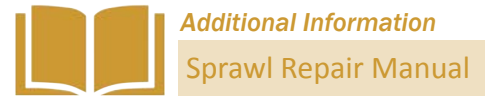
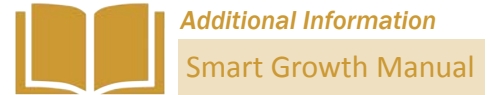
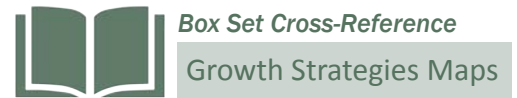
**Urban grain** – the pattern of the arrangement and size of buildings and uses and their plots in an area, usually along a street. Fine urban grain refers to a pattern of street blocks and building sites that is small and frequent, thereby creating a dynamic and animated urban environment for the pedestrian.

**Vernacular** – a category of architecture based on local needs, construction materials and reflecting local traditions.

**Walkable** – a condition of a system of routes which are barrier free, interesting, safe, well-lit, comfortable and inviting to pedestrian travel.

# 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 purposefully does not address 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 should also inform the city’s Land Development Code.



## 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.

### Street Network and Block Pattern

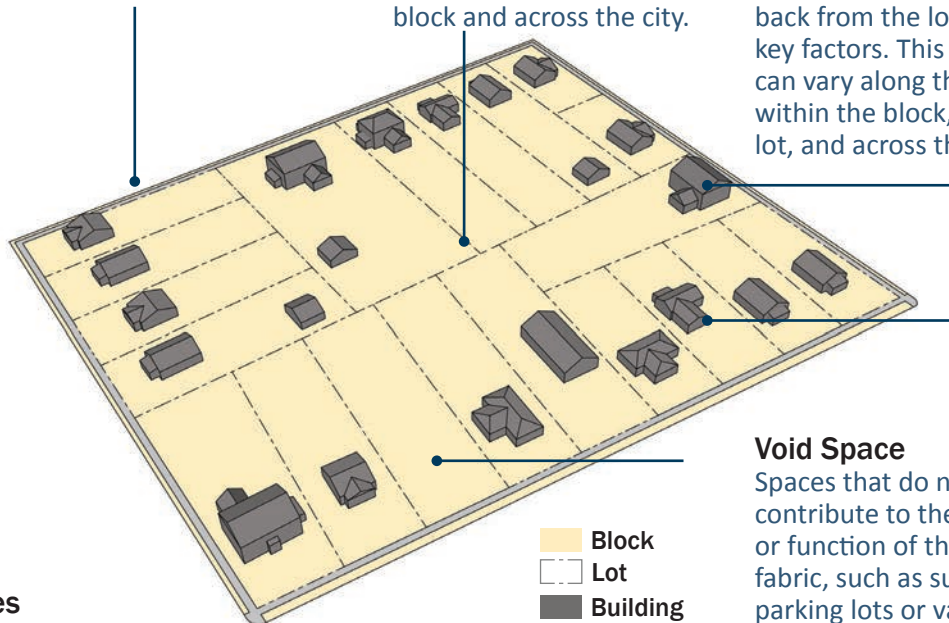
The arrangement, frequency of intersections, length of roads, and the shape and size of blocks differ across the city.

### 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.



### Architectural Style

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

### Urban-Suburban Qualities

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

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 urban-suburban-rural qualities exist along a continuum.

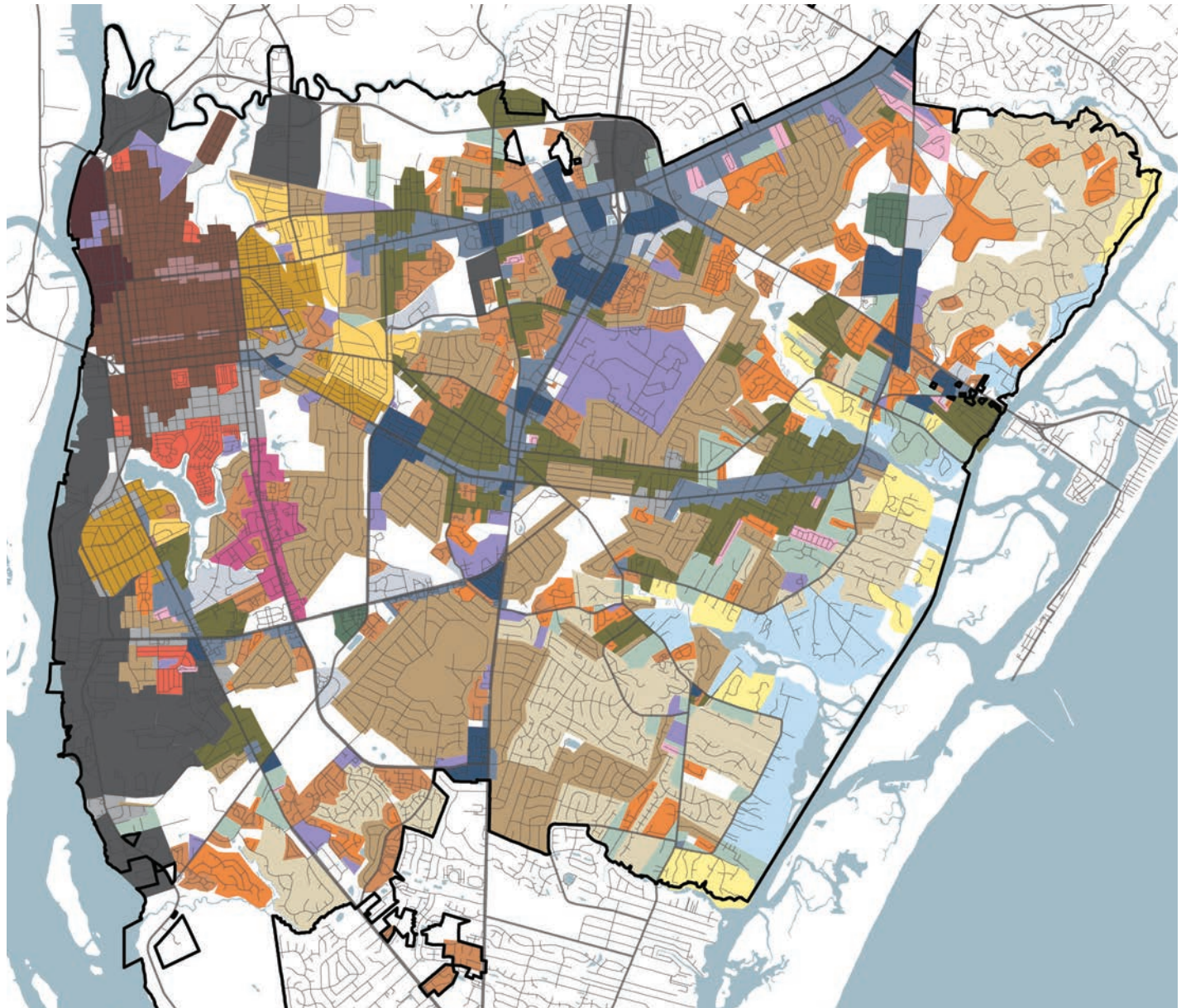
### Void Space

Spaces that do not contribute to the form or function of the urban fabric, such as surface parking lots or vacant sites.





# Community Pattern Areas



- |  |  |
|--|--|
|  Historic Urban Center                |  Manufactured Housing                       |
|  Traditional Urban Neighborhoods      |  Semi-urban Multi-family Development        |
|  Traditional Shopfront Corridors      |  Mid-century Standardized Housing           |
|  Streetcar-era Suburbs                |  Automobile-oriented Commercial Strips      |
|  Assorted Semi-urban Fabric           |  Suburban Office & Business Areas           |
|  Second-ring Suburbs                  |  Suburban Commercial Centers                |
|  Postwar Ranch & Late-century Suburbs |  Neo-traditional Suburban Town Center       |
|  General Contemporary Suburbs         |  Neighborhood Industrial Transition Area    |
|  Compact Clustered Suburbs            |  Hospital & Medical Office Transition Areas |
|  Waterfront-oriented Suburbs          |  Large-scale Industrial Areas               |
|  Intracoastal Tidewater Estates       |  Academic/Institutional Campus              |
|  Semi-rural Areas                     |  Vacant Land                                |

# 8.1 Historic Urban Center

<b>Urban Core</b>	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.

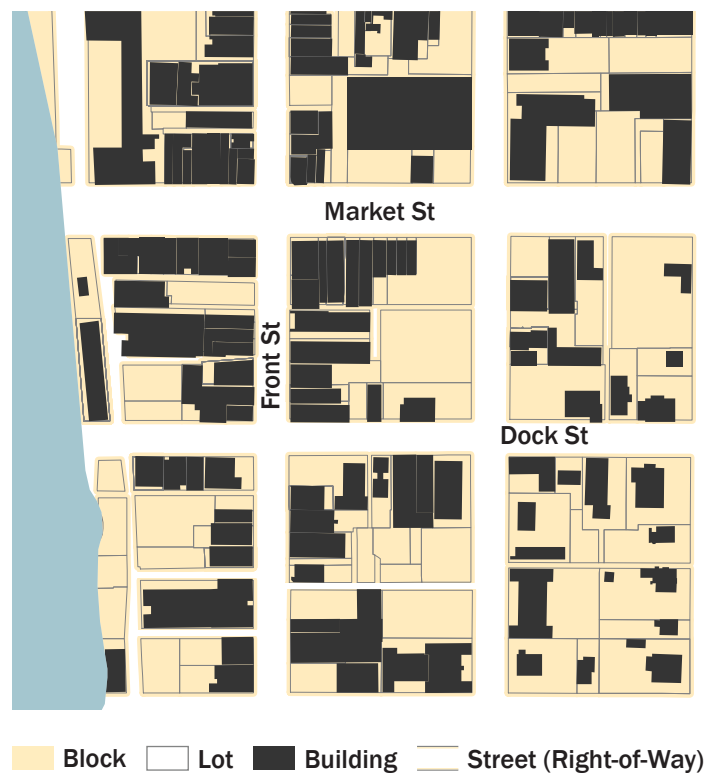
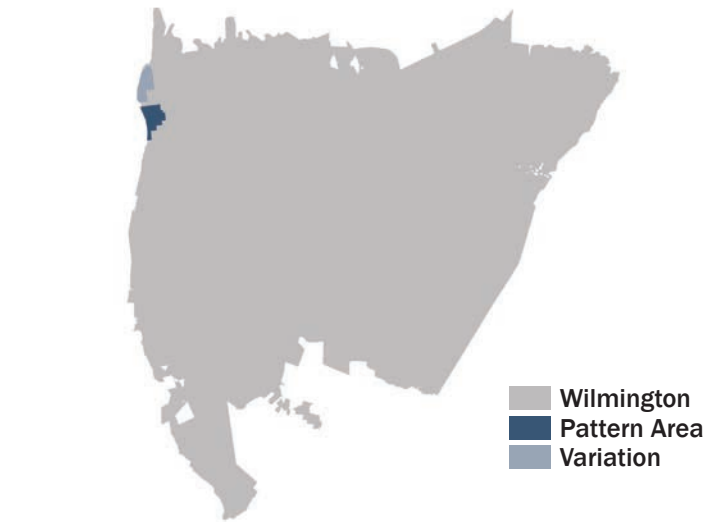
### Block and Street Patterns

This pattern has a strong hierarchy of well-connected streets and pathways. A very regular grid pattern provides maximum connectivity and various ways by which to gain access. 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



Source: City of Wilmington



Aerial view of N. 3rd Street at Market street



Source: Google, 2015

### 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. The 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 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 and 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 under-utilized 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 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.

### Wilmington City Hall



Source (All Images): City of Wilmington

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Rectangular; Square
Typical Lot Size (Sq.Ft.)	10,000
Lot Coverage	Very High
Front Setback	Abrupt, Very Shallow (0-5)
Other	
Parking	Structured; On-street; Surface
Sidewalk Availability and 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.



*Downtown Framework*

9



## 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 neighborhood area. 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.

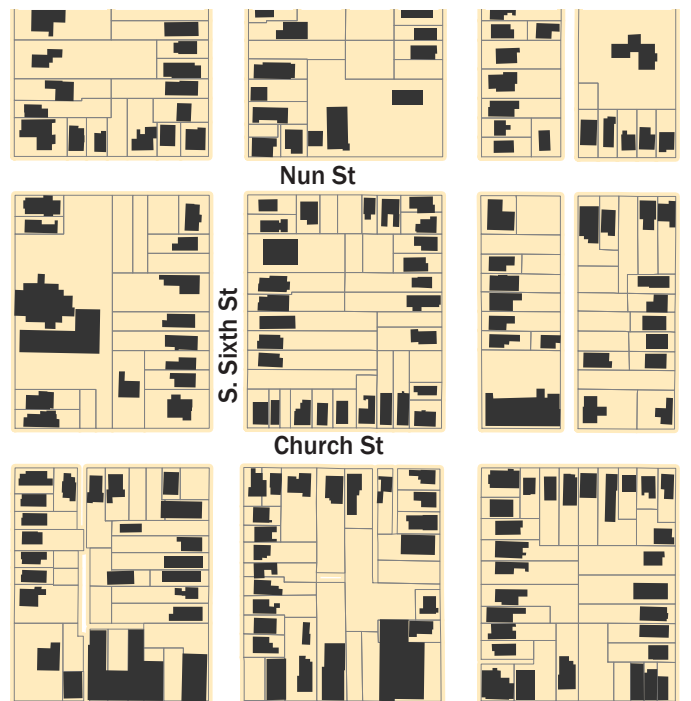
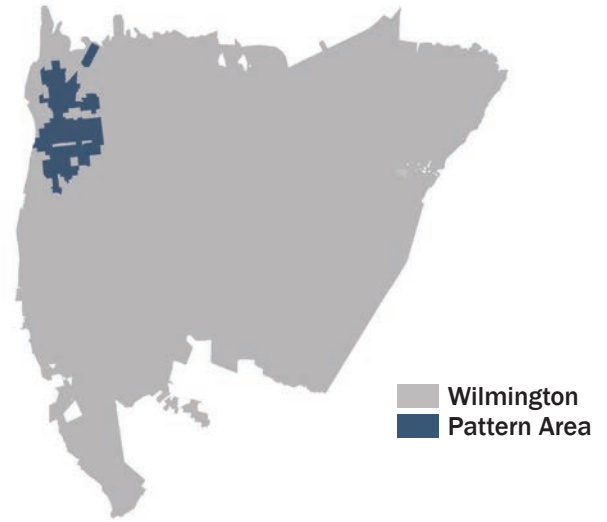
### Block and Street Patterns

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 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

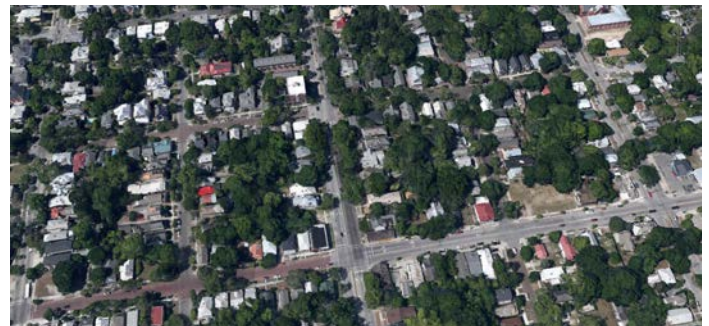


Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### S. 3rd Street at Castle Street



Source: Google, 2015

### 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 (33-66 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 and Crafts style homes exist moving away from downtown. Although single- and three-story buildings are common, most are two stories tall. Since building styles, materials, number of stories, and façades 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 and 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:

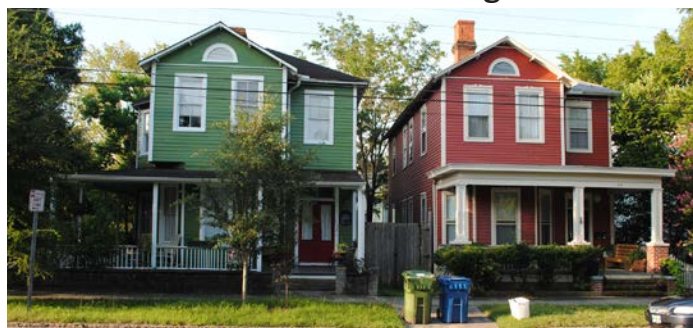
- Redevelopment of sites beyond the local historic districts may be out of place with traditional architecture.
- Structures that have not been well preserved offer challenging renovation or redevelopment opportunities.
- Adaptive reuse of older buildings is possible.
- Division of large homes into multiple 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 and 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 and Buildings	
Typical Lot Shape	Rectangular
Typical 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 and Connectivity	Abundant, Very High
Dominant Land Uses	Residential, Retail, Religious
Supported Transportation Modes	



### Traditional Homes in Northside Neighborhood



### Traditional Homes in Southside Neighborhood



Source (All Images): City of Wilmington

## 8.3 Traditional Shopfront Corridors

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

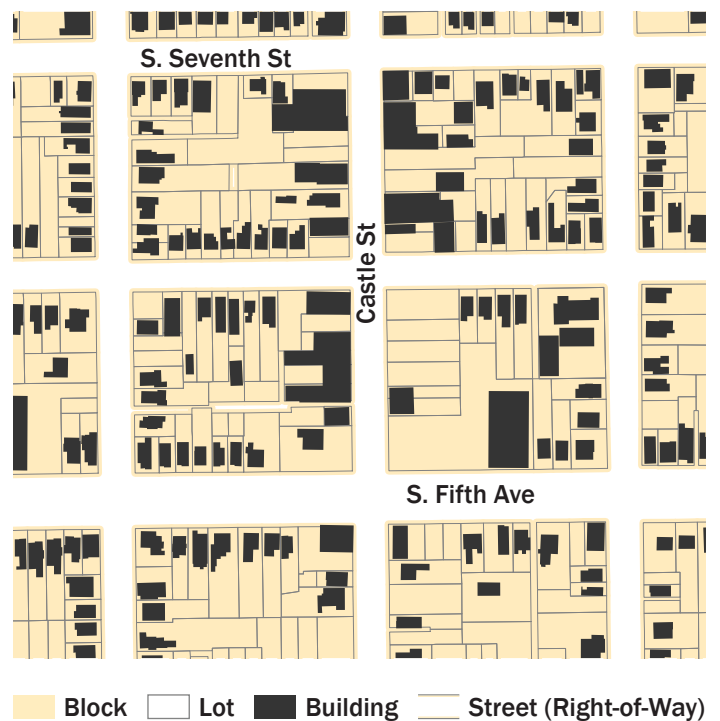
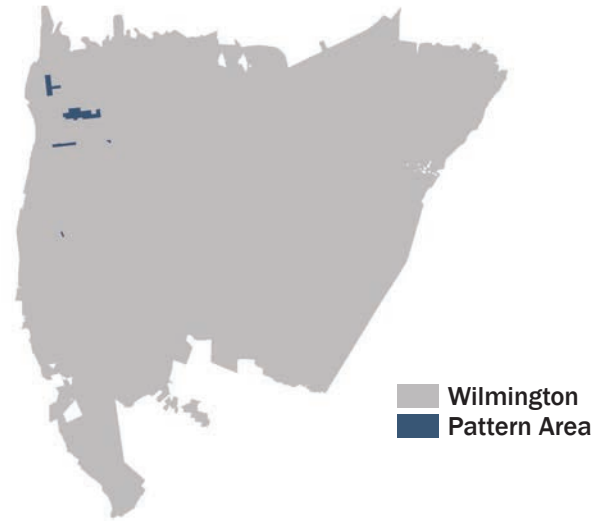
These are relatively short, linear areas composed of one- to three-story buildings. Many structures include ground-level retail and office or residential units above, as well as a very shallow setbacks (0-15 feet). These are typically mixed with small apartment buildings, churches, small industrial buildings, and some single-family homes usually 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. Many 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 detailed 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 common on many streets, but not where streets have been widened into thoroughfares.



### Storefront on Castle Street



Source: City of Wilmington

### Castle at S. 5th and S. Seventh Street



Source: Google, 2015

### Lot and Building Configuration

Lots are primarily rectangular, typically varying in width from 33-66 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 partitioning 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 multi-story buildings, the ground floor is distinct from upper floors (typically of a different use).

### Void Spaces and 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, and they which are ideal candidates for high-density, infill development, that relates to the existing surrounding context, especially the insertion of mixed uses with an active ground floor.

### SW corner of Castle and S. 7th Streets



Source (All Images): City of Wilmington

## Community Pattern Characteristics

Street and Block System	
Street Network	Rectilinear Grid
Block Shape	Rectangular
Block Size (Feet)	n/a
Intersection Density	High
Use of Alleys	Some
Lots and Buildings	
Typical Lot Shape	Rectangular
Typical Lot Size	2,000-12,000 (Sq. Ft.)
Lot Coverage	Very High
Front Setback	Abrupt, Very Shallow (0-5 Feet)
Lot Uniformity	High
Other	
Parking	On-street, Side and Rear of Lots
Sidewalk Availability and 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. 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.

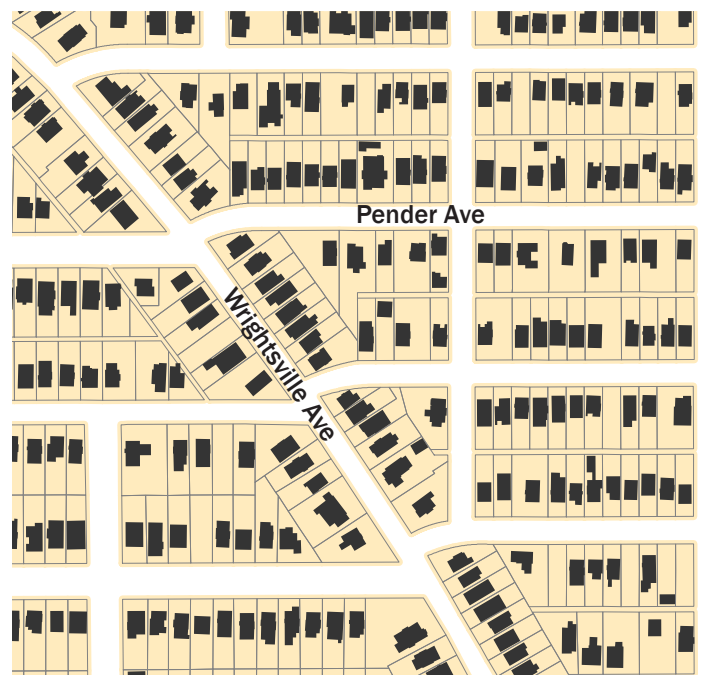
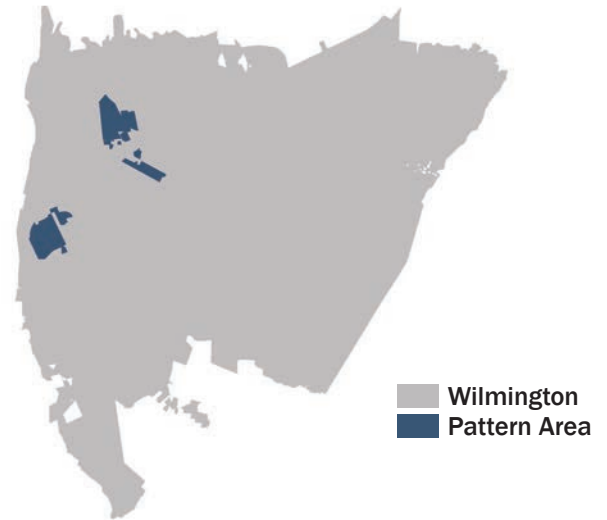
### Block and Street Patterns

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. Much of the street 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 or steep ramps.

### Homes in Carolina Place

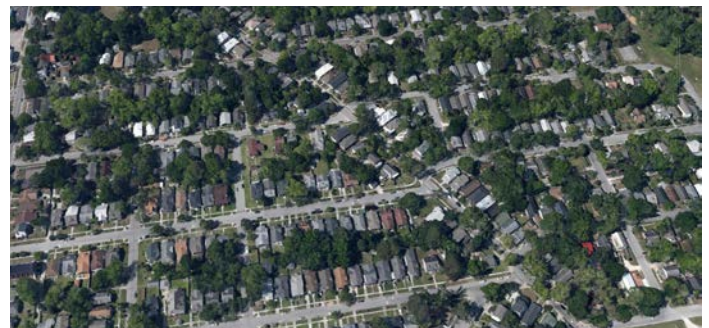


Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### Wrightsville Avenue at Ann Street



Source: Google, 2015



### Lot and Building Configuration

Buildings are oriented towards narrow residential streets, with some large, mansion-like homes constructed along residential 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.

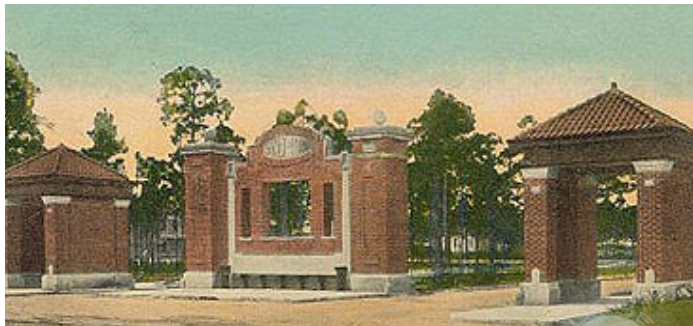
### Architectural Styles

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

### Void Spaces and 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 gateway



Source (All Images): City of Wilmington

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Rectangular
Typical Lot Size	4,000-12,000 (Sq. Ft.)
Lot Coverage	High
Front Setback	Shallow (12-25 Feet)
Lot Uniformity	Very High
Other	
Parking	On-street; Rear of Lots
Sidewalk Availability and 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 and 2000s.

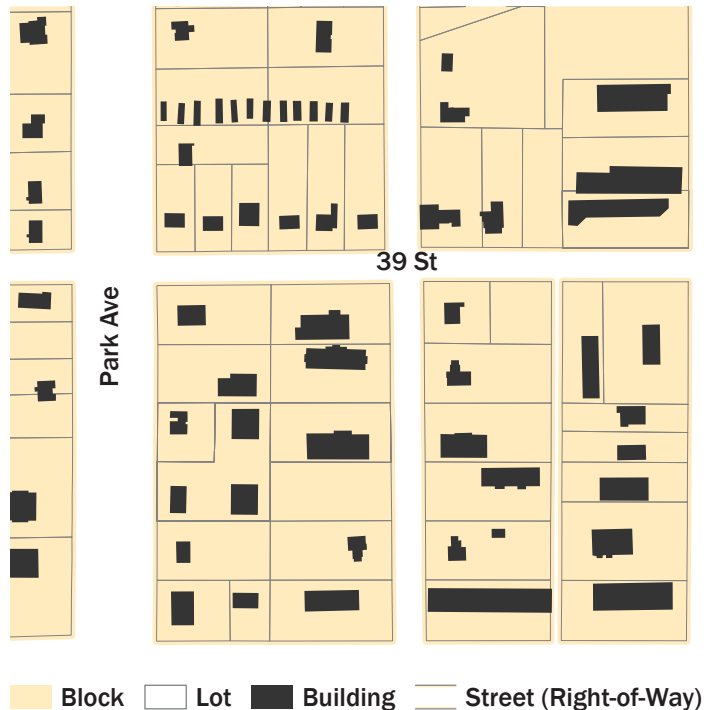
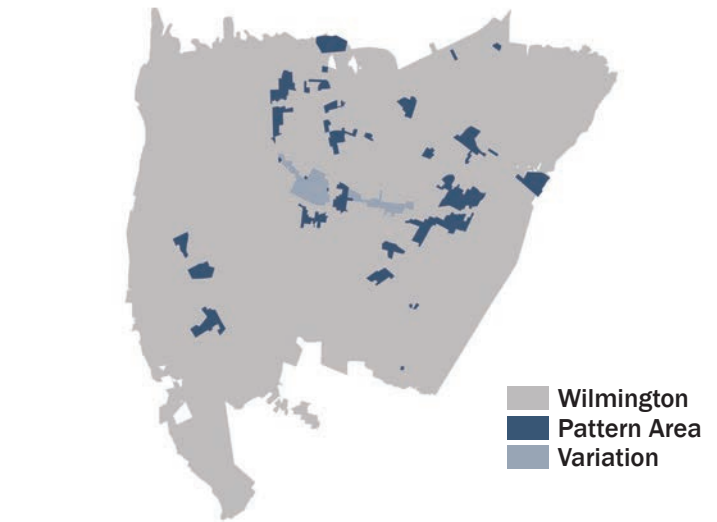
### Block and Street Patterns

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 one another, resulting in unpredictable distances and trip times.

### Lullwater Drive



Source: City of Wilmington



### Wrightsville Avenue at Wilshire Boulevard



Source: Google, 2015

### 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, 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. Houses may now house small office or commercial uses and have a range of structural modifications as a result.

### Void Spaces and 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



Source: City of Wilmington

## Community Pattern Characteristics

Street and Block System	
Street Network	Varied
Block Shape	Varied
Block Size (Feet)	Varied
Intersection Density	Moderate to Low
Use of Alleys	Limited
Lots and Buildings	
Typical Lot Shape	Varied
Typical Lot Size	Varied
Lot Coverage	Varied
Front Setback	Varied
Lot Uniformity	Inconsistent
Other	
Parking	Driveways, Surface
Sidewalk Availability and 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



Source: Google, 2015

## 8.6 Second-ring Suburbs

Urban Core	Urban	Semi-Urban
<b>Suburban</b>	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.

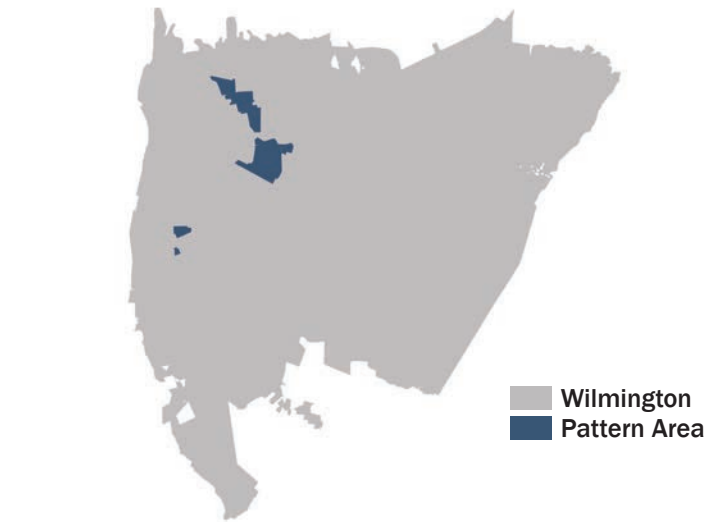
### Block and Street Patterns

This pattern exhibits a high level of connectivity to collector streets. Street edges consist of improved streetscape with aging concrete, short rounded curbing, and driveways.

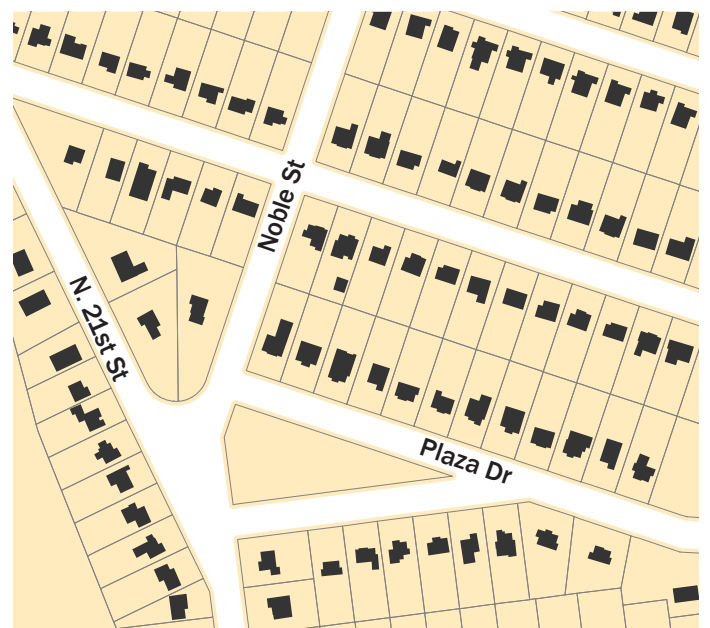
### Princess Place neighborhood home



Source: City of Wilmington

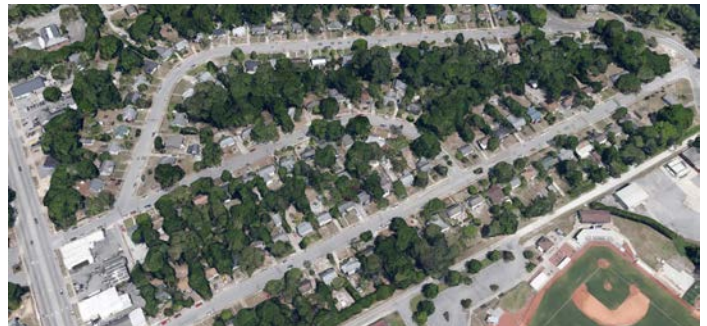


Wilmington  
Pattern Area



Block Lot Building Street (Right-of-Way)

### Woodlawn subdivision



Source: Google, 2015

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 are 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 often have larger, more extravagant structures.

### Void Spaces and 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 patterns continue in some areas of the city, much of which is considered to be in the assorted semi-urban neighborhoods pattern area.

### Second-ring suburb home



Source (All Images): City of Wilmington

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Modified Rectangular
Typical Lot Size	8,000-20,000 (Sq. Ft.)
Lot Coverage	Moderate-Low
Front Setback	Deep (40-60 Feet)
Lot Uniformity	High
Other	
Parking	On-street, Driveway
Sidewalk Availability and Connectivity	Some, Moderate
Dominant Land Uses	Residential
Supported Transportation Modes	



### Second-ring suburb home



### Second-ring suburb home



## 8.7 Postwar Ranch and Late-century Suburbs

Urban Core	Urban	Semi-Urban
<b>Suburban</b>	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 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. This pattern is found in many neighborhoods, including:

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

### Development Eras

Though some of these patterns were constructed prior to 1945 due to Wilmington's thriving wartime industry and postwar suburban boom. The late-century version of this suburban pattern (1960-1990) represents a shift in housing style, but the urban structure remains largely the same.

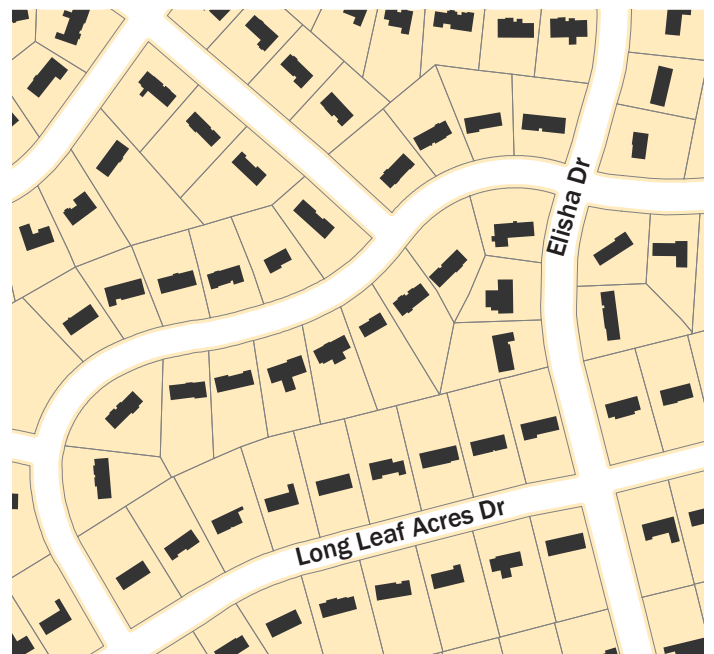
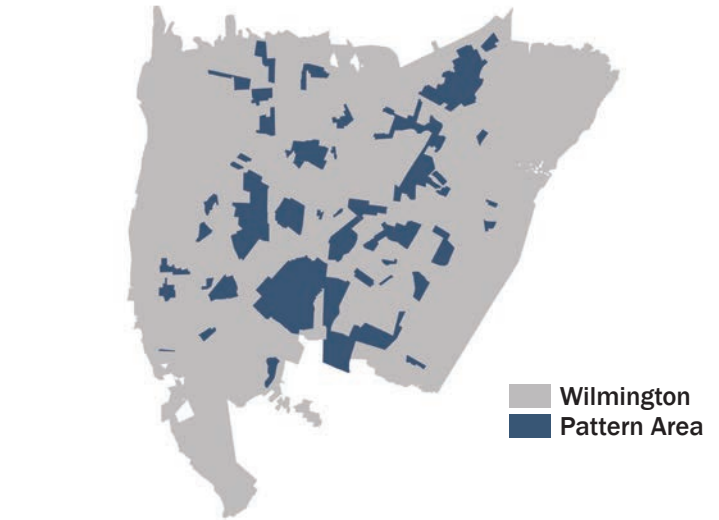
### Block and Street Patterns

Curvilinear streets are dominant generators of block structure and early postwar suburbs exhibit more points of connection than their late-century successors. Curvilinear streets are well connected and form irregularly-shaped, semi-organic blocks. Other occurrences can be long, slightly curved streets that may or may not form a full block.

### Typical ranch-style house

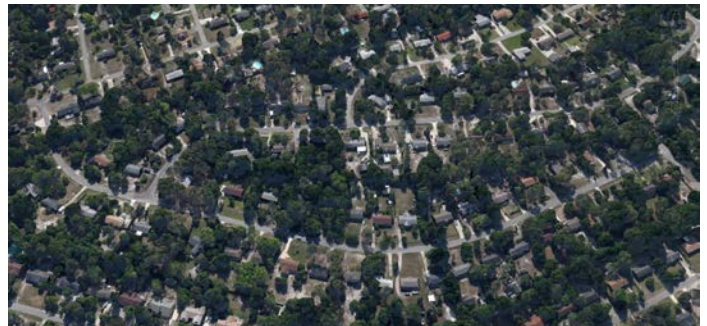


Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### Green Meadows subdivision



Source: Google, 2015

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 also 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. 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 fostered by zoning in the automobile age. The style of these homes are similar, 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 and 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 could be useful in these areas, but could be difficult to implement. Surrounding, higher-density development remains an issue for connectivity and compatibility.

## Community Pattern Characteristics

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



### Pine Valley suburban subdivision



### Pine Valley suburban subdivision



Source (All Images): City of Wilmington

## 8.8 General Contemporary Suburbs

Urban Core	Urban	Semi-Urban
<b>Suburban</b>	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 often have large lot sizes and large 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 not usually in the same neighborhood. Streetscapes are defined by large lawns, articulated facades, concrete driveways, and 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 New Hanover County regulations prior to annexation.

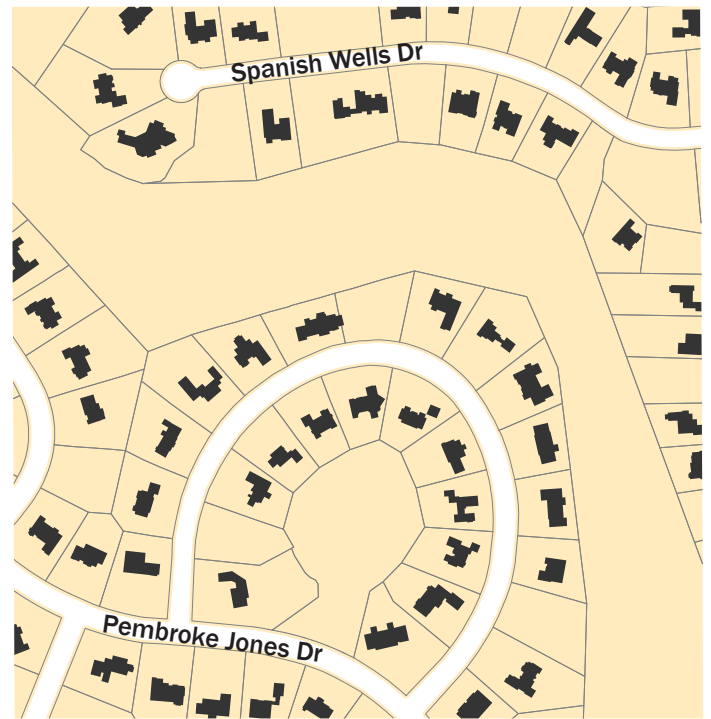
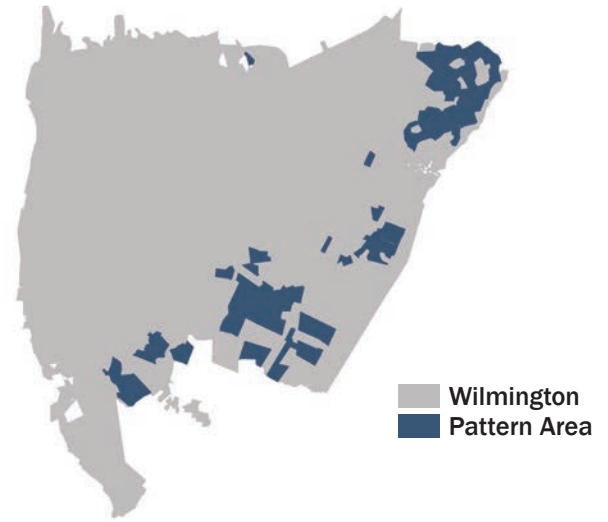
### Block and Street Patterns

Curvilinear streets are dominant generators of block structure. Contemporary suburbs exhibit fewer points of connection to collector streets and more single outlet streets 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

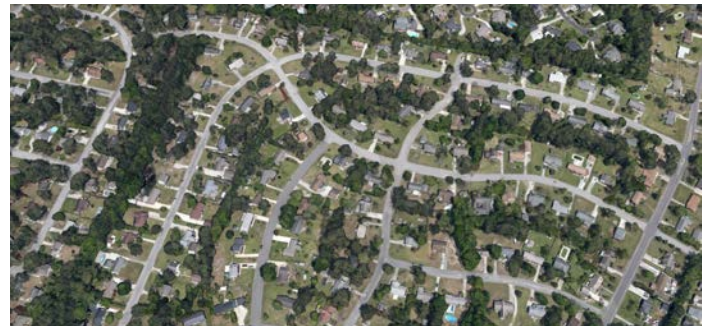


Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### Millbrook subdivision



Source: Google, 2015



This pattern makes high use of the cul-de-sac, a strong defining cultural feature of suburban development, which contributes 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. Lots are typically 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 among typical properties: 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, 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 and 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 (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 around these neighborhoods for infill within mixed-use development that addresses these needs.

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Pie, Irregular
Typical Lot Size	15,000-25,000 (Sq. Ft.)
Lot Coverage	Moderate
Front Setback	Deep (50-60 Feet)
Lot Uniformity	Very High
Other	
Parking	Driveway, Garage
Sidewalk Availability and Connectivity	Very Rare, Very Rare
Dominant Land Uses	Residential
Supported Transportation Modes	



### Contemporary single-family home



### Contemporary single-family home



Source (All Images): City of Wilmington

## 8.9 Compact Clustered Suburbs

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

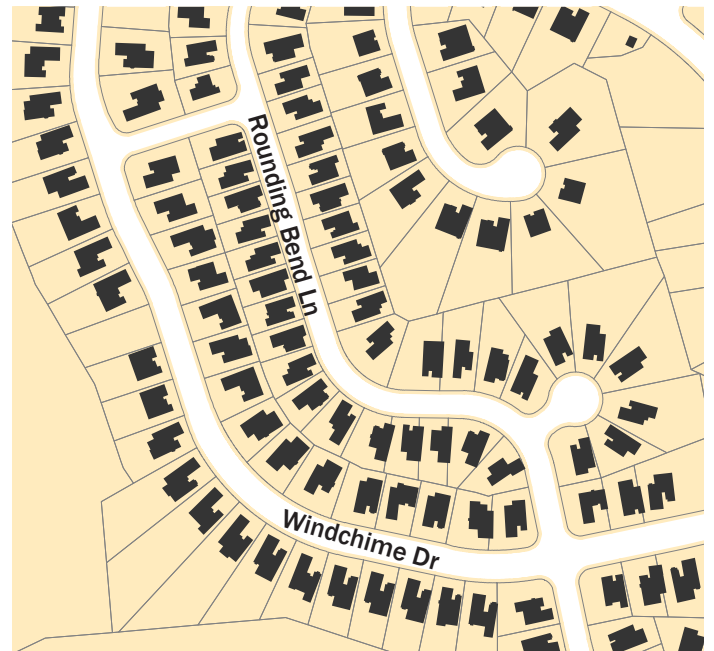
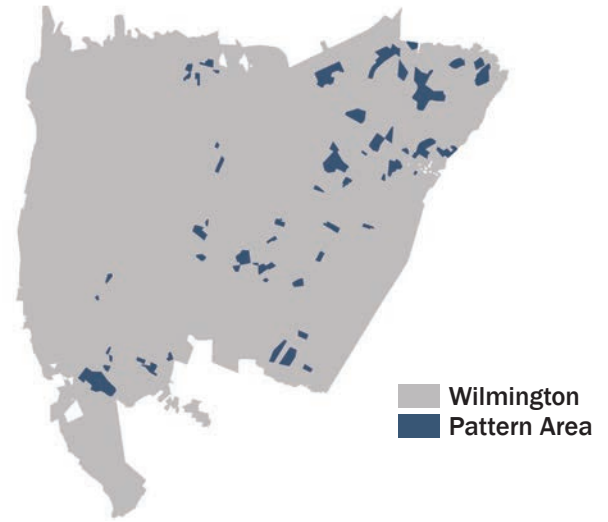
Most commonly found in the eastern parts of the city, this suburban pattern consists of grouping of small homes very close together around streets, often with cul-de-sacs. This pattern is compressed version of the contemporary suburban communities pattern. These “clusters” are made distinct from their 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 New Hanover County regulations prior to annexation into the city. 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.

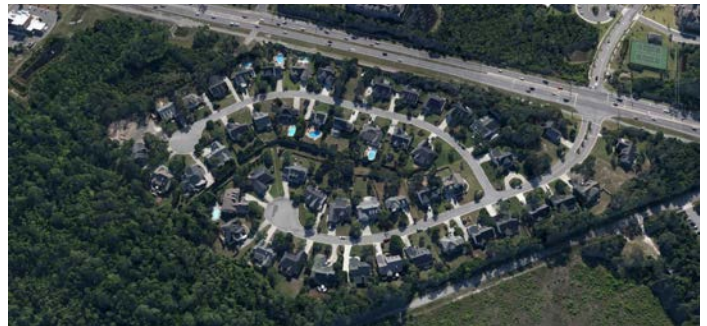


### Village at Summerset



Source: City of Wilmington

### Lucia Point on Military Cutoff Road



Source: Google, 2015

### 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. 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 %. 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 also common. Vinyl siding is a most common exterior material.

### Void Spaces and Redevelopment Areas

This pattern area is already relatively 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, which may provide opportunities 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



Source: City of Wilmington

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Pie, Irregular
Typical Lot Size	6,000-10,000 (Sq. Ft.)
Lot Coverage	Moderate-High
Front Setback	Moderate (5-20 Feet)
Lot Uniformity	Very High
Other	
Parking	On-Street, Driveway, Garage
Sidewalk Availability and 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 neighborhood appearance. Other features may include the use of pocket parks, textured street paving and multiple access points to surrounding areas.

### Parkside at Mayfaire



Source: Google, 2015

## 8.10 Waterfront-oriented Suburbs

Urban Core	Urban	Semi-Urban
<b>Suburban</b>	Semi-Rural	Other

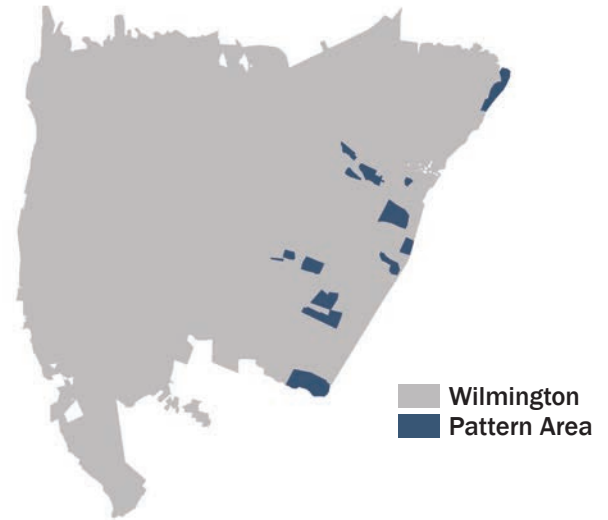
This variation of contemporary suburbs is different in two primary ways: larger lot and home sizes, and an orientation to nearby water bodies as an amenity (and key market driver for more elaborate home features and styles). This pattern is also less consistent in its application, where larger homes are spaced further apart and in a less uniform manner along streets. Streets may 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 water 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 through 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 and connectivity to surrounding areas is very low. Street edges rarely have sidewalks, but curbs and paved driveways are very common.



Block Lot Building Street (Right-of-Way)

### Waterfront suburban home



Source: City of Wilmington

### Intracoastal waterfront



Source: Google, 2015

### 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 or land is bound by adjacent development. Most lots range in size from approximately 40,000-70,000 square feet (or nearly one 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 immediately 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, coastal, Neo-eclectic, and Mediterranean.

### Void Spaces and 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.

### Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Pie, Irregular
Typical Lot Size	40,000-70,000 (Sq. Ft.)
Lot Coverage	Moderate
Front Setback	Deep (30-90 Feet)
Lot Uniformity	Very High
Other	
Parking	Driveway, Garage
Sidewalk Availability and Connectivity	Very Rare, Very Rare
Dominant Land Uses	Residential
Supported Transportation Modes	



Bradley Creek



Softwind Way



Waterfront suburban home



Skystasail Drive



Source (All Images): City of Wilmington

## 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 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.

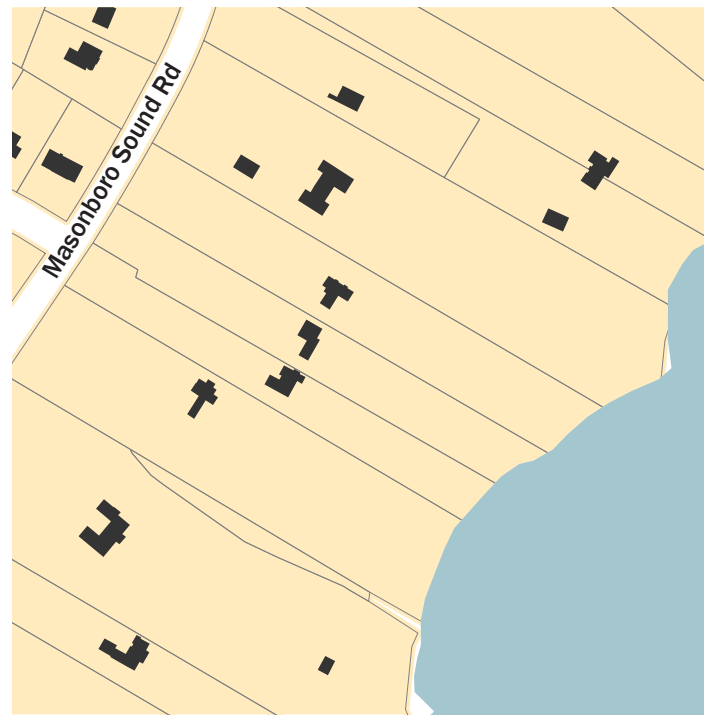
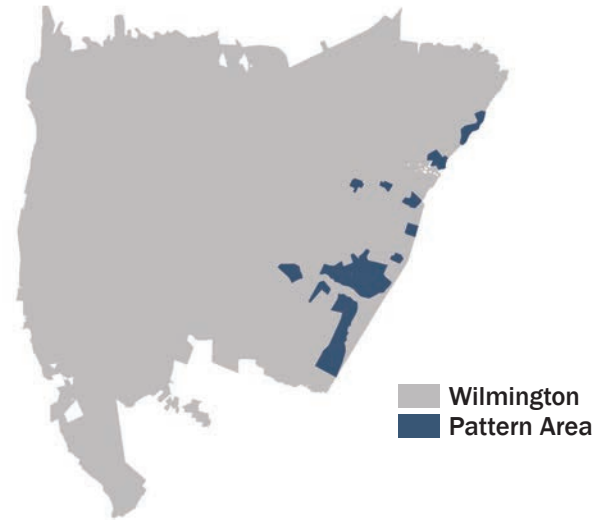
### Block and Street Patterns

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

### Home on Intracoastal Waterway



Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### Intracoastal Waterway at Masonboro Sound Road



Source: Google, 2015

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 that are set far back from the street 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 Neoelectic. Large porches and courtyards opening to the water are common features.

### Void Spaces and Redevelopment Areas

These areas intensify density by developing tightly spaced rows of housing along the private driveways between the main road and the water, often leaving the original home at the street end. 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.

### Home on Masonboro Sound Road



Source: City of Wilmington

## Community Pattern Characteristics

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



### Aerial view of Masonboro Sound



Source: Google, 2015

## 8.12 Semi-rural Areas

Urban Core	Urban	Semi-Urban
Suburban	<b>Semi-Rural</b>	Other

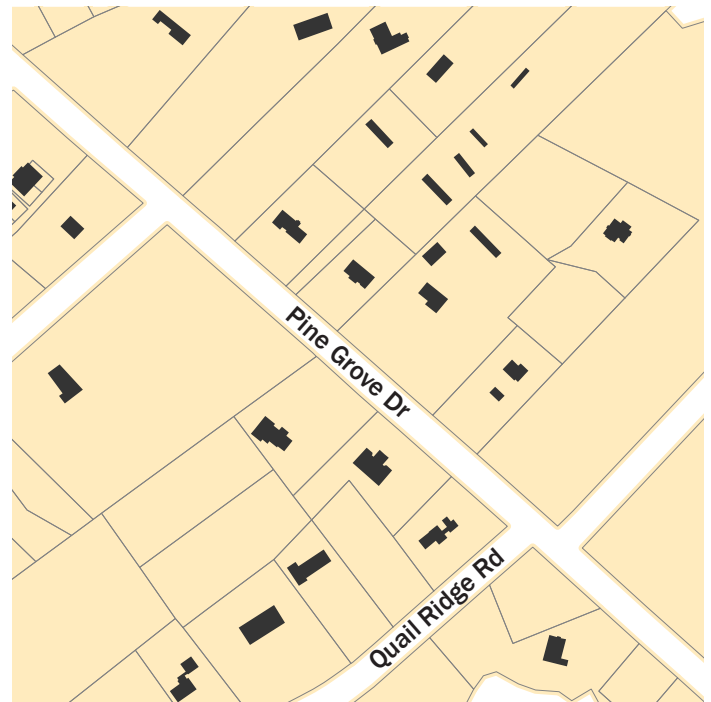
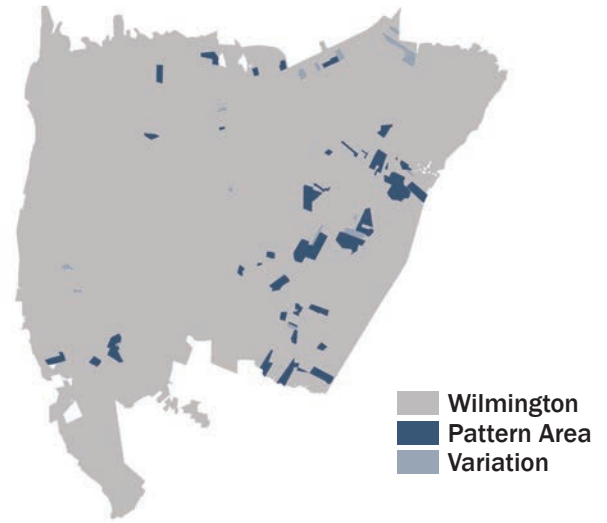
Some parts of the city look and feel more rural than urban or suburban. Large, inconsistently shaped parcels, older country-style houses, pastoral landscapes, and in many cases, unimproved roadways generate this unique pattern. These semi-rural locations are surrounded by various types of suburban pattern areas as 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 were 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 with them. Some streetcar-era platting that was slowly built-out show a more cohesive block structure while having semi-rural characteristics at the site level. These areas are often not well connected 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)

### Home on Masonboro Sound Road



Source: City of Wilmington

### Masonboro Sound Road



Source: Google, 2015



### Lot and Building Configuration

Lot sizes vary widely in shape and size, but are generally larger than their contemporary neighbors. Lots range in size from one-quarter of an acre to four acres. Building setbacks are usually deep (60-150 feet) and lot coverage is 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 and Redevelopment Areas

The abundance of land and lack of street connectivity of these areas, which are surrounded by higher intensity land uses, suggest that additional development could be accommodated. 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.

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Irregular
Typical 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 and Connectivity	None, None
Dominant Land Uses	Residential
Supported Transportation Modes	



## Pattern Variation: Mobile Home Parks

Mobile home parks are a form of 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 produced 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. These homes were meant to be placed on a lot consistent with ranch homes for neighborhood consistency. Some mobile/manufactured home parks consist of diagonal rows along an unimproved, often circular, driveway.

### Aerial photo of Greenville Village



Source: Google, 2015

### Lot on Greenville Loop Road



### Manufactured housing on Greenville Loop Road



Source (All Other Images): City of Wilmington

## 8.13 Semi-urban Multi-family Development

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

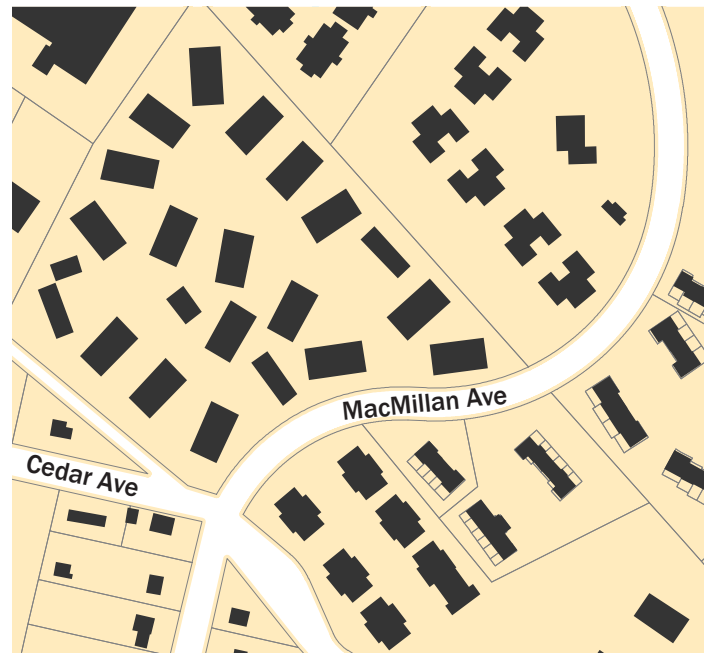
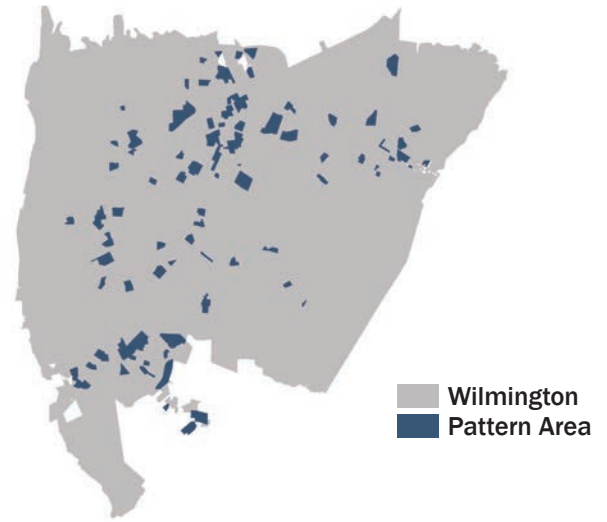
These are typically two- to four-story apartment or condominium communities situated among parking lots with interior circulation networks. There are usually a limited number of connections to the public street network, many of which are restricted by limited access gates. Common amenity areas may exist within the development. A large concentration of this pattern exists in midtown but 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 with 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 having occurred 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 inconsistent, unconnected networks. Sidewalks may be limited to direct building access from parking lots (the most common), a comprehensive internal network around buildings and common areas, or well-connected to the public sidewalk system (least common).

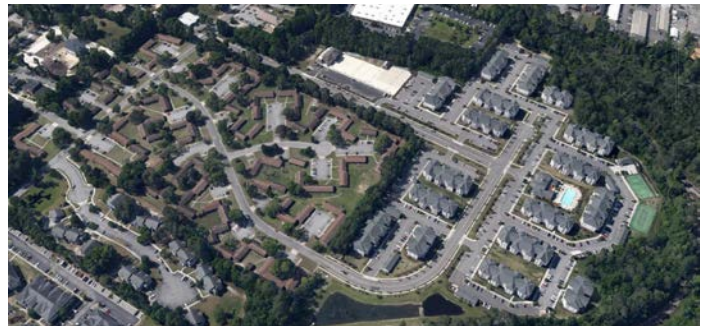


### Mill Creek Apartments



Source: City of Wilmington

### Avalon and Market North apartments



Source: Google, 2015

### Lot and Building Configuration

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

### Void Spaces and 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 results in increased traffic congestion.
- Incorporation of structured parking on smaller sites may allow for more intense development, especially where pedestrian-oriented frontage is encouraged.

### Reserve at Mayfaire



Source (All Images): City of Wilmington

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Varied
Typical Lot Size	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 and 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	<b>Semi-Urban</b>
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 government workers; structures were built to be easily deconstructed and reassembled elsewhere after they were not needed anymore. Lake Village units were pre-fabricated structures that were shipped to Wilmington by rail and assembled on site. These developments are now privately-owned. Built in 1939, Nesbitt Courts was closed in 2006 and renovated into market-rate apartments in 2011. Nesbitt Courts was one of the first public housing communities built in the United States. Houston Moore and Hillcrest, similar types of development, was constructed in 1941 and 1942 and remain public housing today.

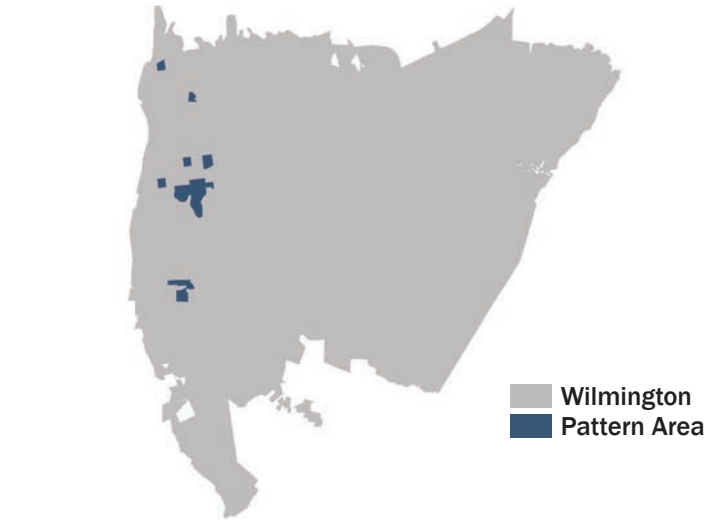
### Block and Street Patterns

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

### Rankin Terrace housing community



Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### Hillcrest public housing community



Source: Google, 2015

the overall street pattern in 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 homogenous within each development, as the same 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 and 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 Place housing complex represents another form of redevelopment for public housing, with its walkable blocks and varied, contemporary 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.

### South Front Apartments



Source: City of Wilmington

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Large Square, Varied
Typical 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 and 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. 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. Updated, contemporary 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



Source: Google, 2015

## 8.15 Automobile-oriented Commercial Strips

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

This pattern area, known commonly as a “strip mall,” 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 sparse 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 without an intentional development pattern 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 development 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 automobile-oriented development pattern.

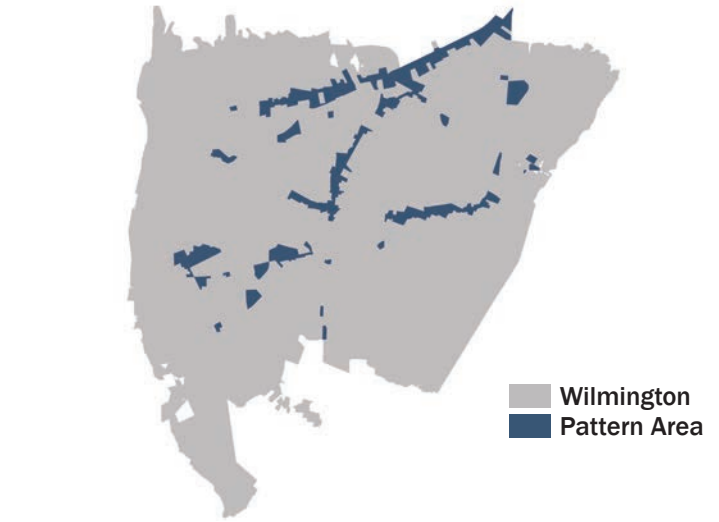
### Block and Street Patterns

The pattern is highly linear, with parcels of various sizes individually arranged along streets with large rights-of-way and heavy traffic volumes. There is either no block structure

### Market Street east of Lullwater Drive looking east

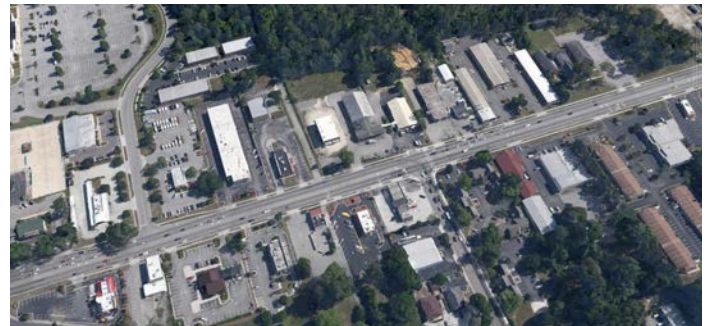


Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### Market Street at Barclay Hills Drive



Source: Google, 2015

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, irregular building pattern.

### Architectural Styles

The initial wave of strip commercial development occurred in the “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 and 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 high volumes of automobile traffic. 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 of the sites.

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Rectangular, Irregular
Typical 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 and Connectivity	Low, Very Low
Dominant Land Uses	Retail, Office, Other
Supported Transportation Modes	



### Sigmon Road



### Market Street at Lennon Drive

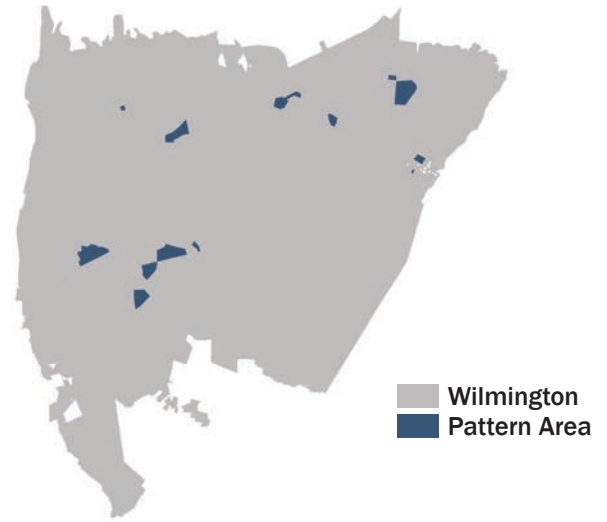


Source (All Images): City of Wilmington

## 8.16 Suburban Office and 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. 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, businesses are less reliant on physical proximity to other offices to conduct business. Contemporary 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 having the same cul-de-sac distribution found in their residential counterpart pattern area, contemporary suburban communities.



### Racine Drive



Source (All Images): City of Wilmington

### Sir Tyler Drive



Source: Google, 2015



### 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 notable features. First generation office parks may be composed of modern-style buildings having plain stucco or concrete walls 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 and 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 financing. The arrangement of buildings to a “main street” configuration instead of a campus-like 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, multimodal access to employment destinations could reduce surface parking demand and peak flow traffic congestion. Safe walking and cycling connections and transit access should 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 and 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 and Buildings	
Typical Lot Shape	Irregular
Typical 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 and Connectivity	Low, Low (Internal Circulation Provided)
Dominant Land Uses	Office, Industrial
Supported Transportation Modes	



### Office Building on Independence Boulevard



### Iron Gate Office Park on Independence Boulevard



Source (All Images): City of Wilmington

## 8.17 Suburban Commercial Centers

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	Other

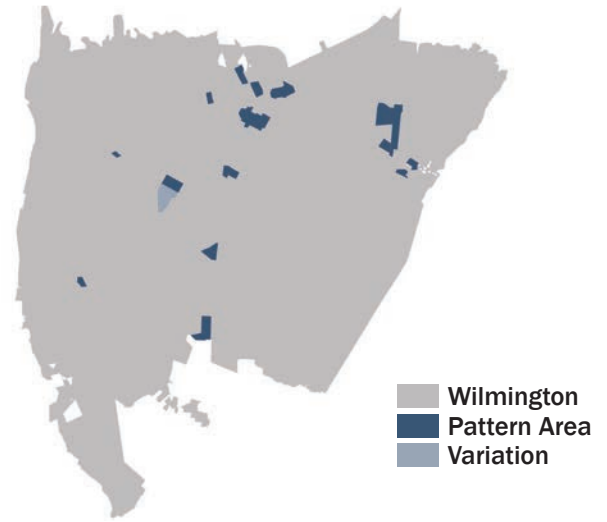
This pattern includes large shopping centers, shopping malls, and other large-scale destinations having major retail anchors (Wal-Mart, Home Depot, Costco, Sears, J.C. Penny, etc), attached retail strips, and various types of out-parcels. These areas are more nodal than linear and draw people, from a regional scale, 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, with 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. For example, Harris Teeter at Hanover Center

### Block and Street Patterns

If any block structure exists, blocks 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. Automobile connections to adjacent development areas are also typically limited.



Whole Foods Market center at Oleader Drive



Source: City of Wilmington

University Commons



Source: Google, 2015

### 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 architectural style of Independence Mall is considered to be vintage modern. More recently constructed centers employ neo-traditional and coastal design styles.

### Void Spaces and Redevelopment Areas

Ample surface parking is the hallmark of these areas. Structured parking would allow for higher intensity land uses and 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 in prime retail locations. 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 on S. College Road



Source: City of Wilmington

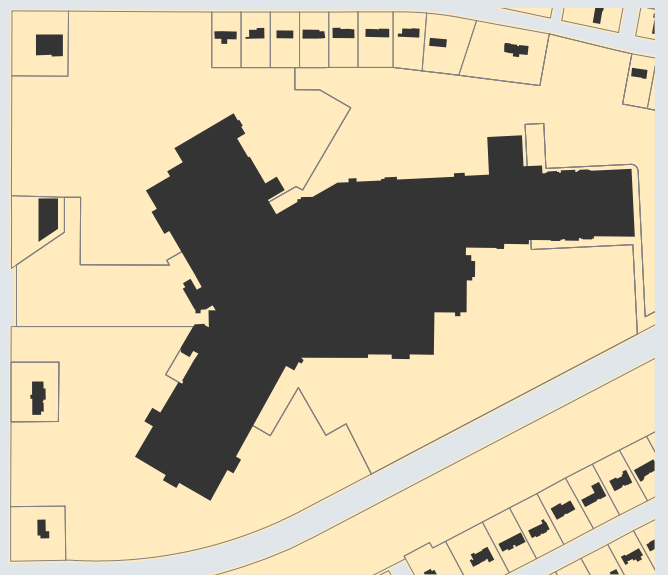
## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Rectangular
Typical 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 and 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 acting 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

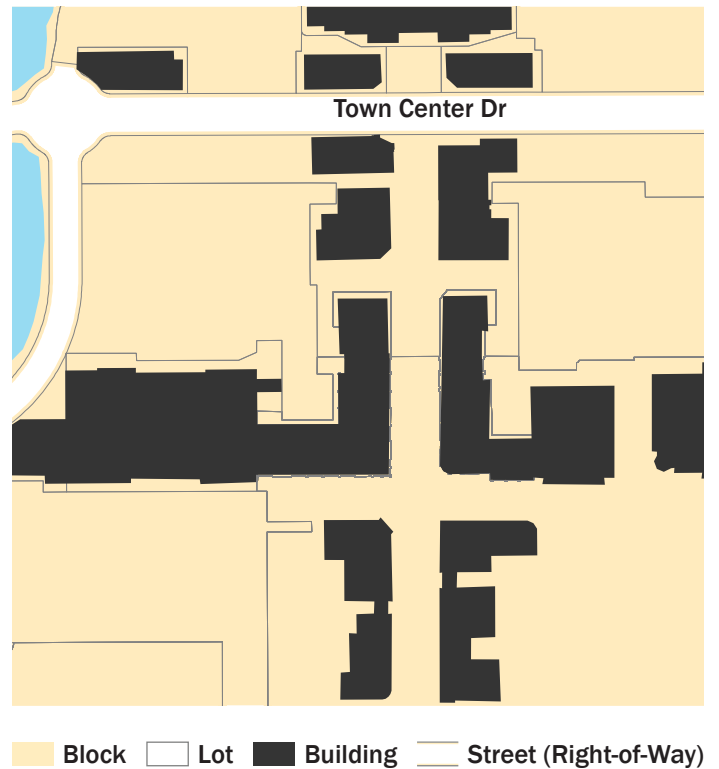
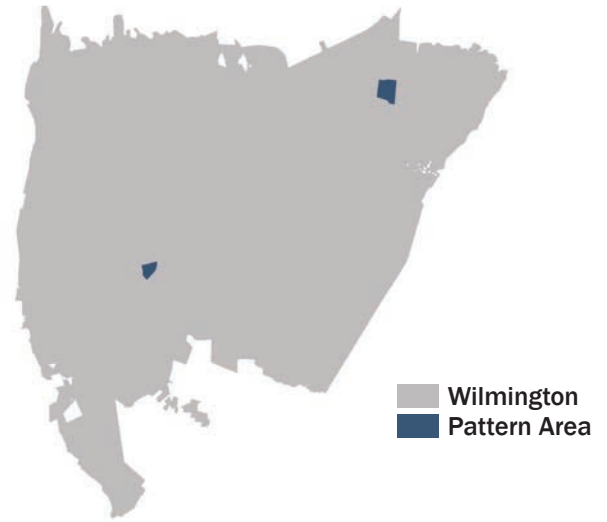
A town center is a walkable and integrated open-air, mixed-use development that is organized around a clearly identifiable public realm. It is usually anchored by major destination retail, dining, and other uses such as office and residential. Often the development includes at least one other use, such as entertainment, hospitality, 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. Barclay Commons is another example of development from this development era.

### 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.



### Mayfaire Town Center



Source: City of Wilmington

### Mayfaire Town Center



Source: Google, 2015

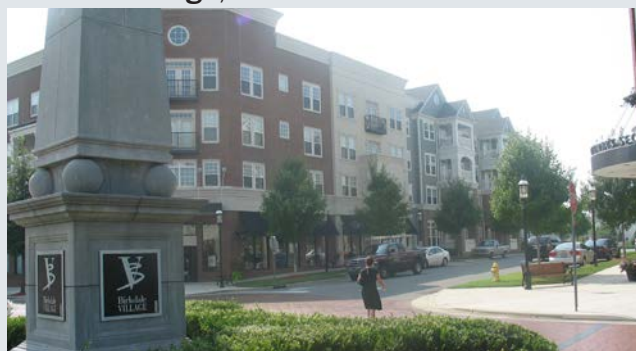
## Town Center Model

The town center development model is being used throughout the United States to capture increasing consumer demand for walkable places in suburban settings. Birkdale Village 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)
- Biltmore Park (Asheville)
- North Hills Mall (Raleigh)
- The Market Common (Myrtle Beach, SC)
- Southern Village (Chapel Hill)

### Birkdale Village, Huntersville



Source: City of Wilmington

While featuring a walkable core, these developments still provide suburban quantities 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.

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Varied
Typical Lot Size	Varied
Lot Coverage	Varied
Front Setback	Abrupt (0-15 Feet)*
Lot Uniformity	n/a
Other	
Parking	On-street, Behind Buildings*
Sidewalk Availability and Connectivity	Robust, Moderate (Some neighbor connections)
Dominant Land Uses	Commercial, Mixed-use
Supported Transportation Modes	



\*Does not include outparcels and parking lots.

### Architectural Styles

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 and 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, unfriendly street edges, and vacant land and buildings. This distinct pattern occurs along the southern edge of the Greater Downtown, from Greenfield Lake to South 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 near 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.

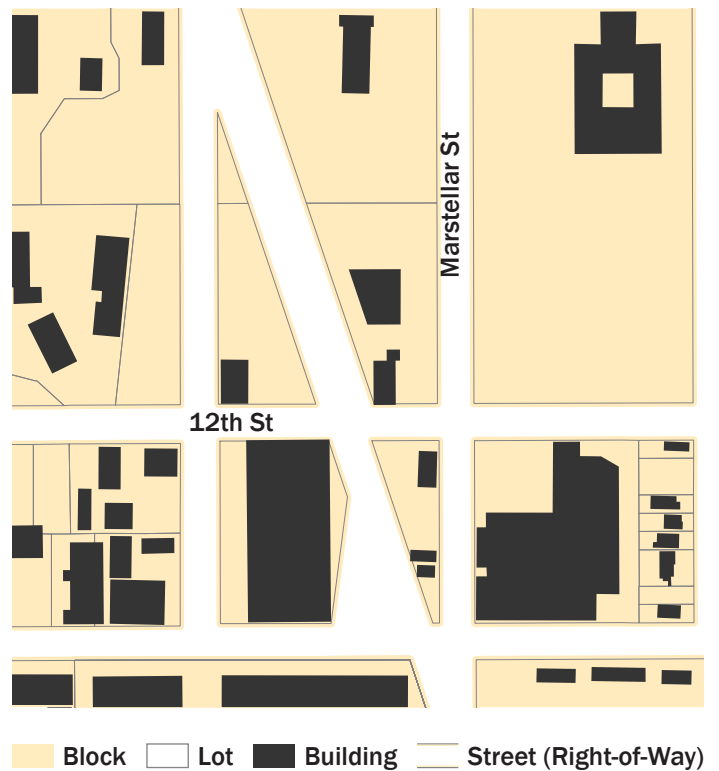
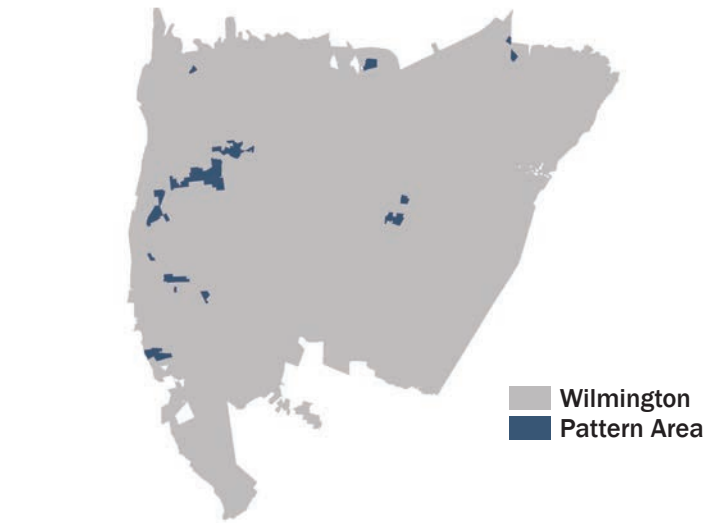
### Block and Street Patterns

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 specific locations. This results in a less connected street network, triangular blocks, and some block-faces that measure up to 850 feet

### Warehouse on S. 5th Avenue



Source: City of Wilmington



### Rail corridor at S. 13th Street



Source: Google, 2015

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 long, blank walls. Railroad infrastructure is a defining street element in many 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 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 and 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 and 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 and Buildings	
Typical Lot Shape	Rectangular
Typical 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 and Connectivity	High, Moderate
Dominant Land Uses	Industrial, Residential, Other
Supported Transportation Modes	



Warehouse at S. 2nd and Willard streets



Century Mills building on Greenfield Street



Source (All Images): City of Wilmington

## 8.20 Hospital and 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 originally 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 Seventeenth 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.

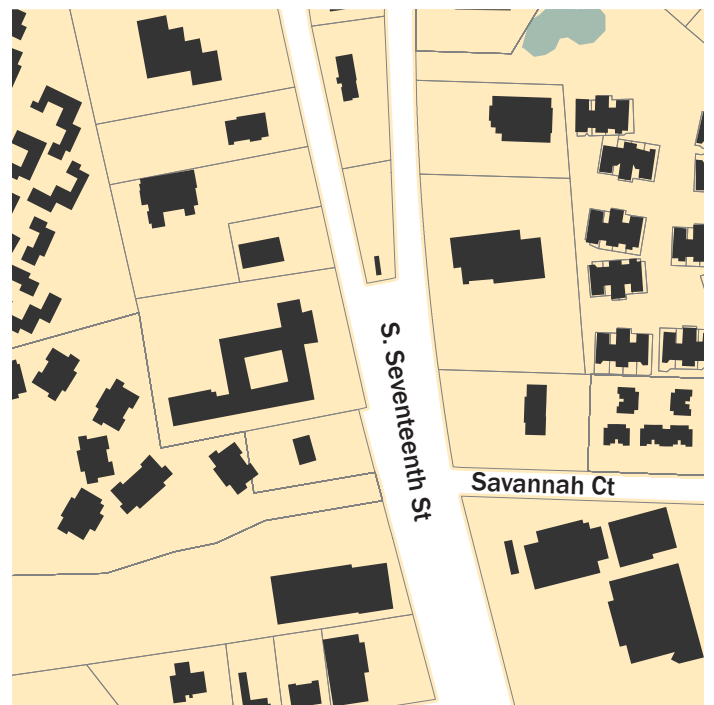
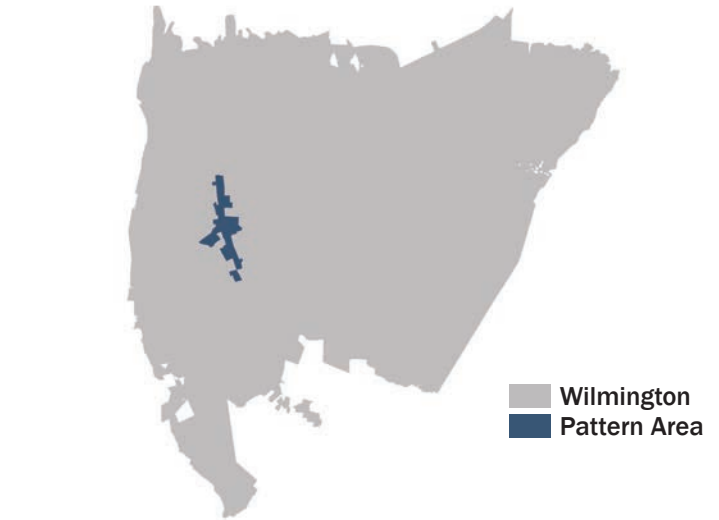
### Block and Street Patterns

Blocks are very large due to infrequent and disconnected street networks. Private or interior circulation connecting surface parking is a common movement system. Block patterns are highly inconsistent. Some rectilinear blocks exist among curvilinear street networks, many of which connect

### Medical office on Delaney Avenue

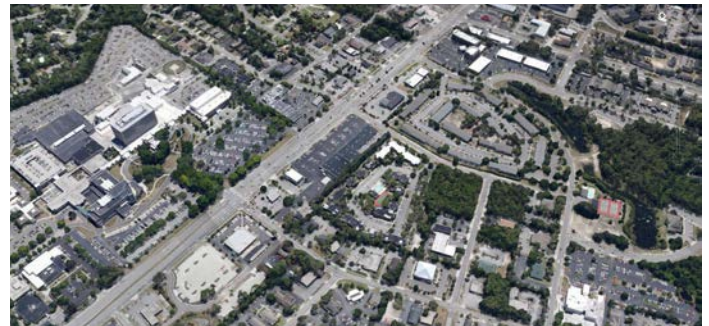


Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### S. 17th Street at NHRMC



Source: Google, 2015



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 and 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. Free-standing surface parking lots, some of which take up entire parcels of land, exist only as parking areas. These could potentially be redeveloped to higher intensity uses. 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. Finally, multimodal access to employment destinations could reduce surface parking demand and peak flow traffic congestion. Safe walking and cycling connections and transit access should be considered. Transit amenities in these areas could help encourage use of public transit to these high-traffic destinations.

## Community Pattern Characteristics

Street and 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 and Buildings	
Typical Lot Shape	Rectangular, Irregular
Typical Lot Size	15,000-120,000+ (Sq. Ft.)
Lot Coverage	Varied
Front Setback	Moderate-Deep
Lot Uniformity	Low
Other	
Parking	Surface Lot, Parking Deck
Sidewalk Availability and Connectivity	Low-Moderate, Low
Dominant Land Uses	Medical Office
Supported Transportation Modes	



### Magnolia Office Park on Oleander Drive



### Office on Hospital Plaza Drive



Source (All Images): City of Wilmington

## 8.21 Large-scale Industrial Areas

Urban Core	Urban	Semi-Urban
Suburban	Semi-Rural	<b>Other</b>

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 include no housing and little retail use.

### 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 development started 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.

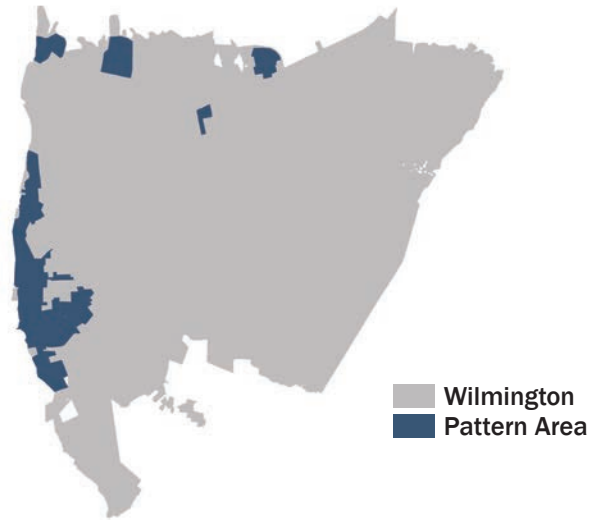
### Block and Street Patterns

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). While streets in these areas do not typically accommodate pedestrians, some smaller sites situated closer to residential and commercial areas may have sidewalks.

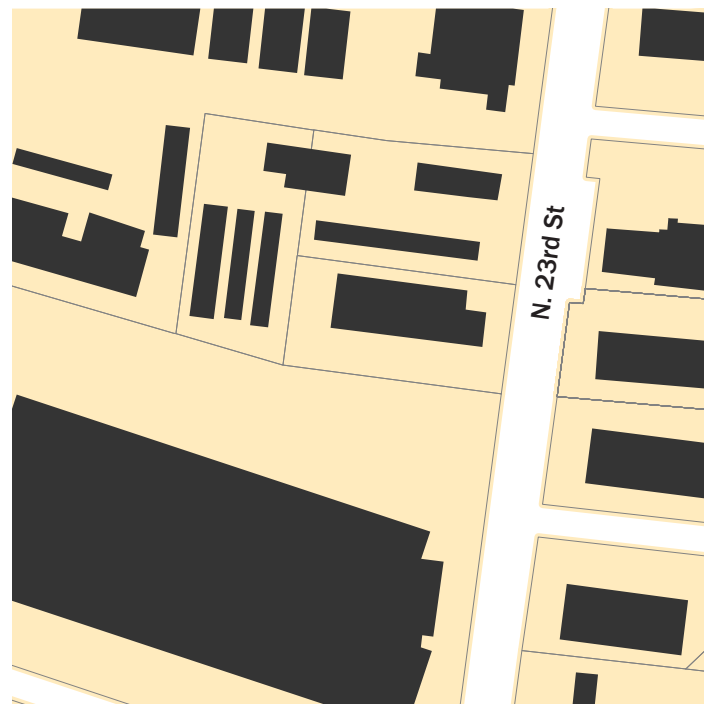
### Industrial site on N. 23rd Street



Source (All Images): City of Wilmington



Wilmington  
Pattern Area



Block Lot Building Street (Right-of-Way)

### Aerial view of N. 23rd Street



Source: Google, 2015

### Lot and Building Configuration

Large sites are situated along arterial roadways that facilitate freight movement and are designed to accommodate wide turning movements and loading. Buildings often 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, 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 of metal. Tank “farms,” gantry cranes, and other industrial structures and facilities are prevalent in many areas.

### Void Spaces and 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, with some located adjacent to the Cape Fear River.
- 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 at Shipyard Boulevard



### Community Pattern Characteristics

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



### Industrial site on River Road



### Industrial warehouse on N. 23rd Street



Source (All Images): City of Wilmington

## 8.22 Academic/Institutional Campus

Urban Core	Urban	<b>Semi-Urban</b>
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 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 buildings. 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. The University of North Carolina at Wilmington 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.

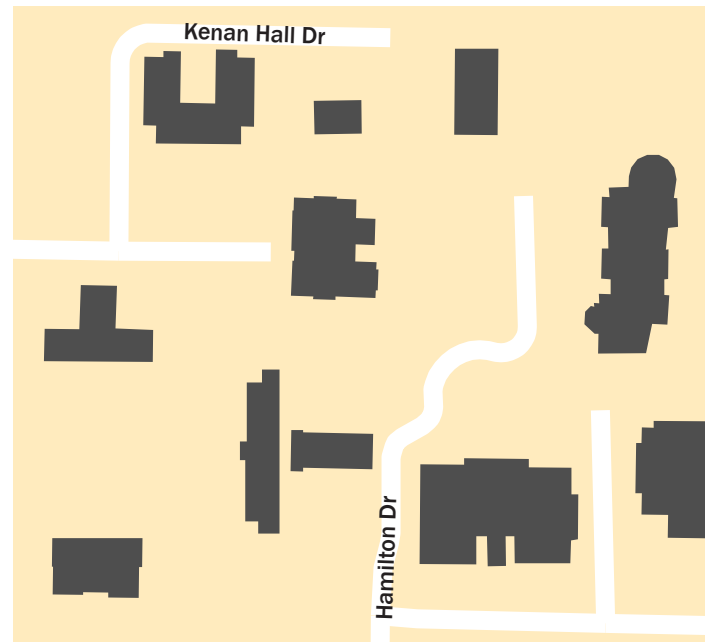
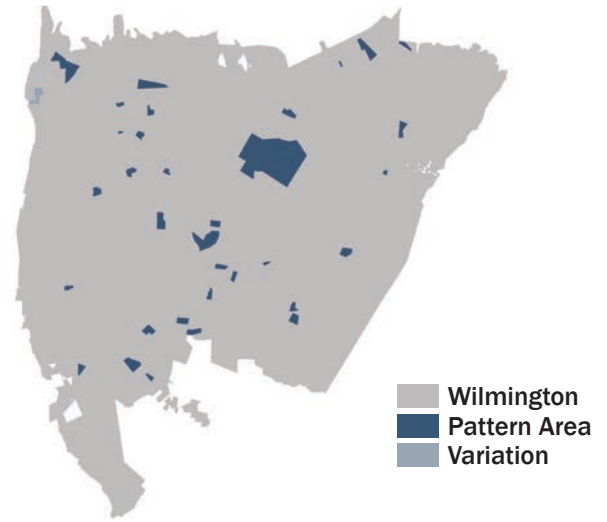
### Block and Street Patterns

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

### Centennial Campus, NC State University, Raleigh



Source: City of Wilmington



Block Lot Building Street (Right-of-Way)

### UNC Wilmington Campus



Source: Google, 2015

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, terminating at a main building entrance. Buildings can also be organized having various orientations not dependent on any exterior street structure. Alternatively, urban campuses like Cape Fear Community College do not necessarily follow the traditional campus development pattern. These campuses are developed according to available land.

### 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. Redbrick construction, columns, and vertical features are also common.

### Void Spaces and Development Opportunities

- These sites often possess a 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 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 lacks a commercial main street often found adjacent to other campuses like UNC Chapel Hill at Franklin Street and UNC Greensboro at Tate Street.

### Cape Fear Community College



Source: City of Wilmington

## Community Pattern Characteristics

Street and Block System	
Street Network	Thoroughfare
Block Shape	n/a
Block Size (Feet)	n/a
Intersection Density	Moderate
Use of Alleys	No
Lots and Buildings	
Typical Lot Shape	Varied
Typical Lot Size	Varied
Lot Coverage	Moderate-Low
Front Setback	Varied
Lot Uniformity	Low
Other	
Parking	Lots Internal to Development
Sidewalk Availability and 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



Source: Google, 2015



# 9

## Downtown Framework

- 9.1 Downtown In Context
- 9.2 Four Parts of Greater Downtown

**Downtown Wilmington  
Urban development patterns must  
increase density for the city to  
accommodate projected growth  
(image opposite).**

Source: City of Wilmington, SABLE Imagery

“We are not running out of land. We are running out of urban places.”

— Andres Duany



# Introduction

This analysis provides an overview of downtown from a geographic and urban design perspective. The primary purpose is to define a workable framework for the **Create Wilmington Comprehensive Plan** and identify issues for further planning. This section may also prove useful as the city goes about the process of replacing its outdated land development code. Variables of analysis are selective and not exhaustive.



1. New and old buildings along North Fourth Street in the Brooklyn Arts District.
  2. Cape Fear River with USS North Carolina. Surface parking lots still exist along the river's edge.
  3. City Market on South Water Street.
  4. Corner of Grace Street and North Front Street.
  5. Downtown street at night (North Front Street).
  6. Iconic building on Castle Street.
  7. Vendors on Front Street, which is sometimes closed to automobile traffic for festivals and other events.
- Source (All Images): City of Wilmington



# 9.1 Downtown in Context



**Not the Only Mixed-use Center**  
Downtown is the origin of Wilmington's settlement and outward development. As the city's oldest and most urban place, it is the historic, commercial, and civic center. Downtown plays a unique role in a larger system of urban centers in the city and the region.

12/15/2014

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## 9.2 Four Parts of Greater Downtown

There are four main geographic areas that make up the Greater Downtown (the area of Wilmington roughly defined by the 1945 Corporate Limits. These boundaries are intended to provide structure for planning efforts and promote a sense of identity through a commonly agreed-upon delineation of geographic areas.



*Additional Information*

Defining Downtown



*Additional Information*

Vision 2020:  
A Waterfront Downtown



*Box Set Cross-Reference*

Policies

### Minor and Major Gateways

Gateways are points of transition into, and out of, a specific area. The physical environment of these locations provide people with a sense of this change in place. They can be accentuated by physical features such as bridges, tree-lined streets, groups of tall buildings, and signage.

Major gateways handle large amounts of traffic and are significantly sized areas where transition from one place to another occurs. Minor gateways are smaller in scale and regional significance, but they provide important local transition points.



Source: City of Wilmington, SABLE Imagery

1

### Downtown Core (Central Business District and Surroundings)

This is the general study area of the Vision 2020: A Waterfront Downtown Plan, created in 2000, as well as the planned extent of the Cape Fear Riverwalk. Much of the area between the Cape Fear Memorial Bridge and the Isabel Holmes Memorial Bridge is zoned, and often commonly referred to, as the Central Business District (CBD). This is the most urban condition in the city in terms of density, scale, and character. The Downtown Core is composed of several distinct sub-districts (also called “urban places” or “urban neighborhoods”).

2

### Northside

The Northside community consists of neighborhoods that have not realized the same modern day economic growth as other areas in the city. This area is architecturally and historically significant for Wilmington because it depicts the character of a mid-nineteenth to early twentieth-century neighborhood that was home to factory, dock, and railroad workers. The railroad track is not being utilized and creates both obstacles and opportunities for the community.

3

### Southside

The area south of Market Street has experienced some revitalization in recent years, most notably on Castle Street and the conversion of a public housing development to market rate apartments (South Front Apartments). Remaining challenges include: the presence of three large public housing complexes, high vacancy and crime rates, an abundance of derelict postindustrial sites, and numerous physical barriers to the Cape Fear River, commercial services, and adjacent neighborhoods.

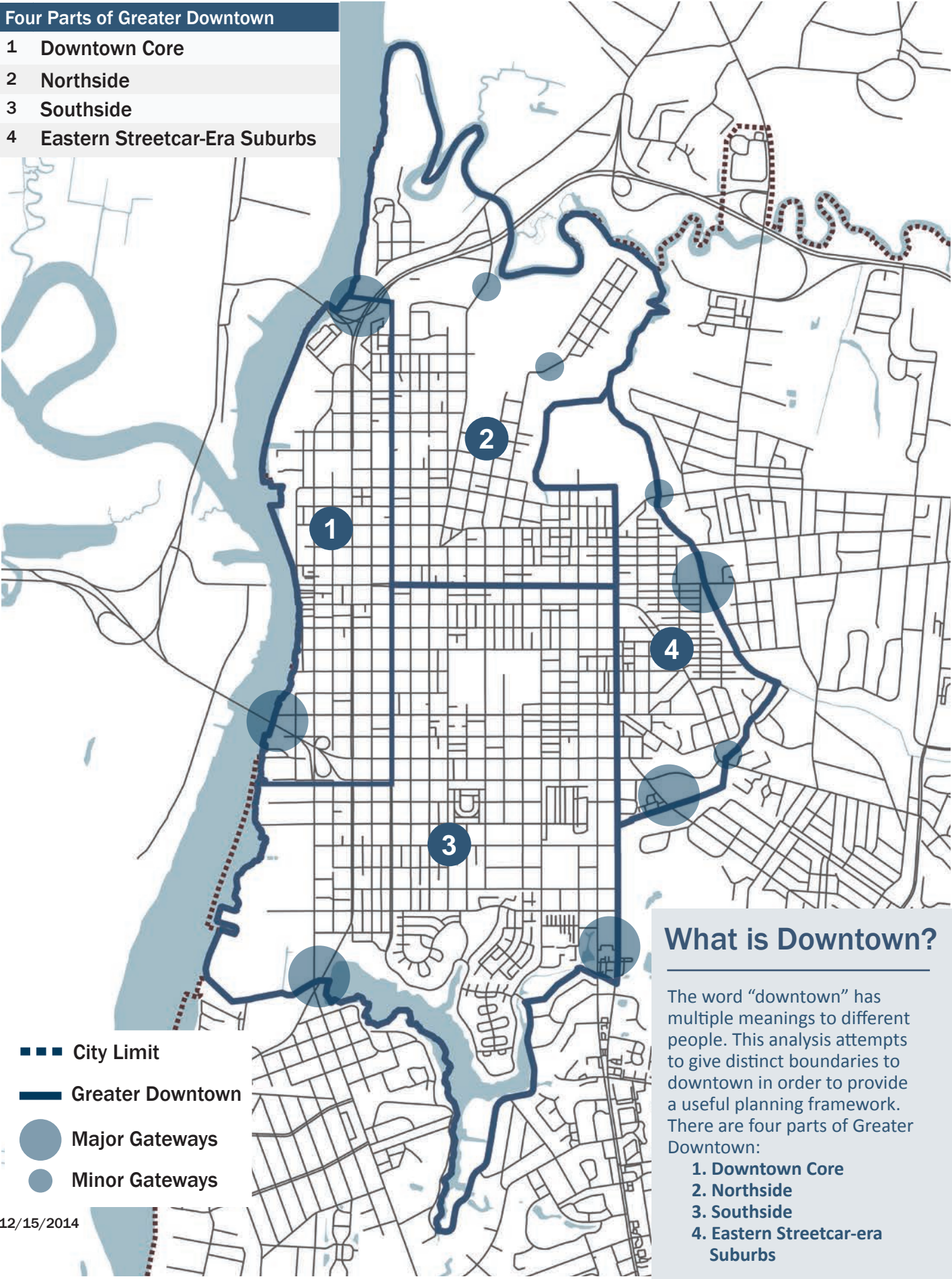
4

### Eastern Streetcar-era Suburbs

In terms of urban form, these historic streetcar-era neighborhoods are slightly modified extensions of the downtown’s street grid. Improvements to South 17th Street will help “thread” this area into the Greater Downtown geography. Though this is a distinct area, the eastern edge represents a more appropriate boundary for the Greater Downtown than does 17th Street.

**Four Parts of Greater Downtown**

- 1 Downtown Core
- 2 Northside
- 3 Southside
- 4 Eastern Streetcar-Era Suburbs



**What is Downtown?**

The word “downtown” has multiple meanings to different people. This analysis attempts to give distinct boundaries to downtown in order to provide a useful planning framework. There are four parts of Greater Downtown:

- 1. Downtown Core
- 2. Northside
- 3. Southside
- 4. Eastern Streetcar-era Suburbs

12/15/2014

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# CREATE WILMINGTON COMPREHENSIVE PLAN

## Contributors

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

### City Council

Mayor Bill Saffo  
Mayor Pro-Tem Margaret Haynes  
Neil Anderson  
Paul Lawler  
Kevin O'Grady  
Laura Padgett (former member)  
Charlie Rivenbark  
Earl Sheridan

### City of Wilmington Staff

Members of the Comprehensive Plan Project Team:

- Brian Chambers, AICP
- Elizabeth Penley, GISP
- Allen Davis, AICP
- Phil Prete, R.E.P.
- Glenn Harbeck, AICP
- Bethany Windle, AICP, Assoc. ASLA
- Christine Hughes, AICP

Members of the Comprehensive Plan Implementation Committee:

- Amy Beatty
- Dave Mayes, P.E.
- Don Bennett, P.E.
- Tony McEwen
- David Cowell, P.E.
- Suraiya Motsinger
- Mitch Cunningham
- Suzanne Rogers
- Lynn Heim
- Ron Satterfield, AICP
- Roger Johnson

