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Greenville

Introduction

Achieving Greenville's Vision

Greenville has grown into the hub of Eastern North Carolina. Regional transportation systems fostered the city's growth in commerce, culture, education, and health care systems. Greenville's location in the state remains an asset that can be leveraged by technology and investment. The sectors that have spurred Greenville's growth in the past are reason to be optimistic about the future of the city. This community plan has been prepared to help achieve that strong future.

Greenville's industrial growth began as a small tobacco farming town at the crossroads of two railroad lines near the banks of the Tar River. The river flows into Eastern North Carolina's Pamlico Sound. Rapid economic growth in Greenville over the past several decades fostered a dramatic rise in quality of life and regional influence. Today, thousands have moved to Greenville for its higher education opportunities, its high wage industrial base, and its advanced medical facilities and services. The city has also grown as a

cultural and entertainment hub in the region, drawing visitors from beyond Pitt County for shopping, art, performances, and sporting events.

Diversity has been a hallmark of Greenville since its earliest days. Along with the rest of the nation, there have been times of triumph and times of injustice. While continuing to respect the past, the future holds the promise of a united community that works to improve the well being of all residents. Greenville's abundant successes have been achieved with the leadership of great visionaries and trailblazers in community development, health, education, and manufacturing, while relying on the long-standing culture of kind-hearted, hard-working, friendly citizens of Greenville.

The community continues to adapt to rapidly changing economic and environmental conditions. By building on assets, Greenville will build a vibrant resilient city that is prepared for the opportunities and challenges that lie on the horizon.



A Community Vision for Greenville

Horizons Plan 2026

Horizons 2026 is both Greenville's long range community-driven process to update the city's comprehensive plan, and the plan document itself. The plan includes goals, policies, and actions that constitute a renewed vision and the blueprint for the city's future. The Horizons process involved four phases which included the initiation of the planning effort, analyses of key community trends and policies, drafting the plan, and adopting the plan. Public engagement was a critical component throughout the planning process.

Greenville is experiencing new challenges. The city population is growing and changing. Local, regional, and global economies are shifting. Environmental challenges are mounting. The city will need to rely on its legacy of thoughtful planning and take advantage of citizen involvement and empowerment. The Horizons 2026 comprehensive plan represents an opportunity to envision and achieve a vibrant and sustainable future.

This comprehensive plan will serve as a tool that expresses the values, aspirations, and vision of the community, along with goals, policies, and strategies to achieve that vision. It sets forth the long-range vision for traditional planning categories including transportation, housing, environment, economic development, and weaves the categories through a complete vision framework that looks at more thematic topics.

Horizons 2010 is the city's previous comprehensive plan and prior plans were adopted in 2004, 1997, and 1992. There are several reasons the Horizons 2010 plan needed to be updated, including:

- Many of the action items have been accomplished;
- The population has grown and changed, resulting in new demands;
- Local, regional, national, and global changes have resulted in a new social, economic, and environmental context; and
- New research and information has expanded the knowledge and thinking about community planning best practices.

Horizons 2026 Process

Phase I: **Initiate** the planning effort

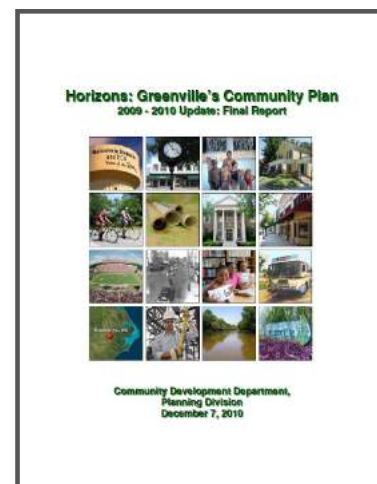
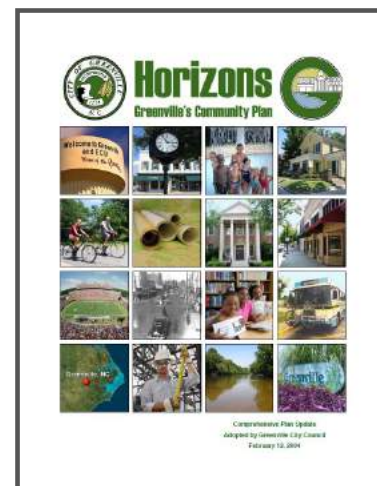
Phase II: **Analyze** community conditions

Phase III: **Draft** the plan framework

Phase IV: **Adopt** the comprehensive plan

Greenville's Previous Horizons Plans

Horizons 2004 is Greenville's previous community plan. The Horizons 2009-2010 Update: Final Report included updates and an audit of the plan's policies and actions.



Horizons 2026 provides an important opportunity to study current trends and conditions, reevaluate the community’s priorities, and create a renewed vision for Greenville.

In this Chapter

A Community Vision for Greenville: This section describes the Horizons 2026 process and what the Horizons plan represents for our community. It describes public engagement and the input provided by members of the community. A vision framework for the plan is presented and its connection to this plan’s sustainability themes is established. Finally, key actions are provided to outline the community’s strategies for achieving our long-term vision.

Planning Context: This section discusses regional and interjurisdictional coordination, the relationship between the Horizons 2026 plan and other adopted policy and area plans, the relationship of this plan to Greenville’s zoning ordinance and regulations, and how this plan should be used and to inform and guide policy decisions.

Public Engagement

Horizons 2026 is a community-driven process. Public engagement has been and will continue to be crucial for the success of the effort. Gathering community input from this diverse community and providing adequate opportunities for public involvement were instrumental in the planning process. The process offered a variety of platforms for learning and providing comments and ideas, including the online website and surveys, Comprehensive Plan Committee meetings, stakeholder meetings, public workshops held in the Uptown District and the Convention Center, and a public open house of the plan’s progress prior to final revision and adoption.

The 24-member **Comprehensive Plan Committee** (CPC) was composed of city board and commission representatives, community partners, and appointments by the Mayor and City Council members. The committee held regular meetings that were open to the public to guide the planning process.

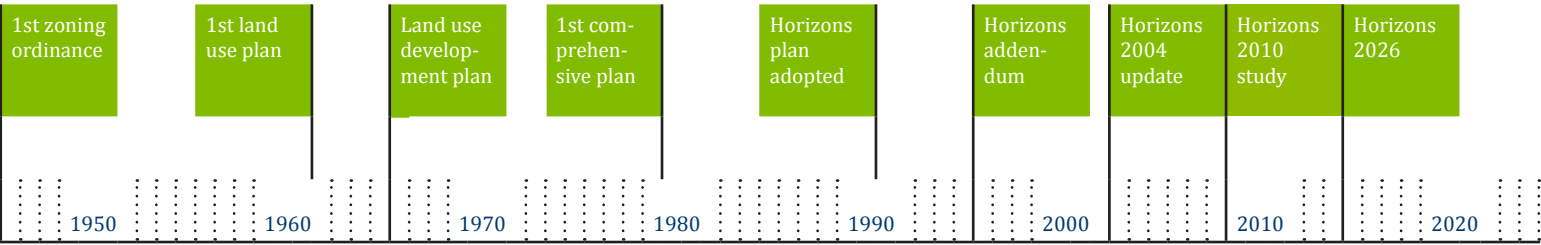
Stakeholder interviews were conducted in August, 2015 to gather information about trends and conditions impacting Greenville. This input set the stage for the planning process and helped determine the city’s key opportunities and challenges.

The **Workshop for Our Future** was held on September 14, 2015, at the Greenville Convention Center and provided an important public engagement opportunity for members of the Greenville community. Attendees learned about current trends and voiced their concerns, aspirations, and ideas for Horizons 2026.

The **How Will We Grow? Land Use Workshops** were held on November 4th and 5th, 2015, to present key trends, conditions, and community concerns, and to gather feedback on the community’s vision for future growth and change. Attendees were polled on growth principles, provided comments about desired development changes, and gathered around maps of the city to mark key opportunities.

Stakeholder meetings were held on November 5th, 2015, for the Horizons 2026 Area Plans. Property owners and other stakeholders provided key information, along with their ideas for how each area should grow and evolve. In the evening, an open house public workshop was held. At this workshop attendees learned about findings from the previous night and provided additional feedback. Input provided by the public was instrumental in the development of the vision framework, growth principles, future growth framework map, and policies within each of the area plans.

Greenville’s Planning History



On May 3, 2016, a **Southwest Bypass Property Owners Meeting** was held at the South Central High School Auditorium in Winterville between 6:00PM and 8:00 PM. It provided an important public engagement opportunity for residents of Pitt County living in the Southwest Bypass Small Area planning boundary that includes the northern half of the bypass corridor. Attendees learned about the incoming Southwest Bypass, the City of Greenville's interest in planning for the area, and individual property owners' interests regarding the future of their property. They voiced their concerns, aspirations, and ideas for the Southwest Bypass Small Area Plan.

The **Our City, Our Plan Public Open House** held on June 20, 2016 presented the progress of the full draft to the public for feedback. There was opportunity for open comment and an exercise where participants selected priority action items for implementation. High ranking action items were taken into account in the implementation portion of this plan, and many comments led to adjustments to the rest of the plan text.

Workshop for Our Future

Attendees at the Workshop for Our Future came from all over the city to learn about important trends and provide input on a variety of issues impacting Greenville. Detailed results of the workshop feedback are provided in the appendix of this plan. The Workshop Report is located in the appendix of this plan.



How Will We Grow? Land Use Workshop

During the *How Will We Grow?* Workshop, attendees gathered around maps of the city's draft future growth framework and offered ideas for how and where the city should grow.

Vision Framework

An important component for every community plan is a vision statement. A vision statement should identify the broadly held public values and aspirations of citizens. Horizons 2026 includes a Vision Framework, which was developed from the public input provided in Phases 1 and 2 of this process. This Vision Framework is similar to the vision statement in the 2010 Horizons Plan in that it describes the long-term aspirations of the community. It is different because it does this in several separate statements for each of the plan's eight chapters. Following is a list of the eight policy chapters in this plan, along with the vision statement for each.

1 Building Great Places

Greenville will be home to active, vibrant, and distinct places that are linked through a high quality, walkable, and beautiful built environment. These places, including mixed use centers, neighborhoods, corridors, and employment districts, will build on Greenville's existing land patterns. They will provide new walkable and connected developments that enrich the distinct visual appearance of the city and foster a growing sense of pride, while conserving key natural areas.

2 Enhancing Mobility

Greenville's transportation corridors will provide accessibility to destinations throughout the city by complementing the built environment and offering well-connected, safe, and attractive travel networks for bicyclists, pedestrians, drivers, and users of public transportation. Compact development and street designs that serve all types of users will reduce automobile collisions and improve travel safety throughout Greenville. The city will be regionally accessible with an airport established as the primary hub for air travel in eastern North Carolina, exceptional interstate roadways, a navigable and inspiring built environment for visitors, and future planning for regional rail service.

3 Maintaining Fiscal Responsibility

Greenville will embrace a culture of transparency and fiscal responsibility in all aspects of city management. The city will foster business investments and collaboration through open governance and a business-friendly culture. Management of public facilities and services will focus on providing a high quality of life for residents, while also achieving fiscal responsibility. Physical planning efforts will grow the city's tax base sustainably and ensure the long-term efficient delivery of Greenville's high quality services.

4 Growing the Economic Hub

Greenville, a city that supports business development, entrepreneurship, and labor force training, will have high quality employment opportunities for an increasingly diverse population. The regulatory environment, business incentives, and partnerships will help to grow and sustain local companies, create an adaptive and well-trained workforce, and foster a thriving public education system. New jobs will emerge in a variety of locations throughout the city, including existing industrial parks, new well-planned employment centers, and urban mixed-use hubs. The city's high quality of life will help retain an well-trained and creative workforce.

5 Creating Complete Neighborhoods

Greenville will offer a variety of quality living options for its growing and increasingly diverse population, while supporting established neighborhoods and their existing residents. Complete neighborhoods will offer a variety of housing types, an integrated network of walkable and bikeable streets, access to transit, public schools, civic space in prominent locations, and proximity to grocery stores and neighborhood-serving commercial services needed by residents. With an assortment of high quality housing options that support a variety of income levels, neighborhoods will support multiple generations of families and ensure that someone can grow up, raise a family, and retire in the same neighborhood.

6 Fostering a Resilient City

Greenville will grow safely by protecting the city's natural water systems and managing development in hazardous areas. The city will be prepared for the impacts of powerful storms, and shifts in climate. It will grow sustainably by using design approaches that serve to minimize impacts on the natural environment. Conservation efforts will maintain the health of the Tar-Pamlico River and Neuse River watersheds, manage stormwater flows, and help to guarantee supplies of clean water for future generations. Greenville will have room for proven renewable energy initiatives, clean transportation opportunities, and green building technologies. Greenville will support nature not just in parks, yards, and open spaces, but along streets, in open lots, and atop buildings.

7 Growing a Healthy City

As the cultural and healthcare hub of eastern North Carolina, Greenville will offer residents and visitors, regardless of their income, the opportunity to maintain a healthy lifestyle. Residents will have access to community gardens, farmer's markets, and high quality grocery stores. Sidewalks, greenways, and bike lanes will promote active travel by connecting housing to jobs, recreation, healthy foods, and shopping. Parks will be destinations for active recreation. These benefits will be accessible by allowing aging residents, those with a physical disability, and visitors to the Health Hub of Eastern North Carolina to participate.

8 Growing Together

Greenville will be a place where people and organizations work together to achieve a vitality and character that cannot be accomplished without purposeful coordination and collaboration. This is a community rich with resources and leadership. Multiple governmental jurisdictions, institutions, organizations, and businesses have worked over the years to contribute to the success and unique character of the City of Greenville. Relationships and partnerships will continue to evolve in a way that moves the community forward, Growing Together.

Sustainability Themes

Planning for sustainability is the defining challenge of the twenty-first century. Sustainability is an important theme of this plan and is central to addressing the long term challenges and opportunities of the community. Sustainability is the ability to sustain and improve the current quality of life and the ecosystems on which it depends for this and future generations. This plan identifies eight themes concerning the sustainability and resilience of Greenville. Each theme is identified below:



Interwoven Equity

Recent decades have shown improvements in economic, health, and quality of life conditions for less privileged people throughout the Southeast. Disparities continue to exist, however, for minorities and children growing up in low income households. The theme of interwoven equity aims to create a city where fairness and equity are provided for in the housing services, health, safety, and livelihood needs of all citizens and groups in Greenville.



Resilient Economy

Regional and global economies have shifted over the past decades in unpredictable ways. More than ever, communities are expected to prepare for the unexpected by building a high wage job base and adaptable job training programs. This plan works to ensure that the community is prepared to deal with both positive and negative changes in its economic health, and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.



Strong Fiscal Responsibility

Shrinking budgets increase the importance of long term fiscal responsibility. Greenville strives to ensure that policies and projects consider the long term fiscal impacts in addition to short term benefits.



Livable Built Environment

This plan strives to achieve a livable built environment where land use, transportation, housing, energy, and infrastructure work together to provide sustainable, green places for living, working, and recreation, with a high quality of life.



Affordable Cost of Living

One of Greenville's many assets is its relatively affordable cost of living with regard to daily household expenses. Maintaining and improving a long-term affordable cost of living continues to be an important sustainability theme within this plan.



Harmony with Nature

This plan works to ensure that the natural environment and ecosystems on which we depend are protected, that the Greenville community protects itself from increasingly volatile weather events, and that the community seeks ways to reduce its reliance on finite natural resources.



Healthy Community

Our living environment impacts our health and well-being in many ways. Some residents may lack opportunities for exercising, accessing healthy foods, or obtaining care. As the city grows, we strive to improve the health of the entire community.



Responsible Regionalism

Regional coordination is key to responsible growth and efficient long-term planning. This plan works to ensure that local policies and projects account for, connect with, and support the plans of adjacent jurisdictions and the surrounding region to the greatest extent possible.

How the Vision Framework Addresses Our Sustainability Themes

The following matrix describes the connection between the vision framework and each of the sustainability themes. Although the sustainability themes are addressed in every chapter, the matrix denotes the more direct connections between them. The goals within each chapter identify relevant sustainability themes.

Horizons 2026 Vision Framework:		Sustainability Themes:							
									
1	Building Great Places	+	+	+	+	+	+	+	
2	Enhancing Mobility	+	+	+	+	+	+	+	+
3	Maintaining Fiscal Responsibility	+	+	+		+			+
4	Growing the Economic Hub	+	+	+	+	+	+	+	+
5	Creating Complete Neighborhoods	+	+	+	+	+	+	+	+
6	Fostering a Resilient City	+	+	+	+	+	+	+	+
7	Growing a Healthy City	+	+		+	+	+	+	
8	Growing Together		+	+					+

Horizons 2026 Big Ideas

Greenville stands at an important time in its history. The city has the opportunity to harness the potential of its status as the regional economic, educational, health, and cultural hub of Eastern North Carolina to improve the overall quality of life in the city. To do this, it will require focused efforts to enhance the community to make it more attractive to investors and to future residents. This community plan sets out five big ideas for the city to help it realize the vision of becoming a premier North Carolina community that offers a high quality of life to its residents and workforce.

1. Improve Built Environment Quality and Choices

- Establish a new approach for managing land use that also addresses community character
- Improve design and increase options for new types of neighborhoods and commercial centers
- Encourage and enhance future development in Uptown

2. Support a More Walkable and Livable Community that Promotes Health and Safety

- Provide new development approaches that support walkable, mixed use developments
- Enhance the transportation system to improve safety and mobility for all modes of travel

- Continue efforts to provide recreational amenities that support healthy behaviors

3. Capitalize on Economic Strengths through Focused Public Investments and Efforts

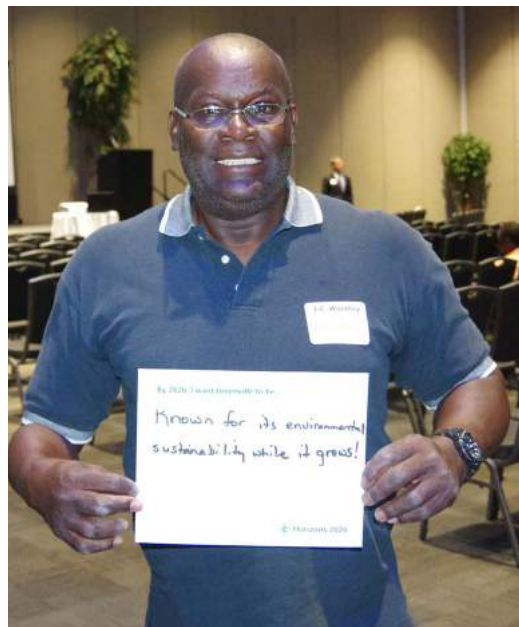
- Leverage economic development potential within the Medical District, within and around the ECU millennial campus, and in the future Southwest Bypass corridor
- Continue Uptown Greenville reinvestment, including connections to adjacent neighborhoods and activating areas near the Tar River

4. Undertake Fiscally Efficient Ways of Managing and Serving Growth

- Encourage infill and redevelopment to maximize the use of existing public infrastructure
- Use a Tiered Growth approach to help guide annexation and capital investment decisions

5. Collaborate with Community Partners to Achieve a Higher Quality of Life in Greenville

- Support cross-jurisdictional planning for areas of common interest, such as the Southwest Bypass corridor
- Improve information and identify opportunities to coordinate and collaborate with community partners and neighboring jurisdictions to realize regional potential



By 2026, I Want Greenville To Be...

Attendees who turned out for the Workshop for Our Future contributed their ideas for what Greenville should be.

Horizons 2026 Action Plan

To achieve the city's big ideas, it will need a clear plan of action for implementation over the next 10 years. This Horizons 2026 Community Plan includes an action plan for implementation that addresses the priority initiatives to undertake over the next 10 years, and secondary initiatives that can be accommodated during that timeframe as resources and staff capacity are available. This action plan should be used when making annual updates to the city's Strategic Plan and when updating the city's Capital Improvement Program (CIP). The priority actions should be reinforced by actions in the Strategic Plan and investments in the CIP.

Priority Actions:

1. 1.1. Adopt Mixed Use Zoning Districts
2. 1.4. Adopt Mandatory Design Standards in Uptown
3. 1.9. Develop Corridor Development Standards
4. 5.7. Develop Strategy to Address Overdevelopment of Peripheral Apartment Complexes
5. 4.2. Create an Incentive Program for Development and Redevelopment
6. 1.5. Implement the Dickinson Avenue Corridor Study
7. 8.1. Establish Arrangements for Information-Sharing
8. 1.8. Develop an Historic Preservation Plan
9. 7.3 Update Development Regulations to Require Open Space / Park Space as a Part of New Neighborhoods
10. 7.4. Support Personal and Community Gardens
11. 3.1. Develop a Fiscal Impact Analysis Model for Evaluating Proposed Annexations and Capital Projects
12. 2.4. Convene Transit Providers to Foster Coordination
13. 6.2. Develop a Green Energy Plan
14. 7.8. Develop an Iconic Pedestrian Bridge that Connects North of the River to Uptown
15. 1.7. Redevelop Properties Along First Street.
16. 6.4 Implement Greenville's Watershed Master Plans
17. 5.8 Develop Strategies to Stabilize and Revitalize the University Neighborhood

Planning Context

Regional and Interjurisdictional Planning Coordination

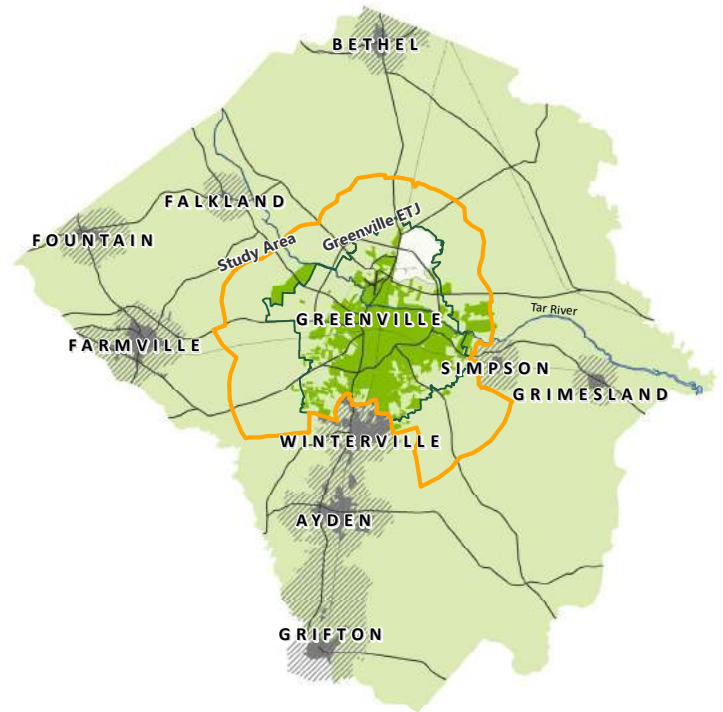
One of the initial steps in the Horizons 2026 process was to determine the study area boundary. The study area that has been determined for this plan includes an adequate inventory of developable land and encompasses areas likely to experience development pressures over the next 20 years. It also includes lands that can be served by the Greenville Utilities Commission (GUC). The study area includes the City of Greenville's corporate limits, unincorporated lands within the city's extraterritorial jurisdiction (ETJ), and portions of unincorporated Pitt County that are anticipated to receive development pressure and that fit within a three-mile buffer beyond the city that is typical of planning studies.

The task of defining the study area also considered adjacent and nearby municipalities and the existing service and annexation agreement with Winterville. Greenville is the largest and fastest growing municipality in Pitt County. This growth means that the city will need to coordinate planning with Pitt County, neighboring municipalities, and GUC.

Integration with Previously Adopted Plans

Several thoughtful plans have been developed and updated within Greenville and the region in order to help guide growth, protect natural and cultural resources, and promote safe, fiscally responsible, and sustainable development. Each plan is important because it provides a vision for a particular geographic area or topic in greater detail than the comprehensive plan, and each identifies implementation strategies over the coming years and decades.

In addition to providing a community-driven long-range planning process that results in a tool with guiding policies and key actions, Horizons 2026 serves as an umbrella plan to Greenville's previously adopted plans. It provides a comprehensive framework that considers each plan within the context of the larger study area, and ties them all together through a cohesive set of over-arching goals, policies, and actions.



Planning Coordination in Pitt County

This map of Pitt County, NC shows the City of Greenville's incorporated area, Greenville's extra-territorial jurisdiction (ETJ) boundary, the Horizons 2026 study area, incorporated municipalities in Pitt County, and the ETJs of these municipalities.

The table on the next two pages lists existing city-wide and regional studies and plans in and around Greenville. Also listed in the table on the next page are existing area plans. Horizons 2026 includes four new area plans:

- Medical Area
- Memorial Drive/Arlington Boulevard Area
- Airport Corridor Area
- Southwest Bypass Area

Each of these includes land use and design guidance, policies, and actions. Three of these area plans are new, while the Medical Area plan replaces the old Medical District Land Use plan.

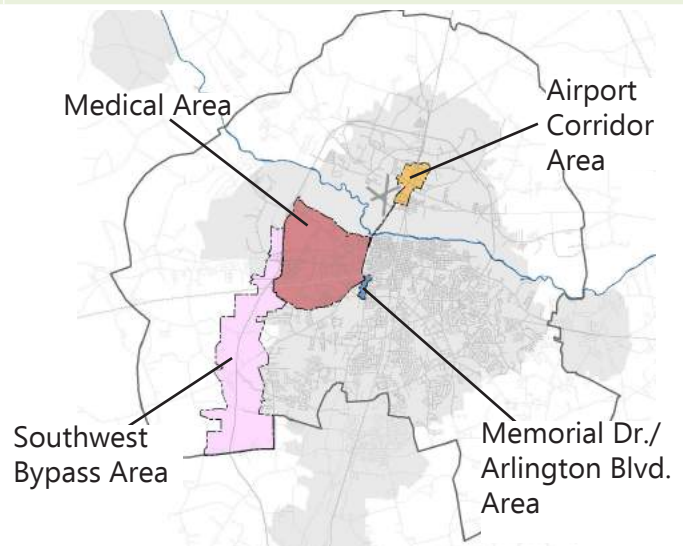
A policy audit of the Horizons 2010 plan was completed of legacy goals, objectives, and strategies. Those determined to still be relevant were incorporated into this plan.

Plan	Year Adopted	Purpose/Summary
City-Wide and Regional Plans		
Neuse River Basin Regional Hazard Mitigation Plan	2015	Identifies strategies for reducing natural hazards in coordination with Greene, Jones, Lenoir, Pitt, and Wayne Counties.
Greenville Capital Improvements Program	2015	Strategic Plan covering 2015-2019 for capital projects.
Metropolitan Transportation Plan	2014	Coordinates a comprehensive transportation planning process throughout the Greenville Urban Area over a 26 year horizon.
Tar River Legacy Plan	2014	Defines a vision and strategies as to how the Tar River can achieve its full potential as a local asset and regional attraction in eastern North Carolina.
Strategic Economic Plan for Greenville, North Carolina: A Roadmap to Community Prosperity	2012	Establishes strategies to build on Greenville's strengths and assets while planning for a changing economy.
ECU Campus Master Plan	2012	East Carolina University's plan for a sustainable, connected campus that supports and enhances both the University and the Greenville community.
Greenville Bicycle and Pedestrian Master Plan (Greenville MPO)	2011	Provides an analyses of walking and bicycling conditions; a recommended bicycle and pedestrian network; and standards, guidelines, and other implementation strategies.
Town Common Master Plan	2010	Proposes programming and physical changes to the riverfront park adjacent to the Uptown District.
Tenth Street Connector Project	2008+	Ongoing plans and project documents set out the design and progress of a connection between Stantonsburg Road and Tenth Street to improve access and connectivity.
Comprehensive Recreation and Parks Master Plan	2008	Identified both current and anticipated future park needs, and established standards for future park development.
Greenway Master Plan	2004	Recommends greenway corridors that provide access to residents, including previously under-served areas of the community.
Task Force on Preservation of Neighborhoods and Housing	2004	Study identifies challenges and provides ten neighborhood improvement strategies for preservation of neighborhoods.

Plan	Year Adopted	Purpose/Summary
Area Plans		
<i>Dickinson Avenue Corridor Study</i>	2014	This study provides urban design and policy ideas and recommendations for the Dickinson Avenue Corridor to grow and sustain a healthy vibrant core.
<i>Oak Grove Estates Subdivision Neighborhood Report and Plan</i>	2013	Plan assesses current conditions and creates a comprehensive framework for stabilizing and revitalizing neighborhood in collaboration with residents and the City of Greenville.
<i>Carolina Heights, Greenbrier, Hillsdale and Tucker Circle Subdivisions Neighborhood Report and Plan</i>	2010	Plan assesses current conditions and creates a comprehensive framework for stabilizing and revitalizing neighborhood in collaboration with residents and the City of Greenville.
<i>Tar River / University Area Neighborhood Report and Plan</i>	2009	Plan assesses current conditions and creates a comprehensive framework for stabilizing and revitalizing neighborhood in collaboration with residents and the City of Greenville.
<i>College Court & Coghill Subdivisions Neighborhood Report and Plan</i>	2007	Plan assesses current conditions and creates a comprehensive framework for stabilizing and revitalizing neighborhood in collaboration with residents and the City of Greenville.
<i>Lake Ellsworth, Clark's Lake and Tripp Subdivisions Neighborhood Report and Plan</i>	2007	Plan assesses current conditions and creates a comprehensive framework for stabilizing and revitalizing neighborhood in collaboration with residents and the City of Greenville.
<i>Medical District Land Use Plan Update</i>	2007	Recommends changes to ensure an adequate distribution of services designed to promote a vibrant, efficient, and sustainable medical district. Horizons 2026 includes an update to the Medical Area plan.
<i>West Greenville Revitalization Plan</i>	2006	Focused on revitalizing the neighborhoods of Cherry View, Parkins Town, Biltmore, and Lincoln Park.

Area Plans

Four new or revised Area plans will join this list as a part of this plan. They are, from west to east, the Southwest Bypass Area, the Medical Area, the Memorial Drive / Arlington Boulevard Area, and the Airport Corridor Area. The plans are built on the work of the entirety of the Horizons 2026 plan and process, but take certain strategic decisions further. They are in appendices at the back of this document.



Plan	Year Adopted	Purpose/Summary
Watershed Master Plans		
<i>Fork Swamp Watershed Master Plan</i>	In Progress	Will evaluate the watershed for existing flooding, water quality, and erosion problems, and identifies projects that reduce flooding, reduce risk of property loss, and reduce sediment loads.
<i>Greens Mill Run Watershed Master Plan</i>	In Progress	Will evaluate the watershed for existing flooding, water quality, and erosion problems, and identifies projects that reduce flooding, reduce risk of property loss, and reduce sediment loads.
<i>Hardee Creek Watershed Master Plan</i>	In Progress	Will evaluate the watershed for existing flooding, water quality, and erosion problems, and identifies projects that reduce flooding, reduce risk of property loss, and reduce sediment loads.
<i>Harris Mill Run / Schoolhouse Branch Watershed Master Plan</i>	In Progress	Will evaluate the watershed for existing flooding, water quality, and erosion problems, and identifies projects that reduce flooding, reduce risk of property loss, and reduce sediment loads.
<i>Johnsons Mill / Parker Creek Watershed Master Plan</i>	In Progress	Will evaluate the watershed for existing flooding, water quality, and erosion problems, and identifies projects that reduce flooding, reduce risk of property loss, and reduce sediment loads.
<i>Swift Creek Watershed Master Plan</i>	In Progress	Will evaluate the watershed for existing flooding, water quality, and erosion problems, and identifies projects that reduce flooding, reduce risk of property loss, and reduce sediment loads.
<i>Meeting House Branch Watershed Master Plan</i>	2013	Evaluates the watershed for existing flooding, water quality, and erosion problems, and identifies projects that reduce flooding, reduce risk of property loss, and reduce sediment loads.

Relationship to Greenville’s Zoning and Regulations

Greenville has a long history of using its comprehensive plan documents for guidance in decisionmaking. The content of the documents influence changes in the economic and physical environment. The intent is to use the Horizons 2026 Plan in that same way.

In North Carolina, municipal zoning enabling statutes require that zoning be “in accordance with a comprehensive plan.” Greenville’s first zoning regulations were adopted in 1947. Since then, the city’s official zoning map has been amended many times in response to changing market conditions and planning trends. Zoning in the city consists of a zoning map and a written ordinance, both of which are available on the city’s website.

Zoning maps and future land use and character maps are often mistakenly perceived to be identical. Although they are related, each serves a different purpose. The zoning map refers to regulations that apply to areas today, specifically how land can be used and what can be built on a given property. The Future Land Use and Character Map depicts a long-term vision of how and where the city will grow and change over the next 20 years in order to accommodate residential, employment, and commercial growth. Zoning should be consistent with future land use and character.

After adoption of a new comprehensive plan with a new Future Land Use and Character Map, the city may undertake a review of its zoning ordinances to make sure it has the tools in place needed to implement the plan.

How to Use This Plan

This plan is designed to be clear, readable, and accessible to all of Greenville’s citizens, policy-makers, developers, employers, and city staff. Each chapter includes the following sections:

- 1. Vision Statement:** This includes the guiding framework for the chapter and is a high level aspirational statement reflecting many of the values derived from public input.
- 2. Key Community Issues:** Community trends and conditions were identified within a Community Profile, included as an appendix of this plan. Within each chapter, the overview of key community issues represents the most relevant trends impacting Greenville today and over the coming decades.
- 3. Concepts and Best Practices to Address Community Concerns:** This section presents data-driven research, fact-based approaches, and best practices that are being used in other local governments around the country.
- 4. Goals & Policies:** This section lists goals for the community and policies to guide change. Policies provide ongoing and open-ended general guidance for decision-makers.
- 5. Actions:** This section provides key actions that the city and its partners will take over the coming decade to bring Greenville closer to the community vision. Actions are distinguished from goals and policies in that actions are designed to be undertaken by city officials, citizens, and partners in order to accomplish a specific task.

Future Land Use & Character Map

- Displays broad categories of character and land use areas
- Represents a long term vision
- Encourages sustainable patterns of growth
- Provides predictability in long term planning decisions
- Amended in response to changes in community’s goals

Zoning Ordinance

- Describes zoning districts on specific parcels
- Provides direct regulation of development on land parcels
- Encourages sound project-level site planning
- Discourages land use conflicts between properties
- Establishes present opportunities and constraints
- Will need to be amended to improve consistency with Horizons 2026



Building Great Places

Greenville will be home to active, vibrant, and distinct places that are linked through a high quality, walkable, and beautiful built environment. These places, including mixed use centers, neighborhoods, corridors, and employment districts, will build on Greenville's existing land patterns. They will provide new walkable and connected developments that enrich the distinct visual appearance of the city and foster a growing sense of pride, while conserving key natural areas.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact Greenville's Built Environment.

Concepts and Best Practices to Address

Community Concerns: This section presents fact-based approaches to solving complex interrelated development policy challenges.

Future Land Use and Character: This section provides principles about how and where development in Greenville should occur.

Goals & Policies: This section lists the goals our community seeks to accomplish and the policies to help guide us there.

Actions: This section provides key proactive actions that the city and interjurisdictional and community partners will take over the coming decade to bring us closer to our community's vision.

Overview

Greenville has developed into the region's main activity center, drawing thousands from around the state to its educational campuses, industrial areas, Uptown and suburban office buildings, parks, recreation facilities, restaurants, bars, and retail stores. Opportunities now exist to shape the built environment and create connected compact and vibrant places, truly great places that inspire Greenville's residents and visitors.

The built environment directly impacts the daily lives of Greenville's workers, visitors, and residents. It is important that the urban form provide a unique sense of place and enhance the live-work-play atmosphere that citizens increasingly demand.

This chapter establishes principles for sound land development that transforms and evolves areas around the city into vibrant places, while preserving the key natural, cultural, and residential areas that our citizens already love. This is a unique community and the built environment should reflect our values and serve all of our citizens.

Previous Page Photo Credit: Aileen Devlin

Planning Influences

Key Community Issues

Greenville has changed in character and form over the past half-century. Much of the city's growth has pushed outward, converting forest and farmland into residential developments and commercial corridors. In some places, low density and automobile-oriented development patterns have reduced citizens' transportation options and introduced fiscal challenges as a result of extending services and infrastructure further away from the city center. Improving the built environment is increasingly being seen as an economic development strategy to reverse Greenville's outward flow of young workers. As demographic changes result in new market demands for living options, the city has an opportunity to renew its emphasis on live-work-play environments.

Existing Land Use

The city occupies approximately 35.6 square miles in 2016. The city and its ETJ, an area that delineates potential growth areas up to three miles outside of the city's corporate limits, together occupy approximately 68 square miles. The Horizons 2026 study area is even broader in scope and contains 145 square miles, including land beyond the city's current ETJ.

Vacant Land: Over half the land in the city and ETJ is classified as vacant (35 square miles / 56.6%). Vacant land includes areas that have never been developed and those that may have been developed at one time and now have no buildings or other improvements.

Residential Land: The majority of developed land in Greenville is residential. Single-family residential uses comprise most of the residential land, typically located within subdivisions. Denser residential patterns exist near Uptown. Several multifamily developments are located in the southern part of the city near clusters of commercial developments.

Mixed Uses: Mixed use development, where different non-residential and/or residential uses may be integrated in the same building, are almost exclusively located within the Uptown area and Greenville has very little mixed use development compared to cities of a similar size.

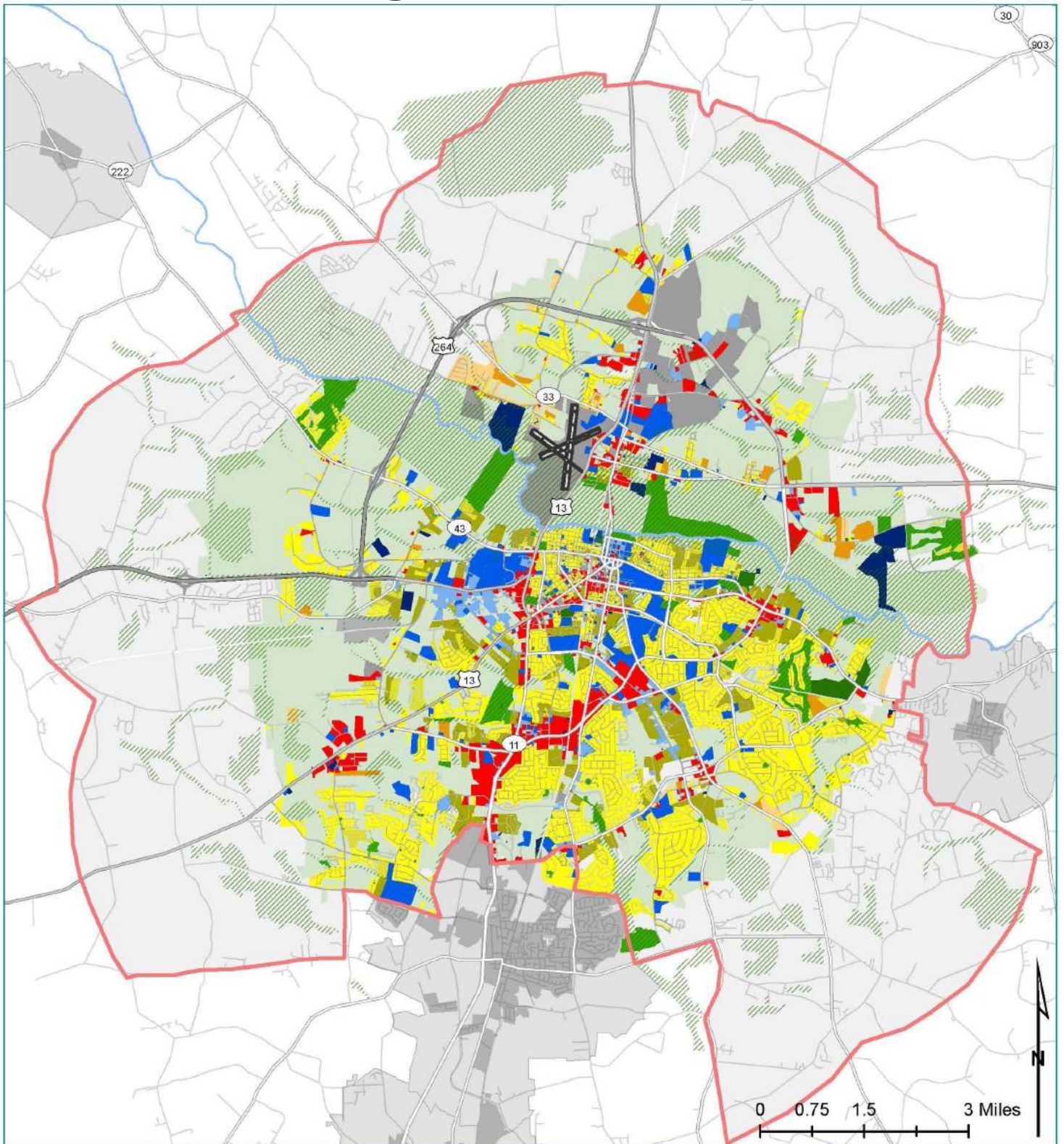
City, ETJ, and Study Area Boundaries



Existing Land Use in Greenville ETJ (2015)

Use	Acres	% of land
Residential		25.0%
Single-Family	7,082.6	16.9%
Duplex	475.5	1.1%
Mobile Home	844.1	2.0%
Multifamily	2,105.0	5.0%
Non-residential		15.3%
Commercial	1,980.3	4.7%
Office	643.8	1.5%
Industrial	1,913.2	4.6%
Institutional	1,900.6	4.5%
Other		6.0%
Utility	503.6	1.2%
Landfill	171.4	0.4%
Public Parking	25.9	0.1%
Cemetery	175.3	0.4%
Recreation	1,627.0	3.9%
Vacant	22,373.1	53.3%
	41,821.3	

Existing Land Use Map



- | | | |
|--|------------------|----------------|
| Study Area | Commercial | Utility |
| City Parks | Mobile Home Park | Public Parking |
| Roads | Mobile Home | Institutional |
| Streams/Water | Multifamily | Office |
| Natural / Conservation Areas (2011 future land use recommendation) | Duplex | Industrial |
| | Single-Family | Landfill |
| | Cemetery | Vacant |

Existing Character Map

In addition to a traditional land use assessment, an analysis of the existing pattern and character of areas throughout the city provides an understanding of the quality of Greenville's built environment. This analysis classifies the study area into 12 Character Areas, which are types of neighborhoods, districts or corridors that share similar attributes of their form and function. The attributes used in defining the Character Areas include:

- Type and size of buildings;
- Relationship between buildings and streets;
- Lot size and coverage;
- Street pattern and connectivity; and
- Land use.

Through zoning, the city ultimately sets out what uses

are allowed on each parcel of its jurisdiction. While zoning had a role in sculpting the development of the city, the land use assessment, and the character map each look to what has actually been built, rather than the variety of uses that may be allowed. The categories listed match observed conditions, rather than necessarily following regulatory categories.

The Existing Land Use Map on the previous page documents the way that land is being used regardless of current or future regulations. On the following page, the Existing Character Map looks beyond the existing land uses to identify the character areas throughout the study area. Together they give a clear picture of the existing pattern of the city.

Urban v. Suburban Characteristics

The existing Character Areas can be broadly divided into two groups urban and suburban. Urban areas are walkable, mixed use areas with small blocks arranged in a grid or grid-like pattern. Greenville's "urban" areas include Uptown and surrounding neighborhoods, which were initially developed before cars were the primary mode of transportation. Suburban areas are designed to be drivable, with longer blocks, curvilinear streets, fewer intersections and separated uses. Areas with "suburban" character make up a majority of Greenville's land.

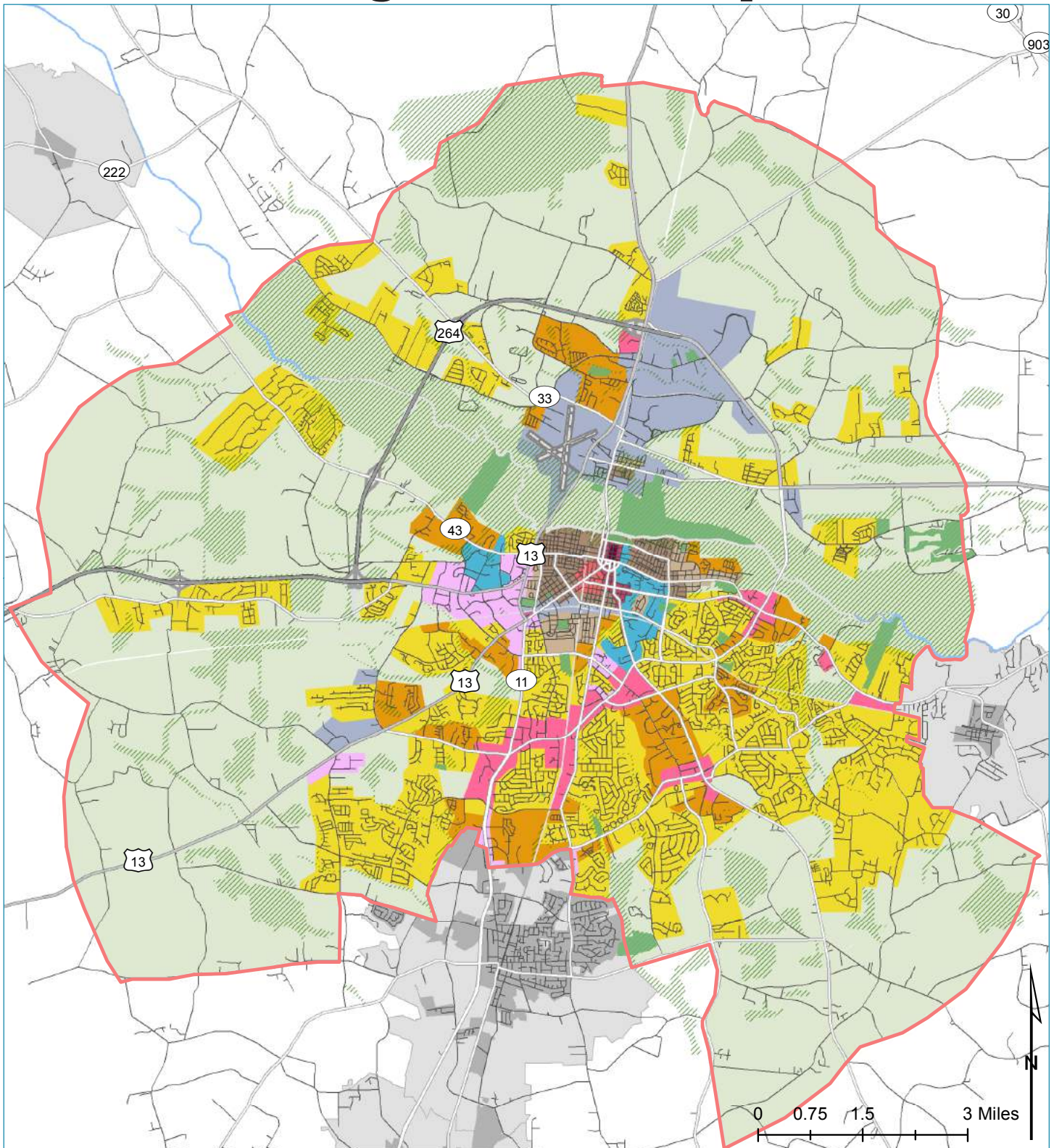


Urban



Suburban

Existing Character Map



- | | | |
|--|------------------------|----------------------------|
| Study Area | Uptown Core | Suburban Center/Corridor 1 |
| City Parks | Urban Center 1 | Suburban Center/Corridor 2 |
| Roads | Urban Center 2 | Institutional Campus |
| streams/water | Urban Neighborhood 1 | Industrial/Logistics |
| natural / conservation areas (2011 future land use recommendation) | Urban Neighborhood 2 | Rural Edge |
| | Suburban Residential 1 | |
| | Suburban Residential 2 | |

Existing Character Types

Uptown Core

Uptown is Greenville's historic core. It is the most urban and mixed use area of the city with buildings located close together and near the street. Small blocks, on-street parking, and street trees create a pedestrian-friendly district.

Urban Center 2

Urban Center 2 consists of primarily large footprint single-story industrial or warehouse buildings within the urban street grid. It includes the ECU warehouse district and future millennial campus area.

Urban Neighborhood 2

Urban Neighborhood 2 occurs at edges of Urban Neighborhood 1 where the urban street grid transitions to a more suburban-like pattern. It is distinguished from Urban Neighborhood 1 by less dense residential and non-residential development on larger lots.

Suburban Residential 2

Set in a similar street pattern as Suburban Residential 1, Suburban Residential 2 is composed primarily of multifamily and small-lot single-family development. Building size and style tend to be consistent within a development with limited connectivity between different building types and uses.

Suburban Center/Corridor 2

Suburban Center/Corridor 2 areas are primarily office, institutional, and neighborhood-scale commercial development situated near and along major roadway corridors. Buildings are typically surrounded by surface parking.

Industrial/Logistics

The Industrial/logistics area is characterized by warehouses and light manufacturing operations and related office uses. It includes the Greenville Industrial Park and airport area, as well as land along active rail corridors in Greenville's urban areas.

Urban Center 1

Urban Center 1 surrounds the Uptown Core and extends its block pattern. It features a variety of mainly non-residential uses with a mix of building sizes, orientation, setbacks, and streetscape features.

Urban Neighborhood 1

Urban Neighborhood 1 is a primarily residential area surrounding Uptown and Urban Centers. It features a grid street pattern and mix of residential building types on small lots, with some commercial, office and civic uses.

Suburban Residential 1

Suburban Residential 1 areas are primarily single-family developments arranged along wide, curvilinear streets with few intersections. Building size and style tend to be consistent within a development with limited connectivity between different residential types and non-residential uses.

Suburban Center/Corridor 1

Suburban Center/Corridor 1 areas are primarily community- and regional-scale commercial development situated near and along major roadway corridors. Buildings are typically set behind surface parking.

Institutional Campus

The Institutional Campus is most represented by ECU's main campus as well as Vidant Medical Center. The core of each campus area tends to cluster buildings in a walkable pattern. At the edges of the campus are related facilities and parking areas.

Rural Edge

Areas at the city's edges are characterized by large-lot single-family residential development in small subdivisions, other isolated development, and abundant undeveloped land.

Fiscal Implications of Land Development

City leaders throughout the country are discovering that there are significant fiscal implications for different types and locations of growth. The box below provides a comparison of two example developments in Greenville. It illustrates a pattern that is well documented in fiscal impact research from cities around the country.

Fiscal Implications of Different Development Models

In this example a big box retail store is compared to a two-story mixed use building in Uptown. The potential tax value growth from the big box store is significant. However, the smaller compact building that provides additional uses on upper floors generates more tax revenue per acre. Often, the cost per customer for providing infrastructure and services to compact development is lower.

Big Box Retail Store in Greenville

Current Tax Value: \$5,961,638
Land Developed: 11.77 acres

Tax Value per Acre: **\$506,511**

Two-Story Mixed Use Building in Greenville

Current Tax Value: \$1,176,888
Land Developed: 0.21 acres

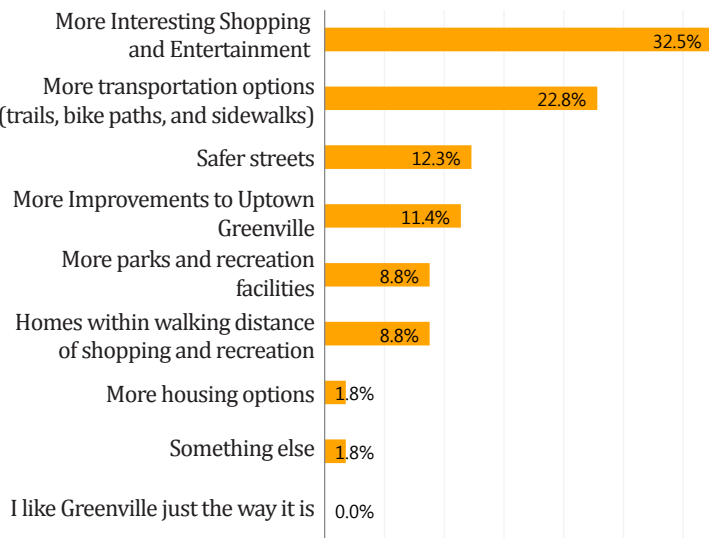
Tax Value per Acre: **\$5,604,228**



What Residents Said They Want

Through public engagement events and online input, Greenville citizens and stakeholders provided hundreds of comments, answered dozens of questions, and responded to several poll questions about what places they like, what places they don't like, and what they want to see in Greenville. Most residents who provided input described a desire for new ways of getting around the city and want to see different types of development, especially high quality mixed use designs that promote walkability and create vibrant urban spaces. Most residents also expressed a desire to have more shopping, dining, work space, and housing in the Uptown area and around the hospital.

What Change Would You Most Like to See in Greenville?



Greenville Public Workshop Attendees Want New Types of Development

During the *Workshop For Our Future* attendees had the opportunity to choose the kind of development that they would like to see in Greenville's future. Several types of development were both liked by some attendees and disliked by others. The images illustrated below were the only images with unanimous agreement. The images labeled ATTENDEES LIKED represent development types that attendees unanimously agreed they would like to see in Greenville, while the image labeled ATTENDEES DID NOT LIKE indicates a development type that attendees unanimously agreed they would rather not see.



Concepts and Best Practices to Address Community Concerns

Cities throughout the country are developing new tools to address the impacts of several simultaneously occurring trends. These trends include:

- Dramatic growth and diversification of America's population
- New market preferences for walkable places from large segments of the population, including millennials and aging baby boomers
- Recent emergence from deep economic recession
- Stagnant wages
- Increasing volatility of storms and weather-related events
- New understanding of adverse health impacts from inactive lifestyles and their connections to the built environment

The policy tools that communities are using are as diverse as the communities themselves. Many successful tools are being replicated and modified to fit specific places, and several address land use. The following are important resources, concepts, and best practices that the city may want to consider.

Investing in Place

In 2012, a national poll conducted by the American Planning Association aimed to understand common concerns among older and younger generations regarding desirable community attributes and their connection to economic development. Many of the poll's findings point to opportunities for coordination of planning and economic development strategies around workforce attraction and competitiveness. The survey focused on Americans with some college education and the results broke the respondents down by the large generational cohorts, from Millennial (aged 21-34) to Gen X (aged 35 to 49) and Active Boomer (aged 50-65). One of the most striking findings of this survey is the sharp decline across demographic groups of interest in traditional, auto-dependent suburban living. Fewer than 10% in each of these generational cohorts see themselves in this type of community in the future despite 40% of them living there today.

This doesn't mean they are universally forsaking suburbs. Instead, the data indicate a desire for living in various types of communities but with greater mobility options, particularly walkability, and easy access to key

amenities. Auto use, while continuing to be dominant, is plateauing. These trends will likely be accelerated by the desire of many to grow older in their existing homes and communities. Across geographies and generations, people seem to be embracing a common set of lifestyle and community goals. This will not only pose important design and planning challenges, but also offer unique opportunities to reimagine communities and neighborhoods.

Smart Growth Principles

During the early 20th century many American cities suffered from poor air and water quality as a result of many incompatible land uses like residential buildings and factories being located next to one another. This trend resulted in obvious public health problems. The creation of zoning regulations worked to separate incompatible land uses. These rules successfully provided more green space and cleaner neighborhoods, and worked to ensure homes were not overcrowded or susceptible to fire hazards. Over time these rules continued to separate uses, even uses that are compatible, and excluded certain segments of the population. Today, some of the same rules that were designed to address the problems of the early 20th century cities continue to be applied to the cities of the 21st century.

Many cities, including Greenville, have begun adopting smart growth development policies as a way of creating more livable cities. Smart growth refers to a range of development and conservation strategies that help



Greenville has a History of Smart Growth

This 1925 postcard displays the National Bank Building that was once located in Greenville. The building demonstrates good compact development with high quality design, multiple stories, and location adjacent to the sidewalk. Image Source: ECU Digital Collections

protect our health and natural environment and make our communities more livable, economically stronger, and more socially diverse. Ten principles guide smart growth development, including:

1. Mix land uses.

By putting residential, commercial and recreational uses in close proximity to one another, alternatives to driving, such as walking or biking, become viable. Mixed land uses also provide a diverse and sizable commercial base for supporting transit.

2. Take advantage of compact building design.

Compact building design suggests that communities be laid out in a way that preserves more open space, and that individual buildings make more efficient use of land and resources. For example, by encouraging development to grow vertically rather than horizontally, and by incorporating structured rather than surface parking, communities can reduce the footprint of new construction, and preserve more green space.

3. Create a range of housing choices.

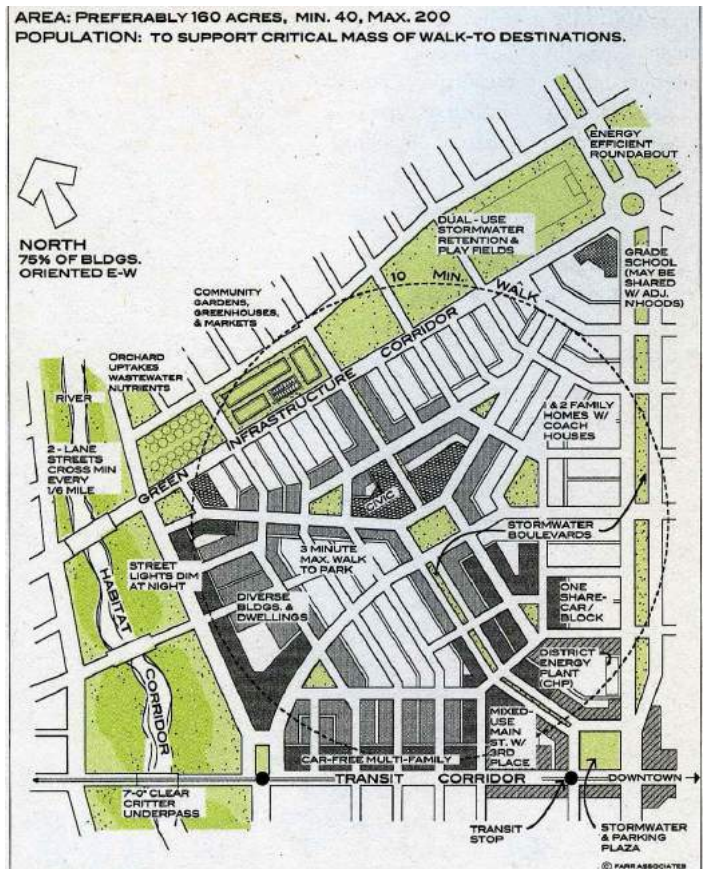
No single type of housing can serve the varied needs of today's diverse households. Opportunities exist for communities like Greenville to increase housing choice not only by modifying land-use patterns on newly developed land, but also by increasing housing supply in existing neighborhoods and on land served by existing infrastructure.

4. Create walkable neighborhoods.

As the personal and societal benefits of pedestrian-friendly communities are realized – benefits that include lower transportation costs, greater social interaction, improved personal and environmental health, and expanded consumer choice – many are calling upon the public and private sectors to facilitate development of walkable places. By building places with multiple destinations within close proximity, where the streets and sidewalks balance multiple forms of transportation, communities have the basic framework for walkability.

5. Foster distinctive, attractive communities with a strong sense of place.

By creating high quality communities with architectural and natural elements that reflect the interests of all residents, there is a greater likelihood that buildings (and therefore entire neighborhoods) will retain their economic vitality and value over time. This means that the infrastructure and natural resources used to create these areas will provide residents with a distinctive and beautiful place that they can call home for generations to come.



Creating Walkable Neighborhoods

The image above illustrates walkable design principles based around the quarter-mile “walk shed” - an area within which people can usually walk to within five minutes. This image was created by urbanist Douglas Farr and is based on an historic diagram by urbanist Clarence Perry in 1929. Image Source: Sustainable Urbanism

6. Preserve open space, farmland, natural beauty and critical environmental areas.

Open space refers to natural areas that provide important community space, habitat for plants and animals, and recreational opportunities. Farmland, places of natural beauty, and critical environmental areas (e.g. wetlands) can also serve as important amenities. Open space preservation bolsters local economies, preserves critical environmental areas, improves community quality of life, and guides new growth into existing communities.

7. Strengthen and direct development towards developed areas.

Directing development towards areas already served by infrastructure keeps communities compact. This development pattern uses the resources that existing neighborhoods offer and conserves open space and irreplaceable natural resources on the edges. Development in existing neighborhoods represents



Compact Development and Preserving Open Space

When growth is channeled into existing communities, there is room for developing compact neighborhoods and for preserving open space.

a cost-effective approach to growth that can improve the quality of life for residents.

Infill development is one strategy that fills the lots that have been left as empty or underused holes in between existing buildings. Redevelopment is another strategy that replaces existing buildings with new types of development. Both of these present significant opportunities for neighborhoods, cities, and developers to improve existing areas in the city and promote revitalization.

8. Provide a variety of transportation choices.

To have true transportation choice, different transit options need to be viable. Walking and cycling are made possible by greater connectivity of the street network and dedicated infrastructure. Transit systems are more viable when high quality frequent service is supported by density and land use mix. For people to choose something other than driving, the connections

between using different transportation modes must be designed to be easy and accessible. Cities across the country have responded to increasing road congestion with this multi-modal strategy to reduce the strain of growth on existing road capacity.

9. Make development decisions predictable, fair, and cost-effective.

For a community to be successful in implementing smart growth, the concept must be embraced by the private sector. Only private capital markets can supply the funds needed to meet the growing demand for smart growth developments. If investors, bankers, developers, builders and others do not earn a profit, few smart growth projects will be built.

Despite regulatory and financial barriers, developers have created successful compact developments in cities of all sizes around the country. In many cases, doing so has required them to spend time and money getting variances to the codes. Expediting the approval process is especially helpful to developers, for whom "time is money." The longer it takes to get approvals, the longer the developer's capital remains tied up in land and not earning income. For smart growth to flourish, municipal governments have made smart growth development approval more timely, cost-effective, and predictable for developers. By creating a supportive environment for development of innovative, pedestrian-oriented, mixed use projects, government can enhance the quality of development.

10. Encourage community and stakeholder collaboration in development decisions.

Growth can create great places to live, work and play if it responds to a community's own sense of how and where it wants to grow. Some cities have worked primarily to improve housing choices. Others that have suffered from disinvestment may emphasize infill development. Newer communities with separated uses may be looking for the sense of place provided by mixed use town centers. Still others with poor air quality may seek relief by offering transportation choices. The common thread, however, is that the needs of every community and the programs to address them are best defined by the people who live and work there.

Transitioning from Commercial Sprawl to Mixed Use Nodes, Cities are Transforming Urban Form

Like many suburban districts, Tysons Corner in Fairfax County, Virginia is reliant on few, widely interspersed arterial roads that are overwhelmed by traffic at peak hours. The roads are unsafe for pedestrians. County planners prioritized the radical reconstruction of the district's road network, moving it from a sprawling neighborhood with a few arterials (top) to a more compact built environment with a hierarchy of streets on a modified grid (bottom).

Commercial Sprawl



Mixed use Nodes



Image Source: The Transport Politic

Form-Based Codes

Form-based codes represent a response to conventional zoning's focus on segregating uses and neglect of an integrated built form. Hundreds of communities large and small have adopted form-based codes as a way of carrying out their long-term vision of becoming more vibrant and walkable while fostering more predictable built results for both developers and existing residents.

Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. The regulations and standards in form-based codes are presented in both words and clearly drawn diagrams and other visual aids.

The fundamental components of form-based codes include a planning or zoning map, standards for public improvements, regulations controlling the features and configurations of buildings that shape the public realm, and a clearly defined and streamlined application review process. Although use can be regulated, the form is of primary concern.

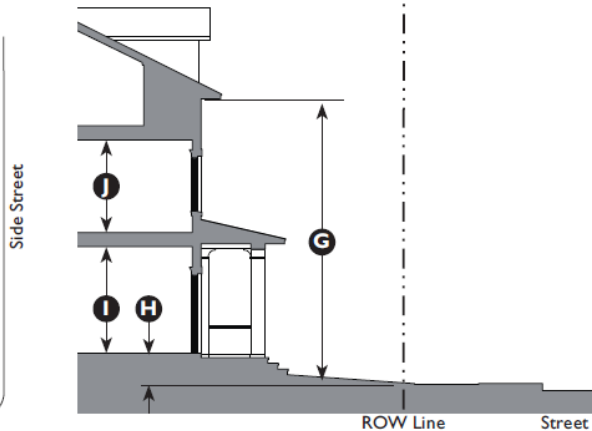
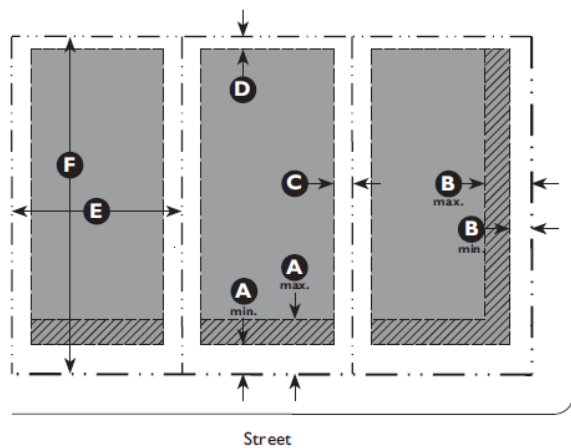
Any form-based code proposed and implemented by Greenville should comply with NC law, and should not govern design elements of one- and two-family dwellings unless fitting into a specific exception. There are still many opportunities to use these codes in Greenville.

An example page from a form-based code is on the next page. The visual nature of these documents simplifies the code standards for developers and residents. Form-based codes are often integrated with traditional text-based codes.

Example of a Form-Based Code from Beaufort County, South Carolina

Division 3.2: Transect Zones

T4 Neighborhood Center



Key

- ROW / Property Line
- Setback Line
- Building Area
- ▨ Facade Zone

C. Building Placement

Setback (Distance from ROW/Property Line)

Front	0' min., 15' max.	A
Side Street	0' min., 10' max	B
Side:		C
Main Building	3' min., 6' max.	
Ancillary Building	0' or 3' min.	
Rear	5' min.	D

Facade within Facade Zone:

Front	75%
Side Street	50%

Lot Size (62,500 SF Maximum)

Width	250' max.	E
Depth	250' max.	F

Miscellaneous

Where existing adjacent buildings are in front of the regulated BTL or front setback, the building may be set to align with the facade of the front-most immediately adjacent property.

No planting strips are allowed between sidewalk and building.

Maximum lot size does not apply to Recreation, Education, Safety, Public Assembly uses

D. Building Form

Building Height

Main Building	2 stories min., ¹ 4 stories max.	G
Ancillary Building	2 stories max.	
Ground Floor Finish Level: ²		H
Residential	18" min.	
Commercial	6" max.	
Ground Floor Ceiling:		I
Commercial	10' min.	
Upper Floor(s) Ceiling	8' min.	J

Ground Floor lobbies and common areas in multi-unit buildings may have a 0" to 6" ground floor finish level.

Within 25' of the rear property line, buildings may not be more than a half-story taller than the allowed height of adjacent buildings.

Footprint

Width: Main Building	250' max.
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Miscellaneous

Distance Between Entries, to Upper Floor(s)	80'
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All upper floors must have a primary entrance along the front.

Loading docks, overhead doors, and other service entries may not be located on street-facing facades.

Notes

¹On Lady's Island, one-story buildings are permitted; multi-story buildings are recommended

²Buildings located in a flood hazard zone will be required to be built above base flood elevation in accordance with Beaufort County Building Codes.

Future Land Use and Character

The Horizons Plan Update provides a critical opportunity to make informed choices about how and where growth and development should occur in the future. The land use recommendations of this chapter were made with consideration for the quality and character of the built and natural environment, fiscal impacts of growth and existing and future transportation needs. The future land use direction is conveyed through two primary elements: 1) Principles and 2) Future Land Use and Character Map.

Principles

Eight Principles describe the intent about “how” (character attributes) and “where” (conceptual location) growth and development in Greenville should occur. They reflect a variety of mutually reinforcing themes. Themes include the quality, appearance, pattern, character, and organization of development, environmental quality, efficient use of infrastructure, community connectivity, and expanding mobility choices for residents. These principles should be used to help guide the city on how to use land resources in a more efficient and effective manner to foster a distinct sense of place.

1. **Development of underutilized land within the city’s existing urban footprint that is served by infrastructure is a priority over undeveloped land on the city’s edge.**

It is preferable to accommodate growth in locations within the existing urban area that are appropriate for and can support increased development densities. Infill and redevelopment will occur in a strategic manner that considers community needs like access to amenities, transportation service, and the quality and quantity of open space.

- Areas for future development are identified for infill, redevelopment and greenfield opportunities. Though infill and redevelopment are priorities, that does not imply that all infill or redevelopment capacity must be consumed prior to support for any greenfield development, or that there cannot be strategically targeted new areas for growth.

- Infill or redevelopment will promote a high quality of life for existing residents by encouraging appropriate building placement and size, minimizing traffic impacts, and avoiding other undue negative consequences.
- When new growth occurs on the edge of the community, it will be done in a manner to minimize demand for new infrastructure and community services. Such greenfield development should be clustered to preserve open space and avoid negative impacts on environmentally sensitive areas and waterways. The scenic quality of the area should be preserved.

Infill describes the development of land in existing urban and suburban areas that is vacant but near existing development and infrastructure.

Redevelopment is improving or utilizing buildings or sites that have been developed already, but are not reaching their highest and best use.

Greenfield development occurs on new sites that have not been previously improved with infrastructure or buildings.

2. Quality design is emphasized for all uses to create an attractive, distinctive public and private realm—architecture, streetscape, corridors, gateways and edges—that distinguishes the city.

Public areas (streets, sidewalks, parks, streetscapes, etc.) and private areas (building facades, lawns, landscaping, parking lots, driveways, etc.) will be planned and designed to balance function, appearance, and affordability, while allowing for creative differences, innovation, and diversity of design.

3. A greater intensity of development that integrates a mix of uses (residential, commercial, office, institutional, civic etc.) and connects with existing developed areas is encouraged in strategic locations.

Places will be created with multiple uses—residential, commercial, and institutional, among others—in proximity to each other, perhaps on the same site and/or in the same structure. Close attention will be given to the compatibility of those uses and their surroundings. Uses will be arranged in a manner that maximizes pedestrian activity.

- Mixed use centers will be an encouraged development pattern in the city. These places mix retail, residences, offices and civic uses at various scales.
- Special districts will be designated for uses that are not appropriate in a mixed use setting (such as industrial).

4. Places throughout the city are well-connected and designed to balance the needs of pedestrians, automobiles, cyclists, and transit users.

Opportunities will be sought to improve the street pattern and connectivity, thereby increasing travel options, potentially decreasing vehicle miles, reducing congestion and improving safety.

- A connected grid street pattern, or modified grid system, will be the preferred network for future development and redevelopment.
- The street pattern will aim to keep local traffic off of major arterials and high-speed through-traffic off of local streets.
- Well-connected streets will be designed with short blocks and include sidewalks to facilitate walking.
- Roadways and trails will have high connectivity within and between neighborhoods and commercial districts.
- Bicycle and pedestrian paths and supporting amenities will be integrated into new development and areas undergoing redevelopment.

5. Uptown features a vibrant mix of businesses, residences, education, recreation, entertainment, and civic uses, and a distinctive character that is appealing to residents, visitors and investors.

As the historic and civic heart of Greenville, Uptown will be a focus for revitalization efforts, strengthening community pride and the city's image. Revitalization efforts will include both public and private investment.

- ECU's Main and Millennial Campuses will be leveraged to attract new development and help strengthen the city's core.
- Adaptive reuse of underutilized buildings will be encouraged.
- Development of buildings on existing surface parking areas will be encouraged, while parking needs will be addressed through sharing arrangements and parking structures.
- Policies will encourage investment in neighborhoods at the edge of Uptown.

6. The city's established neighborhoods are maintained, while new residential areas have the characteristics of strong neighborhoods, including sidewalks, mixed housing types, parks, and easy access to basic retail needs.

Complete neighborhoods will include a variety of land uses (residential, commercial, civic and recreational areas), building types, and housing types. They will have an identifiable center that offers basic services such as grocery stores and specialty shops. The neighborhoods will support a variety of travel options and be well-connected to adjacent neighborhoods and districts. They will seamlessly integrate the members of diverse, multi-generational communities living in proximity to one another.

- Neighborhoods will be walkable with quality streets that accommodate both bicycles and automobiles, but give priority to the pedestrian experience with sidewalks, street trees, and lighting.
- Civic, institutional, and public spaces that form the physical nucleus of the neighborhoods will be encouraged.
- Basic retail service can be located nearby (accessible via walking and/or biking) or integrated with residential areas in the form of neighborhood centers.

7. A network of connected greenways and green infrastructure will protect wildlife habitat and sensitive natural areas and provide recreational opportunities.

Future development will contribute to expanding the quantity, quality, access to, and connections between the city's parks, open space, and recreational amenities.

- As feasible, wooded areas and stream corridors will be protected, integrated into new developments, and connected to create a continuous open space system.
- Convenient and accessible recreational opportunities will be provided for all ages.
- Existing recreational, green space, public areas, open spaces, and natural spaces will be maintained. New areas will be set aside that connect people to the natural environment and promote recreational opportunities. The network of spaces will support healthy active lifestyles.

8. Environmentally-sensitive and sustainable practices will be encouraged in future developments

Development will be designed to reduce potentially negative impacts on environmental features such as stream corridors, wetlands, and significant stands of mature trees.

- The city will continue efforts to protect watersheds, wetlands and floodplain areas when development or redevelopment occurs.
- New construction will employ context-sensitive design to reduce impacts on existing site features and the natural environment.
- Green building practices will be encouraged. Projects will minimize the consumption of resources, employ recycling of building materials, and promote quality indoor living and working environments.
- Green stormwater and graywater management options will be encouraged. Sites will retain and reuse stormwater to reduce surface runoff and prevent negative impacts on the watershed.
- Infill and redevelopment will maintain or enhance the urban tree canopy.

Future Growth Framework

Future development priorities as described in the Principles can be illustrated conceptually through a depiction of centers, neighborhoods, corridors, and open space. The following concepts and the map on the facing page depict where centers of various intensity are distributed through Greenville. It also depicts priority corridors for improvement and natural areas that should be preserved as open space. This conceptual map is a generalization of the city's intent for where and how to grow, which is depicted in detail on the Future Land Use and Character Map in the following section.

Neighborhood Activity Center

Commercial or mixed use node generally providing 20,000-50,000 sf of commercial space and serving an area within one mile.

Community Activity Center

Commercial or mixed use node generally providing 50,000-250,000 sf of commercial space serving an area approximately three miles.

Regional Activity Center

Commercial or mixed use node generally providing 250,000-500,000 sf of commercial space and serving an area approximately ten miles.

Employment Center

A special employment district with a regional-scale concentration of non-retail jobs (institutional, office, industrial).

Signature Corridor

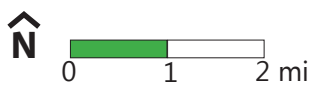
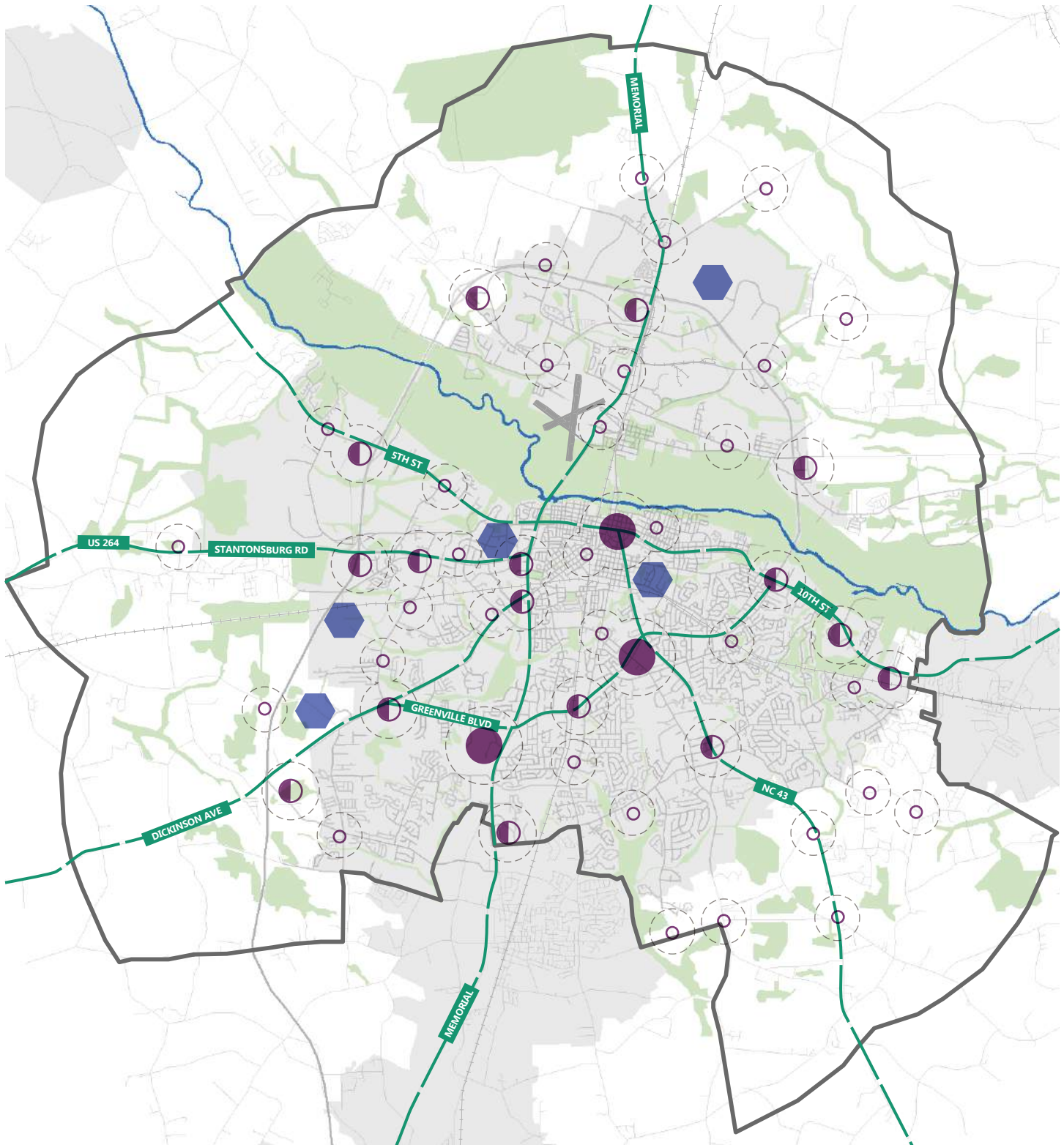
Primary corridors through Greenville that should be the priority for improving the appearance of development and safety for all users.

Pedestrian Shed








Area within approximately one-quarter to one-half mile from an activity center that should be the priority for creating a walkable pattern of development. Residential uses within a center's pedestrian shed should generally be more compact than in areas further from a center.

Natural Area

Potential preserved open space areas and significant natural features including wetlands, floodplain, or forest that should be preserved from development.



Legend







-  Neighborhood Activity Center
-  Community Activity Center
-  Regional Activity Center
-  Employment Center
-  Signature Corridor
-  Natural Area
-  Pedestrian Shed

Future Land Use and Character Map

The Future Land Use and Character Map expresses the city's intent for how Greenville should grow in the future. Similar to previously adopted Future Land Use Maps, this map identifies character areas, which are types of places that share attributes of urban form and function including the size and type of buildings and their relationship to the street; the surrounding street and block pattern; parking and access; as well as land uses or types of development. Character areas are not zones. The city gives force to the Future Land Use and Character Map through its zoning decisions. Multiple zoning districts may fit appropriately into a given character area.

The 16 Character Types are listed below. Attributes of each type are defined on the following pages.






ACTIVITY CENTERS

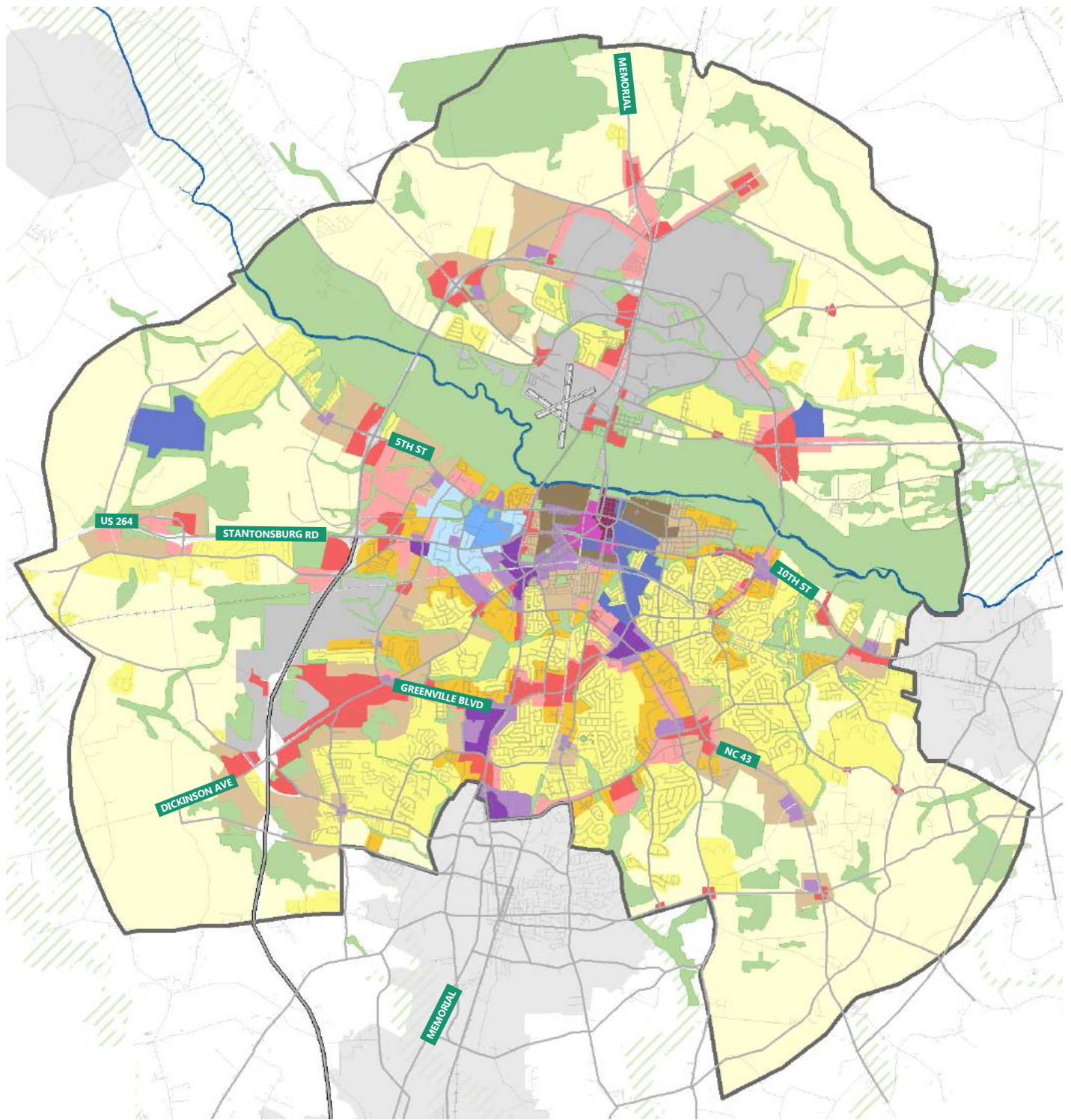
-  Uptown Core
-  Uptown Edge
-  Mixed Use, High Intensity
-  Mixed Use
-  Commercial
-  Office / Institutional

NEIGHBORHOODS

-  Uptown Neighborhood
-  Traditional Neighborhood, Medium to High Density
-  Traditional Neighborhood, Low to Medium Density
-  Residential, High Density
-  Residential, Low to Medium Density

SPECIAL DISTRICTS

-  University Institutional
-  Medical Core
-  Medical Transition
-  Industrial / Logistics
-  Potential Conservation / Open Space



0 1 2 mi

LEGEND

- Uptown Core
- Uptown Edge
- Mixed Use, High Intensity
- Mixed Use
- Commercial
- Office / Institutional
- University Institutional
- Medical Core
- Medical Transition

- Industrial / Logistics
- Uptown Neighborhood
- Traditional Neighborhood, Medium-High Density
- Traditional Neighborhood, Low-Medium Density
- Residential, High Density
- Residential, Low-Medium Density
- Potential Conservation / Open Space
- School locations

UPTOWN CORE

DESCRIPTION

Uptown Core is composed of Greenville's historic core. It is the most urban and mixed use area of the city with buildings located close together and near the street. Small blocks, on-street parking, and street trees create a pedestrian-friendly district. New development is encouraged to fill-in vacant sites such as underutilized parking areas.

INTENT

- Infill vacant lots
- Encourage vertical mixed use development (residential or office above commercial)
- Adapt and reuse historic buildings
- Reduce/consolidate surface parking
- Maintain and expand public realm features such as street trees, lighting, and wayfinding signs

PRIMARY USES

- Commercial
- Institutional/Civic

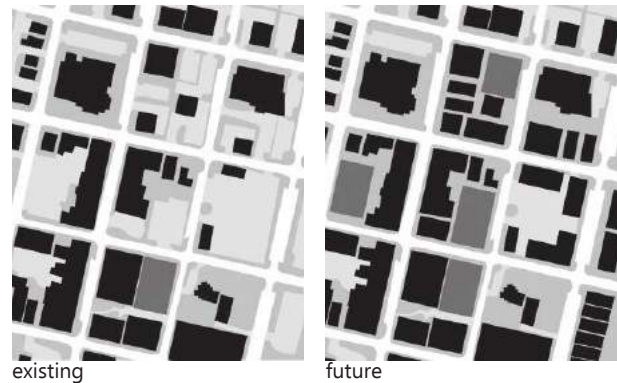
SECONDARY USES

- Office
- Multifamily residential
- Attached residential (townhomes)

BUILDING BLOCKS

Building Height	2-5 stories
Building Setback (front)	0-10 feet (generally consistent within a block)
Lot Coverage	60-90%
Street pattern / connectivity	linear, grid-like / high
Block Length	300-350 feet
Parking Provision	on-street & behind buildings

EXAMPLE PATTERN



EXAMPLE CHARACTER



UPTOWN EDGE

DESCRIPTION

Uptown Edge surrounds the Uptown Core and continues the urban street grid. It includes the Warehouse District and the area near the future ECU Millennial Campus. Development should extend the mixed use and walkable pattern of the core. With parcels generally larger than in Uptown Core, this area offers opportunity for larger-scale infill and redevelopment projects.

INTENT

- Infill and redevelopment with a mix of uses
- Adapt and reuse existing buildings for non-industrial uses
- Improve public realm with sidewalks and street trees
- Reduce/consolidate surface parking

PRIMARY USES

- Commercial
- Institutional/Civic
- Neighborhood-scale commercial

SECONDARY USES

- Multifamily residential

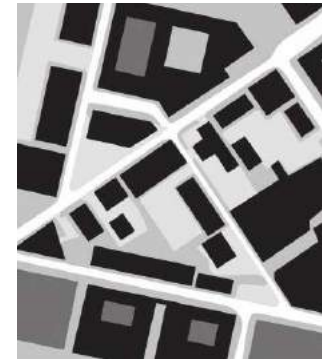
BUILDING BLOCKS

Building Height	1-4 stories
Building Setback (front)	0-15 feet
Lot Coverage	60-70%
Street pattern / connectivity	linear, grid-like / high
Block Length	300-350 feet
Parking Provision	on-street & surface parking to the side of buildings

EXAMPLE PATTERN



existing



future

EXAMPLE CHARACTER



GREENVILLE, NC



GREENVILLE, NC

MIXED USE, HIGH INTENSITY

DESCRIPTION

Large-scale activity centers that contain places to live, work, and shop integrated in a walkable pattern. Multi-story mixed use buildings are located close together and near the street. Large floorplate buildings may support uses that serve the broader community and region.

INTENT

- Vertical mixed use buildings (residential or office above commercial) as well as multi-story single-use buildings that are integrated in a walkable street pattern
- Accommodate parking on-street, behind or to one side of buildings, or in parking structures; limit curb cuts that break main pedestrian ways; wrap parking structures with other uses or decorative elements; light parking well for safety.
- Provide pedestrian and vehicular connection to surrounding development

PRIMARY USES

- Office
- Commercial
- Multifamily residential

SECONDARY USES

- Institutional/Civic

BUILDING BLOCKS

Building Height	3-6 stories
Building Setback (front)	0-10 feet (generally consistent within a block)
Lot Coverage	70-80%
Street pattern / connectivity	linear, grid-like / high
Block Length	300-350 feet
Parking Provision	on-street, shared structures, or surface lots behind buildings

EXAMPLE PATTERN



EXAMPLE CHARACTER



MIXED USE

DESCRIPTION

Small-scale activity centers that contain places to live, work, and shop integrated in a walkable pattern. Mixed Use buildings are located close together and near the street. Buildings tend to be smaller than Mixed Use Center, High Intensity, supporting primarily locally-oriented uses and serving as a transition in intensity to nearby neighborhoods.

INTENT

- Vertical mixed use buildings (residential or office above commercial) as well as various single-use buildings that are integrated in a walkable street pattern
- Accommodate parking on-street, behind or to one side of buildings, or in parking structures; limit curb cuts that break main pedestrian ways; wrap parking structures with other uses or decorative elements; light parking well for safety
- Provide pedestrian and vehicular connection to surrounding development

PRIMARY USES

- Office
- Commercial
- Multifamily residential

SECONDARY USES

- Institutional/Civic

BUILDING BLOCKS

Building Height	2-3 stories
Building Setback (front)	0-20 feet (generally consistent within a block)
Lot Coverage	60-80%
Street pattern / connectivity	linear, grid-like / high
Block Length	300-350 feet
Parking Provision	on-street, shared structures, or surface lots behind buildings

EXAMPLE PATTERN



EXAMPLE CHARACTER



COMMERCIAL

DESCRIPTION

Primarily community- and regional-scale commercial development situated near and along major roadway corridors. Existing development is characterized by buildings set back from streets behind surface parking. That existing pattern should evolve to become more walkable with shorter blocks, buildings near streets, shared parking, and connections to surrounding development.

INTENT

- Provide connectivity to nearby uses (paths, streets)
- Locate new buildings near street on at least one side and accommodate parking to the side or rear of buildings
- Improve/provide public realm features such as signs, sidewalks, landscaping
- Reduce access-points into development for pedestrian and vehicular safety
- Reduce and consolidate surface parking

PRIMARY USES

- Commercial (small and large format)
- Office

SECONDARY USES

- Institutional/Civic

BUILDING BLOCKS

Building Height	1-4 stories
Building Setback (front)	15-30 feet (generally consistent within a block)
Lot Coverage	50-80% including surface lots
Street pattern / connectivity	multi-lane thoroughfares and wide connectors / low
Block Length	300-500 feet
Parking Provision	surface lots

EXAMPLE PATTERN



existing



future

EXAMPLE CHARACTER



GREENVILLE, NC



COLUMBUS, OH



WORTHINGTON, OH

OFFICE / INSTITUTIONAL

DESCRIPTION

These areas serve as a transition between more intense commercial areas and surrounding neighborhoods. The form of future development should take a more walkable pattern with shorter blocks, buildings near streets, shared parking, and connections to surrounding development.

INTENT

- Provide connectivity to nearby uses (paths, streets)
- Locate new buildings near street on at least one side and accommodate parking to the side or rear of buildings; cluster buildings to consolidate and share surface parking
- Improve/provide public realm features such as signs, sidewalks, landscaping
- Reduce access-points into development for pedestrian and vehicular safety

PRIMARY USES

- Office
- Institutional/Civic

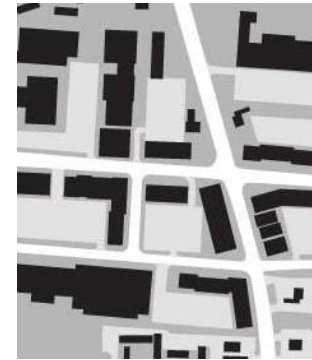
BUILDING BLOCKS

Building Height	1-4 stories
Building Setback (front)	15-30 feet (generally consistent within a block)
Lot Coverage	50-80% including surface lots
Street pattern / connectivity	multi-lane thoroughfares and wide connectors / low
Block Length	300-500 feet
Parking Provision	surface lots

EXAMPLE PATTERN



existing



future

EXAMPLE CHARACTER



GREENVILLE, NC



CHICAGO, IL

UPTOWN NEIGHBORHOOD

DESCRIPTION

Uptown Neighborhood is a primarily residential area surrounding the Uptown Core and Uptown Edge. It features a grid street pattern and mix of residential building types on small lots, with some commercial, office and civic uses.

INTENT

- Improve/maintain streetscape features such as consistent sidewalks, street trees, and lighting
- Introduce neighborhood-scale commercial centers at key intersections
- Address blight/property maintenance
- Address historic preservation efforts

PRIMARY USES

- Single-family residential
- Two-family residential

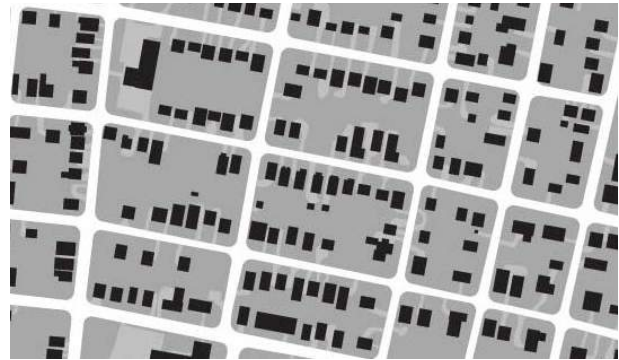
SECONDARY USES

- Multifamily residential
- Commercial (neighborhood scale)
- Institutional/Civic (neighborhood scale)

BUILDING BLOCKS

Building Height	1-2 stories
Building Setback (front)	10-30 feet (generally consistent within a block)
Lot Coverage	40-60%
Street pattern / connectivity	linear, grid-like / high
Block Length	250-400 feet
Parking Provision	on-street & private off-street

EXAMPLE PATTERN



EXAMPLE CHARACTER



TRADITIONAL NEIGHBORHOOD, MEDIUM-HIGH DENSITY

DESCRIPTION

Primarily residential area featuring a mix of higher density housing types ranging from multifamily, townhomes, and small-lot single-family detached. They are typically located within a walkable distance to a neighborhood activity center. Traditional neighborhoods should have a walkable street network of small blocks, a defined center and edges, and connections to surrounding development.

INTENT

- Provide streetscape features such as sidewalks, street trees, and lighting
- Allow neighborhood-scale commercial or mixed use centers at key intersections within neighborhoods

PRIMARY USES

- Multifamily residential
- Single-family residential attached (townhomes) and detached (small-lot)

SECONDARY USES

- Institutional (neighborhood scale)

BUILDING BLOCKS

Building Height	2-3 stories
Building Setback (front)	10-30 feet (generally consistent within a block)
Lot Coverage	40-60%
Street pattern / connectivity	linear, grid-like / high
Block Length	250-400 feet
Parking Provision	on-street & private off-street

EXAMPLE PATTERN



EXAMPLE CHARACTER



TRADITIONAL NEIGHBORHOOD, LOW-MEDIUM DENSITY

DESCRIPTION

Residential area with a mix of housing types on small lots with a single-family neighborhood appearance. Traditional neighborhoods should have a walkable street network of small blocks, a defined center and edges, and connections to surrounding development.

INTENT

- Provide streetscape features such as sidewalks, street trees, and lighting
- Introduce neighborhood-scale commercial centers at key intersections

PRIMARY USES

- Single-family residential
- Two-family residential
- Attached residential (townhomes)

SECONDARY USES

- Multifamily residential
- Small-scale Institutional /Civic (churches and schools)

BUILDING BLOCKS

Building Height	2-3 stories
Building Setback (front)	10-30 feet (generally consistent within a block)
Lot Coverage	40-60%
Street pattern / connectivity	linear, grid-like / high
Block Length	250-400 feet
Parking Provision	on-street & private off-street

EXAMPLE PATTERN



EXAMPLE CHARACTER



RESIDENTIAL, HIGH DENSITY

DESCRIPTION

Residential areas composed primarily of multifamily housing in various forms. Defined by existing development patterns where building size and style tend to be consistent within a development, with large blocks, and limited connectivity between different building types and uses. Future development should take a more traditional neighborhood pattern where different residential types are connected in a walkable pattern. High density residential is typically appropriate near activity centers and corridors.

INTENT

- Provide better vehicular and pedestrian connectivity between developments
- Improve architectural variety and site design for new developments
- Improve streetscape features such as consistent sidewalks, lighting and street trees

PRIMARY USES

- Multifamily residential
- Two-family residential
- Attached residential (townhomes)

SECONDARY USES

- Office
- Single-family detached residential (small lot)
- Institutional/Civic (neighborhood scale)

BUILDING BLOCKS

Building Height	2-4 stories
Building Setback (front)	20-30 feet (generally consistent within a block)
Lot Coverage	20-30%
Street pattern / connectivity	wide connectors with curving residential streets / low
Block Length	350-500 feet
Parking Provision	on-street & private off-street

EXAMPLE PATTERN



EXAMPLE CHARACTER



RESIDENTIAL, LOW-MEDIUM DENSITY

DESCRIPTION

Residential, Low to Medium Density areas are primarily single-family developments arranged along wide, curvilinear streets with few intersections. Building and lot size range in size and density but tend to be highly consistent within a development with limited connectivity between different residential types and non-residential uses.

INTENT

- Provide better pedestrian and vehicular connectivity between residential developments
- Improve streetscape features such as consistent sidewalks, lighting, and street trees

PRIMARY USES

- Single-family detached residential

SECONDARY USES

- Two-family residential
- Institutional/Civic (neighborhood scale)

BUILDING BLOCKS

Building Height	1-2 stories
Building Setback (front)	20-30 feet (generally consistent within a block)
Lot Coverage	20-30%
Street pattern / connectivity	wide connectors with curving residential streets / low
Block Length	350-500 feet
Parking Provision	private off-street

EXAMPLE PATTERN



EXAMPLE CHARACTER



UNIVERSITY INSTITUTIONAL

DESCRIPTION

Mainly comprised of ECU's Main Campus, surrounding facilities (athletic fields), and the future Millennial Campus. The core of the campus area tends to cluster buildings in a walkable pattern. At the edges of the campus are related facilities and parking areas.

INTENT

- Encourage better physical links between Uptown and ECU
- Support campus development as described in *A Campus Within Context, A Comprehensive Master Plan for East Carolina University (2012)* and in potential master plan updates by coordinating infrastructure improvements and leveraging investments to revitalize adjacent areas.

PRIMARY USES

- Institutional/Civic

SECONDARY USES

- Office
- Multifamily residential

BUILDING BLOCKS

Building Height	1-5 stories
Building Setback (front)	0-50 feet (generally consistent within a block)
Lot Coverage	30-60%
Street pattern / connectivity	narrow, curvilinear, grid-like / high
Block Length	200-600 feet
Parking Provision	surface lots and structures

EXAMPLE PATTERN



EXAMPLE CHARACTER



ECU, GREENVILLE, NC



ECU, GREENVILLE, NC

MEDICAL CORE

DESCRIPTION

This is the core of Vidant Medical Center and ECU's Health Sciences Campus. As an economic engine for Greenville, development in the Medical Core should continue to expand the primary activities of the two institutions.

INTENT

- Maintain the primacy of medical and medical office uses
- Encourage growth through infill and redevelopment within the medical core both in a horizontal pattern (developing underutilized land) and vertically through multi-story buildings and structured parking
- Consider accessibility to transit services and pedestrian connectivity within the medical core and adjacent area

PRIMARY USES

- Institutional/Civic
- Medical Office

SECONDARY USES

- Office

BUILDING BLOCKS

Building Height	3-8 stories
Building Setback (front)	20-40 feet
Lot Coverage	60-80% including surface lots
Street pattern / connectivity	multi-lane thoroughfares / low
Block Length	400-800 feet
Parking Provision	surface lots and structures

EXAMPLE PATTERN



EXAMPLE CHARACTER



MEDICAL TRANSITION

DESCRIPTION

Area surrounding the Medical Core with a mix of related medical and institutional uses in a similar pattern to Office / Institutional. This area may serve as a future expansion of the medical core, but should offer amenities that support or complement the vitality of the Medical Core.

INTENT

- Allow development of locally-serving commercial, accommodation, and residential uses
- Improve/provide public realm features such as signs, sidewalks, landscaping
- Reduce access-points into development for pedestrian and vehicular safety
- Locate new buildings near street on at least one side and accommodate parking to the side or rear of buildings; cluster buildings to consolidate and share surface parking
- Consider accessibility to transit services and pedestrian connectivity within the medical core and adjacent area

PRIMARY USES

- Institutional/Civic
- Medical Office

SECONDARY USES

- Mixed Use
- Multifamily residential

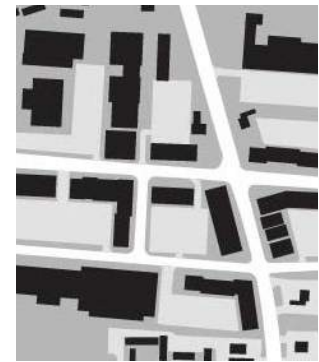
BUILDING BLOCKS

Building Height	1-4 stories
Building Setback (front)	15-30 feet
Lot Coverage	20-60% including surface lots
Street pattern / connectivity	multi-lane thoroughfares / low
Block Length	400-800 feet
Parking Provision	shared structures, or surface lots behind buildings

EXAMPLE PATTERN



existing



future

EXAMPLE CHARACTER



DURHAM, NC



COLOMBUS, OH

INDUSTRIAL / LOGISTICS

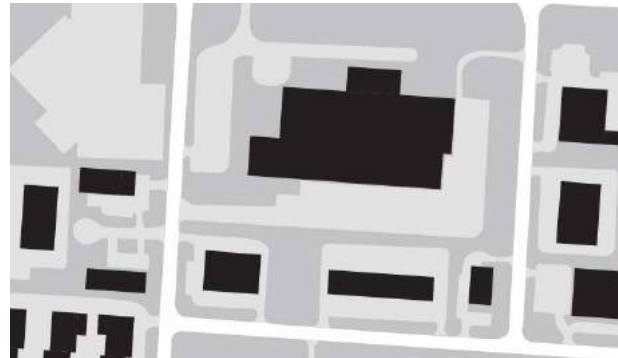
DESCRIPTION

Area is characterized by warehouses and light manufacturing operations and related office uses. It includes the Greenville Industrial Park, airport area, and Southwest Bypass Corridor.

INTENT

- Encourage expansion of light industrial, assembly and research uses
- Encourage the use of higher-quality building materials and landscaping for highly-visible sites

EXAMPLE PATTERN



EXAMPLE CHARACTER

PRIMARY USES

- Industrial
- Light industrial
- Research and assembly
- Warehousing

SECONDARY USES

- Office
- Commercial

BUILDING BLOCKS

Building Height	1-2 stories (primarily 1 story)
Building Setback (front)	100-400 feet (tends to vary from lot to lot)
Lot Coverage	20-60% including surface lots
Street pattern / connectivity	multi-lane thoroughfares / low
Block Length	1000-3000 feet
Parking Provision	surface lots



POTENTIAL CONSERVATION / OPEN SPACE

DESCRIPTION

Potential Conservation / Open Space land is typically located in areas that contain existing parkland, needed land buffers, exhibit potential for flooding, or are deemed inappropriate for development due to physical or environmental barriers. Some land within this area may not contain barriers to development, or there may be reasonable mitigation. Site analysis is needed to determine development capabilities in these areas.

The Future Land Use and Character Map identifies certain areas as Potential Conservation / Open Space. Much of this area is designated based upon data on flood-prone land and environmental constraints that may not correspond precisely with conditions on the ground. Seeing an area designated this way is the beginning of a conversation. When considering rezoning requests or other development proposals, some areas classified as Potential Conservation / Open Space may be determined not to contain anticipated limitations on development, or that existing concerns can reasonably be mitigated. In such cases, the future preferred land use should be based on adjacent Land Use and Character designations, contextual considerations, and the general policies of the comprehensive plan.

EXAMPLE CHARACTER



INTENT

- Conserve environmentally-sensitive land
- Buffer incompatible land uses with open space
- Provide open space network through the city for recreation
- Conservation/Open Space buffers adjacent to industrial development should be maintained at a width based on the type of industry and its potential to create compatibility problems.
- Greenways and greenway connectors should be maintained to be consistent with the Greenways Plan.

Tiered Growth Framework

The Tiered Growth Framework is a policy tool that can help manage growth of the city's corporate limits by setting out areas to be served and developed in the next phase of planning, as well as priority areas for growth and redevelopment within the planning horizon (10 years). It aligns the Horizons Future Land Use and Character Map and GUC's future water and sanitary sewer service plans and ensures these plans are supportive of economic development targets for the city. The purpose of the Tiered Growth Framework is to:

1. Better coordinate interjurisdictional long-term planning between the City of Greenville, adjacent municipalities, Pitt County, and GUC.
2. Encourage long-term fiscally sustainable growth by better managing the extension of taxpayer-funded city services.
3. Encourage infill development.
4. Provide more predictability to developers, landowners, and farmers about future growth and annexations.
5. Provide better policy guidance to the Greenville City Council regarding annexations, city service provision, development fees and incentives, and locations for capital improvements.

The map sets out Primary, Secondary and Future Service Areas within the city's planning area that define the preferred timing of public service extensions (water, wastewater, etc.) that support development. It also sets out a Preferred Growth Area to encourage increased density and redevelopment in targeted economic development locations.

Primary Service Area: Land where provision of services is preferred and encouraged within the *Horizons 2026* timeline. Annexation is also envisioned as a part of the agreement to provide services.

Area includes:

- Existing incorporated areas
- Areas within the existing ETJ
- Areas that GUC does or can serve today

Secondary Service Area: Land where provision of

services is permitted within the *Horizons 2026* timeline. Annexation would be a part of the agreement to provide services. Additional care should be taken to analyze whether the requested type of development can be realized within the Primary Service Area instead. This area includes:

- Areas GUC has identified as having sewer extension capability through gravity lines; and
- The east side of Southwest Bypass.

Future Service Area: Land where provision of services and new development is beyond the *Horizons 2026* timeline.

The area includes:

- Areas currently outside of GUC's current plans for sanitary sewer extension through gravity lines; and
- Areas within the *Horizons 2026* Study Area boundary not covered by the Primary or Secondary Service Areas.

Preferred Growth Areas: Land where the city encourages growth through increased density and redevelopment within the *Horizons 2026* timeline.

The area includes:

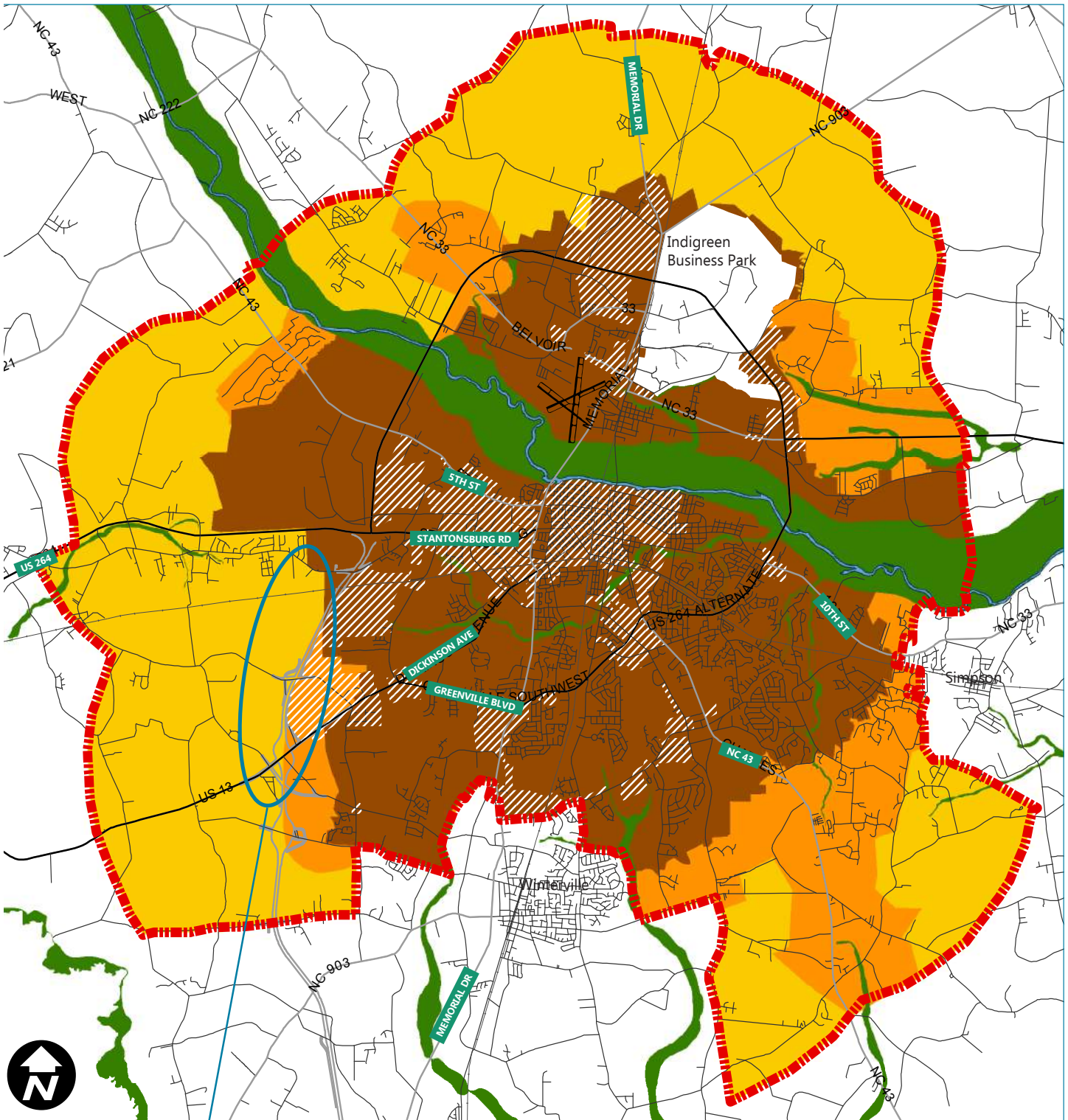
- Uptown Greenville and surrounding areas;
- Economic development targets for new employment developments, including near the Southwest Bypass;
- ECU campus and Millennial District properties; and
- The Medical District.

How To Use the Tiered Growth Map

The Tiered Growth Map can be used in three main ways:

1. **Guide annexation decisions.** This map provides leaders with a rational basis for making annexation decisions and is supported by policies in this chapter.
2. **Identify Areas to Provide Incentives.** This map identifies areas where growth is preferred and can be encouraged through incentives. One incentive example is to allow higher density development by-right, as opposed to requiring a special use permit in preferred growth areas.
3. **Coordinate Planning.** The Tiered Growth Framework sets out a framework for coordinating the plans of the city, GUC, and Pitt County on an ongoing basis as part of five year updates to the *Horizons* Plan.

Tiered Growth Map



Note: Land West of the Southwest Bypass falls outside of GUC's existing extension capability for gravity sewer lines. It is located in the Future Service Area. This may warrant revisiting as planning and development around the Southwest Bypass progresses.

- Primary Service Area**
- Preferred Growth Areas**
- Secondary Service Area**
- Future Service Area**

Goals & Policies

Goal 1.1. Focused Approach to Growth and Reinvestment

Greenville will have a variety of mixed use districts, employment centers, neighborhoods, and community corridors throughout the city that have distinct characteristics and are anchored by higher intensity transit supporting nodes.



Policy 1.1.1. Guide Development with the Future Land Use and Character Map

The Future Land Use and Character Map is the primary guide for planning and policy, development proposals, and rezoning requests. New public and private development should be consistent with the map and character types.

Policy 1.1.2. Promote Transit Supportive Nodes

Promote the development of a network of compact nodes of walkable mixed use development that can support transit.

Policy 1.1.3. Maintain Valued Areas

Improve and maintain the walkability, on-street character, and integrity of areas that Greenville's citizens value as designated in this plan and in future local advocacy. Special attention should be placed on residential neighborhoods.

Policy 1.1.4. Encourage the Evolution of Commercial Areas

Promote the evolution of commercial areas from primarily automobile-oriented to walkable mixed use

areas as identified in the Future Land Use and Character Map. This evolution will likely occur incrementally and over time.

Policy 1.1.5. Transform Key Nodes and Districts

Promote compact and walkable mixed use development within key nodes throughout the city as identified by the Future Land Use and Character Map and the Future Growth Framework Map in this chapter.

Policy 1.1.6. Guide Development Using the Tiered Growth Approach

Use the Tiered Growth Map to guide decision-making regarding development approaches, and consider providing incentives to developments located within the Preferred Growth Area.

Community Voices: We Want...

- Greenville to be full of unusual and beautiful buildings.
- Increased development density and more infill.
- Greenville to be more walkable.
- More quality of life amenities.
- Greenville to be a destination of choice for transitioning veterans and military retirees
- To include artists.
- More accessible grocery stores.
- Attractive public spaces.
- Growth and development north of the river.
- More nodes of mixed use walkable development.
- Uptown-style development all over Greenville.
- More activities for young people.
- Greenville to be a place to move back to in late retirement.
- Great jobs in walking distance.
- More independent coffee shops and nightspots.
- Attractive housing close to Uptown shops and restaurants.

Policy 1.1.7. Coordinate Land Use and Transportation Planning

The city should coordinate land use and transportation planning to ensure that transportation infrastructure is compatible and promotes the Future Land Use and Character Map.

Goal 1.2. Active & Vibrant Places

Growth and development will build on Greenville's unique character - it's cultural history and local architecture - to create exciting, meaningful, and vibrant places that improve the city's livability and foster civic pride.



Policy 1.2.1. Improve the Design of First Floor Building Facades

First floor building facades along important pedestrian corridors, particularly in Uptown, should include a minimum percentage of windows. Other design strategies that showcase visible activity in the building may be an appropriate alternative. This visibility improves the walkability and safety of streets.

Policy 1.2.2. Showcase Terminating Vistas

Developments should consider built and natural terminating vistas at "T" intersections to enhance the public realm and create memorable places for residents and visitors.

Policy 1.2.3. Frame Public Space

Great spaces are defined by their border. The borders of parks, plazas, and other public spaces should have windows and active storefronts that provide vibrance and safety. When possible, blank walls and high speed roads should be avoided on these borders.

Policy 1.2.4. Develop Cohesive Streetscapes

Streetscapes should include pedestrian amenities including sidewalks on both sides of the street, street trees, pedestrian-scaled lighting, and where possible on-street parallel parking and protected bicycle lanes. There should be a cohesive streetscape design within a neighborhood or district.

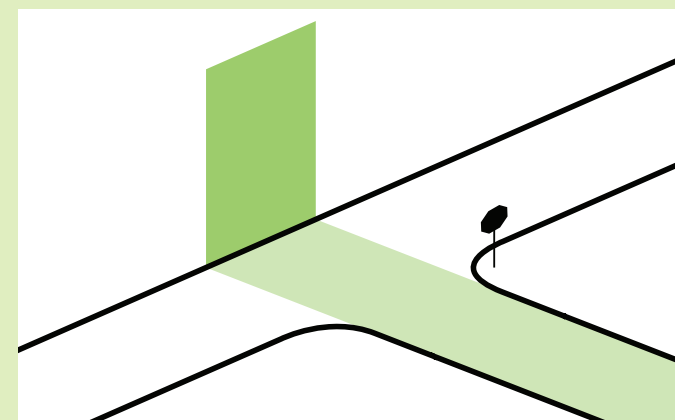
Policy 1.2.5. Reduce Off-Street Parking Requirements

Off-street parking should be located behind commercial buildings. Parking lots or structures should be shared between proximate businesses, residences, and mixed use structures. The city should work with developers to reduce the amount of surface parking constructed and the negative environmental impacts of impermeable surface area resulting from excess pavement.

Policy 1.2.6. Discourage Strip Mall Development

One-story strip commercial development, with large parking lots located between the building and the street, is discouraged in new development and redevelopment projects.

Terminating Vistas



Concept



Flags capping Evans St.

Policy 1.2.7. Support Urban Farming

Support urban farming on empty lots, city parks, and residential lawns. Ensure the city does not have barriers to allowing vegetable gardens on residential property. Allow community garden plots to flourish on public and private lands

Policy 1.2.8. Promote a Mix of Housing Types

Promote a mix of housing types that support a variety of household incomes and family sizes within and in walking distance to mixed use developments that coincide with regional and community activity centers.

Policy 1.2.9. Support Special Events

Support special events, including festivals, parades, musical performances, and some sporting events in and around the Uptown area and throughout the entire city.

Goal 1.3. High Quality Infill and Redevelopment

Infill and redevelopment strategies will be pursued. Empty lots in developed areas will be built on. Aging sites served by infrastructure and utilities will be remediated and revitalized. Gaps between developed areas will be filled with transitions that respect uses they currently separate.



Policy 1.3.1. Support Infill and Redevelopment

Promote development and redevelopment throughout the city with a concentration of these projects in the Uptown Core of the Future Land Use and Character map and the Primary Service Area of the Tiered Growth Map in order to balance the city's tax base, reduce service and maintenance expenditures, and make smart long term investments that use taxpayer dollars wisely. This is generally preferred over new peripheral development.

Policy 1.3.2. Support Transitioning Mixed Use Centers

Support the transition of automobile-oriented commercial areas including any outdated malls where parking is located between the street and the building to walkable mixed use centers where buildings are located in front of parking and close to the sidewalk.

Policy 1.3.3. Enable Redevelopment of Housing Areas at Risk of Disinvestment

Enable older housing developments with high vacancy rates to be redeveloped by making them attractive to new investment as their useful life ends. This can be done by zoning the areas as mixed use, or through some transitional zoning category that promotes redevelopment of these areas.

Goal 1.4. A Vibrant Uptown

Greenville will have a beautiful and vibrant Uptown with active public spaces. Safe and exciting streets will be active throughout the morning and evening. Diverse housing choices will be offered in Uptown for people of all ages where there will be many shopping opportunities, a unique connection to River Park North, reused historic structures, and a variety of employment spaces for companies large and small.



Policy 1.4.1. Activate Town Common and First Street

Activate Town Common by promoting compact, inspiring, mixed use buildings along First Street. Orient corner buildings toward both Town Common and adjacent streets.

Policy 1.4.2. Foster High Density Infill Development

Foster development of high density mixed use buildings in and around Uptown that create a more vibrant pedestrian environment and provide a mix of new housing and office spaces.

Policy 1.4.3. Promote Street-oriented Design

All new buildings and redevelopment of existing buildings in the Uptown area should be oriented toward the street and enhance the pedestrian realm and vibrancy of the street.

Policy 1.4.4. Support Parking that Fits the Uptown Character

Where parking is needed in Uptown, entrances and exits should occur off of major pedestrian thoroughfares. In most of Uptown, this means placing them on east-west streets. Curb cuts to parking should accommodate. Where structured parking decks are necessary, they should be hidden from the main street view, wrapped with other uses, or wrapped with aesthetic elements. Parking should be well lit for safety.

Policy 1.4.5. Support and Control Uptown Nightlife

Promote Uptown as Greenville's vibrant and walkable nightlife district that supports a variety of high quality and responsible drinking and restaurant establishments. A thriving nightlife can attract and retain the young professional workers that in turn attract high quality employers. This does not mean nightlife activities need to be allowed to run out of control. Appropriate standards for these businesses should be enforced so that Uptown can be enjoyed safely and responsibly.

Policy 1.4.6. Promote Quality Signage

Business and traffic signage in Uptown should enhance the character of Uptown. Traffic signage should be limited where alternative options are available.

Policy 1.4.7. Promote Context-Sensitive Transportation Infrastructure

Transportation infrastructure should be designed and built considering the development context, and designed to improve navigability of Uptown for pedestrians, bicyclists, and drivers.

Policy 1.4.8. Maintain Uptown's Historic Character While Increasing Density

Uptown's historic character should be restored and maintained. As the density of uptown increases, care should be taken to preserve the historic fabric, particularly when renovating buildings deemed to have historic or cultural value. New construction should be sensitive to the character of the area, using design elements from historical buildings and not blocking or damaging existing facades.

Policy 1.4.9. Work with ECU on Millennial Campus in Uptown

Work with ECU on the development of the Millennial Campus in Uptown. There should be harmony between the needs of the university and the plans of the city. Campus buildings can contribute to quality design in Uptown.

Policy 1.4.10. Enhance Gateways

Gateways should mark the entrance into the Uptown area in order to brand the districts and create a sense of place. They should represent the cultural, economic, and environmental values of Greenville.

Policy 1.4.11. Plant Street Trees

Street trees should be placed within short increments along all possible streets. In commercial parts of Uptown, street trees should be placed in tree wells to maintain wide and accessible sidewalks.

Goal 1.5. A Valued History

Greenville will take advantage of the legacy of its past. It will protect and enhance historic buildings and areas. Old buildings will have new life breathed into them with updated systems and interior space designed to serve the market. Neighborhoods will showcase their history and strengthen the connection to Greenville's past.



Policy 1.5.1 Preserve Historic Buildings, Landmarks, and Areas

Cultural and historic buildings should be restored and reused in order to foster a sense of place, promote green building practices, and emphasize Greenville's unique heritage. New buildings in historic areas should be compatible with the surrounding neighborhood. Greenville's Historic District and Local Landmark Design Guidelines should continue to be maintained and used. Historic cemeteries should be preserved for their heritage. Preserve heritage important to the history of minority communities in Greenville.

Policy 1.5.2. Encourage Adaptive Reuse of Historic Structures

Encourage developers to preserve historic structures and adapt them to fit modern day needs while preserving their unique character. Use this strategy for residential, commercial, industrial, and warehouse buildings. Other communities have used this strategy to preserve unique historical structures built for uses no longer in demand, such as old tobacco warehouses.

Policy 1.5.3. Support Historic Neighborhoods

Encourage revitalization of historic neighborhoods in Greenville in a manner that preserves and enhances the neighborhood identity and character of historic areas.



Greenville's Rich History

Greenville's built environment is enhanced by the rich history of its historic buildings and landmarks, including the Sheppard Memorial Library, built in 1930.

Source above: ECU Digital Collection; below: Local Landmarks Story Map



Actions

Action 1.1. Adopt Mixed Use Zoning Districts

The city should move quickly to adopt a minimum of two new mixed use zoning districts that are consistent with the descriptions, intents, and building blocks of the Mixed Use, High Intensity (MUHI) and Mixed Use (MU) character districts outlined in this chapter. Additionally a strategy should be developed for implementing the Uptown Core (UC) and Uptown Edge (UE) districts that may be enacted through new zoning districts or overlay districts. The city may consider implementing a form-based code district in certain areas. To ensure the application of the zoning district, incentives could be provided for new development within these areas.

Action 1.2. Rezone Parcels in Areas Designated for Future Mixed Use

Upon adoption of new zoning districts, develop rezoning procedures on parcels that fall within mixed use areas on the Future Land Use and Character Map. This should be done in order to ensure cohesive mixed use environments within these strategic locations.

Action 1.3. Adopt a Unified Development Ordinance (UDO)

Through a robust public engagement process, the city should adopt a UDO that incorporates modern best practices in development regulations and streamlines the permitting process in order to improve the built environment, promote economic development, and use staff time efficiently. The city may consider an ordinance with form-based districts for future mixed use areas that enhance readability of the code and incorporate design standards for key mixed use, employment, and commercial areas throughout the city.

Action 1.4. Adopt Mandatory Design Standards in Uptown

Because of the importance of a vibrant Uptown District for Greenville's economic success and quality of life improvement, the city should adopt mandatory design standards within and around the Uptown District that will eventually become incorporated within the city's updated development ordinance.

The city should also consider adopting design guidelines for mixed use areas as indicated on the Future Land Use and Character Map and provide incentives to promote adherence to the guidelines.

Action 1.5. Implement *The Dickinson Avenue Corridor Study*

The city should continue to work with public and private partners throughout the community to implement *The Dickinson Avenue Corridor Study* which was adopted in November of 2014. This plan incorporates many of the actions of the *Corridor Study*, and the city should continue to carry out the near- and mid-term actions and monitor progress in the plan's implementation.



The Dickinson Avenue Corridor Study, prepared in 2014, gives recommendations to a small but important area of the city.

Action 1.6. Simplify the Entitlement Process

The city should perform a comprehensive review of the development permitting process and work to continue simplifying and enhancing the review process in order to foster high quality development. The city should continue or begin to:

- Consider providing an online permit manager;
- Maintain a one-stop-shop for permitting of most development projects;
- Maintain the online zoning map and update the interface as user-friendly technology progresses;
- Create a new ombudsman position to facilitate private development projects, particularly for Uptown or mixed use areas; and
- Consider pre-approved site plans and building types in certain areas.

Action 1.7. Redevelop Properties Along First Street

Given the critical function of Uptown and the overwhelming public support of activating Uptown and Town Common, engage with Pitt County to develop a strategy for redeveloping county-owned parcels along First Street. Development considerations for this area should consider inspiring mixed use anchor projects that activate adjacent streets and the Town Common.

Action 1.8. Develop an Historic Preservation Plan

Develop an historic preservation plan that builds off of existing inventories and other historic preservation

Outdated one-story properties along 1st Street present an enormous redevelopment opportunity to revitalize Uptown. As a part of developing zoning for districts, Greenville should educate developers and residents about the development potential.

resources and sets out a comprehensive strategy for preserving the city's important heritage and cultural resources. The plan should take special care to provide direction on the architectural and historical heritage of properties in Uptown, Skinnerville, Higgs, Riverdale, and any other neighborhood with significant historic character that the city later designates. The plan should discourage demolition of structures with historical importance and prevent incompatible uses that would alter surrounding historical assets. It should also provide for maintaining the inventory of relevant structures and explore creative ways to market these treasured landmarks.

Action 1.9. Develop Corridor Development Standards

The City will undertake development of commercial corridor development standards that can be applied through established commercial zoning districts, or through an overlay district. These standards will be designed to achieve the policies of this plan, specifically to encourage the evolution of established commercial areas to more vibrant and visually appealing places and to design commercial corridors to better accommodate multiple modes of transportation and improve safety for bikers and walkers. These standards could include requirements for placement of parking to the side or rear of buildings, orienting and placing buildings so that they frame the road, enhanced landscaping standards, building façade and roofline design standards, connectivity requirements with adjacent developments, or other requirements. The standards will often be applied in redevelopment contexts. To offset new regulations in a redevelopment context (which can sometimes be a deterrent to reinvestment) one option is to develop these standards as a menu for options using a point system, allowing individual property owners the flexibility to determine what improvements will work for a given site and context.





Hornby St., Vancouver, Canada
Photographer Paul Krueger

Enhancing Mobility

Greenville's transportation corridors will provide accessibility to destinations throughout the city by complementing the built environment and offering well-connected, safe, and attractive travel networks for bicyclists, pedestrians, drivers, and users of public transportation. Compact development and street designs that serve all types of users will reduce automobile collisions and improve travel safety throughout Greenville. The city will be regionally accessible with an airport established as the primary hub for air travel in eastern North Carolina, exceptional interstate roadways, a navigable and inspiring built environment for visitors, and future planning for regional rail service.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact travel accessibility between places in Greenville and destinations throughout the region.

Concepts and Best Practices to Address

Community Concerns: This section presents fact-based approaches to solving complex interrelated challenges.

Goals & Policies: This section lists the goals our community seeks to accomplish and the policies to guide us there.

Actions: This section provides key proactive actions that the city and interjurisdictional and community partners will take over the coming decade to bring us closer to our community's vision.

Overview

This chapter highlights opportunities to increase transportation options, improve traffic flow, expand access throughout the region, and create a healthy, safe, accessible, and fiscally-sound transportation network for people and industry.

Efficient and affordable transportation is key to building a socially and economically vibrant city. Transportation networks have always been an important component of life in this place. Greenville flourished from its early access to the Tar River and railroad. Increasingly, Greenville residents, visitors, and industries have access to local and regional roadway systems, transit service, air travel, and an expanding greenway system.

Now residents are demanding more choices in how they get around. Nationwide market trends indicate that millennials and baby-boomers want to live where they can reach places by bike or on foot. Demands are increasing for transportation infrastructure that supports safe and affordable mobility options.



Planning Influences

Key Community Issues

For many years, those who lived in Greenville, or visited from surrounding areas by train, walked between the places they needed to go. Small streets defined by short blocks and many connections were built to connect neighborhoods with commercial and employment areas resulting in public spaces built for people.

The advent of the automobile increased the freedom to travel for those who could afford it and connected Greenville to rural parts of Pitt County and the rest of the state. Over time, streets became wider to accommodate larger vehicles travelling at faster speeds. Blocks became longer, decreasing the connected pattern that defined Greenville's earlier years, and parking lots became larger, dominating the landscape and sometimes taking the place of cherished spaces. For many, the car became the only viable way to travel.

This pattern now limits how people can get around, especially children, elderly, the poor, and disabled. Increasing road maintenance costs have begun straining city budgets. A growing number of millennials, baby boomers, and low income earners have started demanding more travel options. As the Greenville population continues to flourish, the growing number of transportation options can become an asset that contributes to the city's growing economic prosperity.

Maintaining transportation systems face increasing public and private costs, changing market demands, volatile oil prices, adverse health trends, and increasing awareness of air pollution and carbon emissions. Greenville is looking to modernize its transportation system to foster the growth of the city's 21st century economy. This helps retain and attract young

professionals, and promotes livability for families and elderly individuals. There is a mismatch in the way Greenville residents want to travel locally and the way they actually travel locally. The following page describes key conditions impacting transportation in Greenville.

How we travel today: % of trips by car, walking, biking, or transit



How we want to travel: % trips by car, walking, biking, or transit



Greenville's Transportation Preference Mismatch

Greenville residents were asked how they currently travel throughout the city and how they would they prefer to travel. Individual inputs were gathered on the Horizons website and during the Workshop for Our Future. Overwhelmingly, respondents indicated that they drive to get places but would rather have a greater variety of viable transportation options.

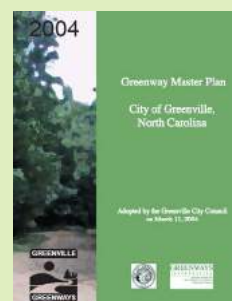
Relevant Plans



Greenville
Urban Area MPO
Metropolitan
Transportation
Plan



Greenville
Urban Area
MPO Bicycle
and Pedestrian
Master Plan



City of Greenville
Greenway
Master Plan

How People in Greenville Travel

Most trips in Greenville are made using a motor vehicle. According to the U.S. Census Bureau Decennial Census and American Community Survey, over 92 % of commuters in Greenville take a car, truck, van, or motorcycle to work. Just over 5 % of workers commute by bike, on foot, or use public transportation. The number of daily commuters into Greenville is nearly three times the number of residents leaving to work elsewhere. The average household in Greenville has 1.61 vehicles and drives an average of 21,000 miles annually, emitting 8.38 tons of greenhouse gases into the atmosphere.

New Transportation Investments

New infrastructure projects will reshape the transportation landscape in Greenville. Upcoming infrastructure investments include the Tenth Street Connector, Dickinson Avenue Modernization, the Southwest Bypass, a bridge connecting Town Common to River Park North, and a variety of roadway improvements and greenway extensions funded by a bond approved by Greenville voters in 2015.

Transportation Safety

In 2013, AAA Carolinas counted 4,572 collisions in 2013 in Pitt County, averaging 318 crashes per 100 million vehicle miles traveled. This made Pitt County the most dangerous county in the state for driving for the past six consecutive years. A disproportionate percentage of those injured and killed on streets are low income and minority residents.

Development Patterns

Greenville's older neighborhoods and commercial centers are walkable, while newer neighborhoods are more difficult to navigate on foot and by bike. Over time, Greenville's built environment has grown in a way that has resulted in a less walkable environment due to wide roads, disconnected curvilinear hierarchical street networks, large setbacks, prominent parking facilities, and separated land uses.

Increased Congestion

Traffic congestion is increasing and impacting people's daily commutes. Over the course of the Horizons planning process, many Greenville residents expressed concern over the growing number of cars on the road and the increasing problem of traffic congestion on city streets, especially during rush hour. While the average commute time in Greenville is lower than the national average, there are certain areas within the city that are particularly congested with automobile traffic

throughout the day, particularly around Vidant Medical Center and some of Greenville's major commercial corridors. As the city grows, traffic will become an increasing concern to motorists, especially if the city continues to grow with the same development pattern.

The Cost of Infrastructure

Road maintenance for an increasing number of roads presents a growing burden for local and state taxes. With the state of North Carolina spending less on transportation smart long-term infrastructure decisions will be key in maintaining adequate transportation systems.

Transit

Three transit providers currently operate in Greenville, including Greenville Area Transit (GREAT), Vidant Medical Center, and ECU Transit. These systems provide critical transportation services to their riders. Each are operated separately and with different goals.

Pitt-Greenville Airport (PGV)

The Pitt-Greenville Airport is located on about 1,000 acres on the north side of the Tar River. It has two runways and is one of ten passenger service airports in North Carolina. Several publicly-owned airports that do not serve passengers are located nearby. PGV depends primarily on Federal Aviation Administration grants for capital improvements. Land planning and community engagement will be important as this airport expands and adds additional carriers.

Community Voices: We want...

- Frequent bus service and more lines.
- Sidewalks and bike paths that are wide and connect to destinations.
- To reduce traffic congestion.
- Transportation for all children to attend events.
- Bus shelters.
- Narrower streets.
- A permanent trolley and Uptown tours.
- Crosswalks with pedestrian lights at intersections.
- To think more about safety, travel for persons with disabilities, travel for seniors and multiple age groups.
- To improve our regional ingress and egress for automobiles.
- To reduce the size of paved parking lots for cars.

Concepts and Best Practices to Address Community Concerns

Most growing communities wrestle with transportation issues. In some instances they are traffic-based, in others they are maintenance-based and in still others they are user-preference-based. At the core, all the issues are about people in the community needing transportation to get to destinations. Looking to the most recent best practices, cities are tackling mobility in a holistic manner. The best and most applicable of recent practice follows.

Street Safety

Slowing Traffic: In cities that have been successful at improving roadway safety conditions, officials discovered that decreasing automobile speeds in urban areas is the most effective way to reduce traffic accidents and save lives. This does not mean increasing the time it takes to travel from place to place. Slowing vehicle speeds can actually improve traffic flow over the long-term. Installing traffic calming devices can reduce automobile speeds, enhance driver attentiveness, and reduce automobile collisions. When collisions do occur, slower speeds help to make the consequences more forgiving. Damage is reduced and people are more likely to survive.

Enhancing Sidewalks: Sidewalks are critical facilities and are proven to reduce pedestrian-vehicle accidents. About 4,500 pedestrians are killed annually in the US. 8% occur walking along roadways. In addition to saving lives of pedestrians, sidewalks also encourage walking and physical activity which can reduce the negative impacts of obesity and related diseases, and positively impact community health. *Further discussion of sidewalks and the health benefits of a pedestrian network can be found in Chapter 7: Growing a Healthy City.*

Redesigning Intersections: Intersection design is important for improving the safety of drivers, bicyclists, and pedestrians. According to the National Association of City Transportation Officials, the design of intersection corners directly impact vehicle turning speeds and pedestrian crossing distances. Minimizing the size of an intersection corner while allowing for truck traffic where necessary is critical to creating compact intersections with safe turning speeds.



Sidewalks and Protected Bike Lanes Promote Safe Travel

Protected bicycle lanes improve travel safety and increase travel options, especially for children and low income families. Bicyclists in North Carolina are eight times more likely to be hit and killed than in Oregon, where bike lanes are more prevalent. Black and Hispanic students are more likely to bike to school, leaving these populations especially vulnerable where there are fewer bicycle facilities.

Image Source: Louisville, KY; Louisville.edu

Designing Driveways: Several communities promote shared driveways and rear parking that is shared between multiple buildings in order to promote better access management and avoid hazards resulting from cars turning into parking lots. Often, access to parking is from a sidestreet and rear alley, avoiding any access from major thoroughfare roads.



Traffic Calming Infrastructure Improves Travel Safety

Bulbouts and other traffic calming facilities improve intersection safety by creating shorter crossing distances for pedestrians. They can also create additional green space and provide a natural filter for stormwater runoff.

Image Source: Houston, TX; kylejack.com

Bicycle Facilities

Benefits: A large and growing body of literature suggests that investments in on-street and off-street bicycle infrastructure and greenways yield long-term returns to city budgets and city economies. Many studies also show that these investments improve health, safety, livability, and equity for racial minorities.

Safety: Protected bike lanes improve transportation safety and encourage healthy travel modes. Cities around the US are investing in protected bike lanes to increase bicycle ridership, reduce motor vehicle speeding, reduce crashes, and improve people's feelings of safety on those streets. College students are especially likely to use bike infrastructure, potentially reducing the number of young drivers on the road. When people become familiar with bicycle lanes, they want more, especially young people.

Financial Impacts: Investments in bicycle infrastructure have proven to be net positive investments. Bicycle parking reduces parking construction and maintenance costs. It costs the same to build parking for 75 bikes as it does for just 4 cars. Bicycling and active transportation can also reduce healthcare costs for employers and individuals.

Bicycle transportation is inexpensive, and can save households substantial amounts of money, indirectly supporting the local economy. According to the Bureau of Transportation Statistics' 2009 Pocket Guide to Transportation, average annual operating cost of a bicycle is \$308, less than 4% that of an average car (\$8,220). Households in automobile-dependent

communities devote 50% more—an extra \$3,000 on average—to transportation than households in communities with better bike and pedestrian facilities. *For the health benefits of bicycles, see Chapter 7: Growing a Healthy City.*

Street Trees

Financial Impacts: Studies indicate that planting urban trees can have positive impacts on transportation, safety, and health. Many studies measuring the net financial impact of trees show that they are fiscally and economically positive investments.

When planted appropriately, street trees reduce long-term road maintenance infrastructure costs by providing shade that prolongs the life of the pavement. Shaded roads can save up to 60% of repaving costs. That could be a considerable sum, considering the amount of pavement in Greenville.

Street trees can also save money otherwise spent on stormwater management infrastructure. Green streets, rain barrels, and tree planting are estimated to be up to six times more effective in managing stormwater per \$1,000 invested than conventional methods.

Travel Safety: Planting street trees can also promote travel safety and reduce crash rates along roads. By placing street trees at short 30-foot intervals between the street curb and the sidewalk, they serve to shade pedestrians from the sun and provide a barrier from moving traffic, creating a more comfortable street.

Street Trees Yield Multiple Benefits

Street trees provide many benefits to cities. In addition to cleaning the air and filtering stormwater, street trees improve health and well-being, ameliorate impacts of urban heat island effect, and promote walkability by providing shade to pedestrians.

Image Source: Wasatch Front Regional Council (Utah)



Street Connectivity

Greater connectivity results in shorter travel distance. Traffic modeling conducted by researchers predicts that a connected road network reduces vehicle miles traveled (VMT) within a traditional neighborhood by 57% compared with conventional designs, both by making trips more efficient, and by making walking and cycling viable options for some trips.

Connectivity promotes safety by slowing down automobile traffic, creating shorter distances between destinations, and providing for more viability among non-automotive forms of transportation. High connectivity - along with narrow streets, home frontages, and a mix of uses - encourages natural surveillance of neighborhoods.

Studies indicate that neighborhoods with shorter blocks and greater connectivity result in significantly shorter emergency vehicle response times and lower expenditures on city services. One study suggested that fire trucks were able to serve about three times more area in highly connected places than in places with disconnected streets (Alba and Beinborn 2005).

Having a highly connected street network also yields benefits for motorists, and emergency services. In instances of traffic accidents or road work, a well-connected street grids provide a greater number of choices when a route becomes unavailable. Compared to long and disconnected street networks, more connected street networks provide shorter travel distance, and greater accessibility to residential dwellings. This increases the efficiency of taxpayer dollars for services such as trash pickup, school buses, city buses, and postal deliveries.

Connectivity: Community Examples

Several communities are implementing connected streets using connectivity indexes and maximum block lengths through their city codes. The connectivity index is calculated by dividing the number of links (street segments) by the number of nodes (street intersections) within a new development.

Franklin, TN (Population 65,000)

- Block length average: 600 ft
- Mid-block connection required
- Street Connectivity Index: 1.65
- Alleys required in residential neighborhood
- Pedestrian access required on cul-de-sacs

Greensboro, NC (Population 280,000)

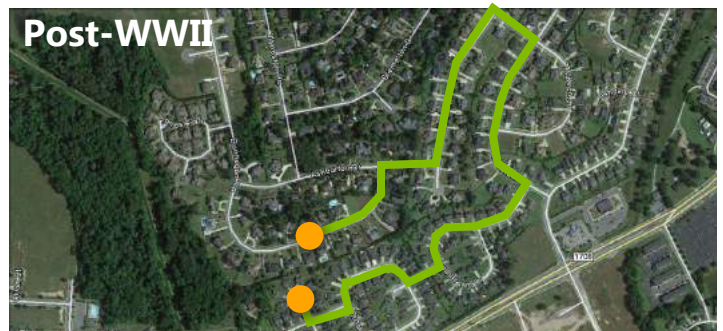
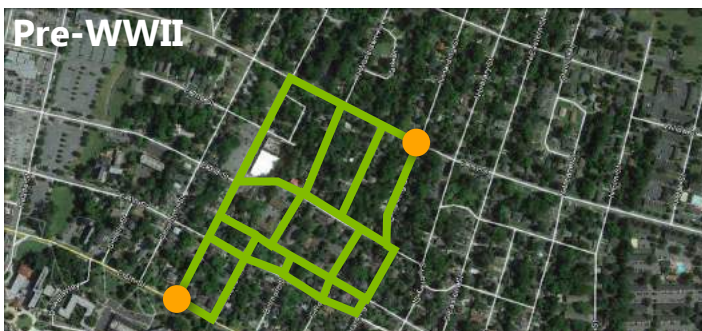
- Traditional Neighborhood Development block length maximum: 600 ft
- Cul-de-sacs prohibited in TND

Medford, OR (Population 75,000)

- Block length maximum: 660 ft
- Block length perimeter maximum: 1,800-2,100 ft (Depending on land use)

Winston Salem, NC (Population 240,000)

- Local street block length maximum: 600 ft



Connected Streets and Short Blocks Slow Traffic and Improve Travel Options

Greenville's older neighborhoods were built using two key design principles: (1) Short blocks and (2) Many connections. Short blocks are important to improve the safety and walkability of the network. They slow traffic and provide a more comfortable walking environment for pedestrians, who are able to see the next intersection. Many connections are important because it diffuses traffic and provides alternative travelways when a road is blocked for emergencies or construction.

Data show that more traffic fatalities occur in places with lower connectivity, higher speeds, separated uses, and higher speed limits. A pedestrian fatality rate of fourteen deaths per million in the United States (47,392 deaths between 2001 and 2010) is more than double the rate in the UK and Germany where the rates are 6.7 and 5.8, respectively. Greater connectivity reduces traffic fatality rates. AAA estimates that traffic crashes cost the US \$300 billion annually in the form of medical expenses, lost wages, pain and suffering, and other measures.

Level of Service

For many years, engineers and transportation planners have used the Level of Service (LOS) approach to determine roadway design. Level of Service is a system that assigns letter grades based on motorist delay. Roughly speaking, a street with free-flowing traffic gets an A, while one where traffic is congested gets an F. Over time, this measure by itself has become outdated and more complete measures have become necessary to supplement the LOS measure.

Some communities have supplemented LOS measures to promote multi-modal transportation. For example, Charlotte still uses LOS in its planning, but in combination with metrics that measure quality of service for cyclists, and pedestrians as well.

The Federal Highway Administration (FHWA) is working to accelerate the adoption of alternatives to LOS and encourages state and local policy makers to consider different performance measures.

Context-Sensitive Design

One of the most effective long term strategies for improving transportation conditions is promotion of efficient land development practices. These methods are addressed in *Chapter 1: Building Great Places* of this plan. In addition to land development adjacent to city streets, street design can also employ low impact development (LID) practices that increase permeable surface area and more sustainably manages stormwater while increasing the greenery along thoroughfares.

Transit

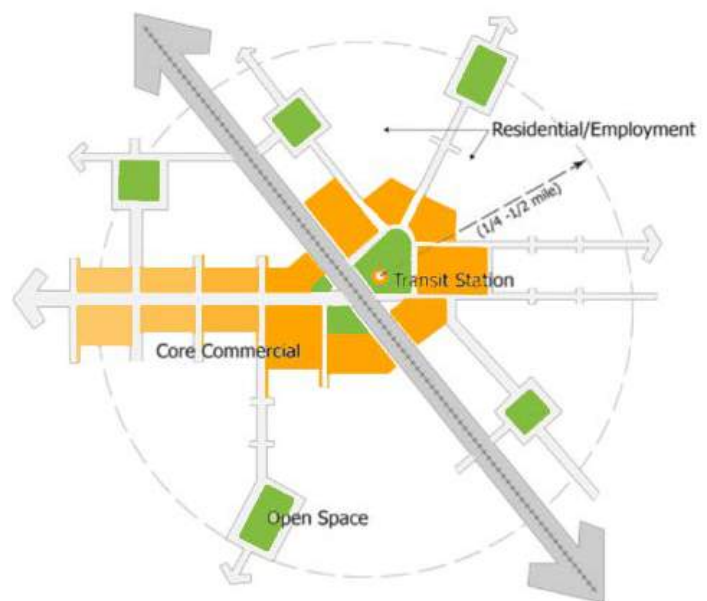
Transit service coordination is critical to a well-functioning transit system in Greenville. Regional transit systems that are not well-coordinated can impose burdens on transit users, discourage transferring among

multiple transit providers, and decrease ridership. Some of the burdens that riders may face in an uncoordinated transit system are unpredictable travel times, long transfer times, and increased fare payments. Successful communities have regular meetings between different transit providers and mechanisms to better coordinate service.

Transit Oriented Development is an important strategy for improving transportation systems in our city. Enhanced access to transit can yield multiple environmental, equity, and affordability benefits.

“Walkable communities are good for social connectedness, good for business, good for the environment, and, most importantly, good for our personal health.”

-Vivek H. Murthy, M.D., M.B.A., Surgeon General, U.S. Department of Health and Human Services



Transit Oriented Development in Greenville

Having walkable mixed use development within a half-mile of transit access is important for two primary reasons. One reason is that generally people are willing to walk up to a half-mile (ten minute walk) to access transit, making transit more accessible to a greater number of people. Another reason is that more potential riders can contribute to the transit system, making more reliable and frequent service viable. *Image Source: 2030palette.org*

Parking

Cities around the country are beginning to assess the damage that has been caused by decades of minimum parking requirements. Multiple studies have sought to calculate the total cost of parking. While the results vary, they show that parking spaces have very high direct and indirect costs to the developer, consumer, and society.

Considering the reality that driving continues to serve as the primary mode of transportation for people in Greenville and other cities, eliminating parking requirements is not an option. Instead communities are turning to several strategies to hide and reduce their parking supply and slowly reduce their dependence upon it, while continuing to provide sufficient parking. Some of these strategies include promoting transit oriented development patterns, requiring that parking be placed behind buildings, providing on-street parking, establishing shared and maximum parking standards, and maximizing the use of existing parking.

Industrial Transportation

Freight transportation is an essential part of urban transportation networks. Municipalities around the US are exploring innovative ways of providing adequate freight transportation without jeopardizing street safety and air quality, including providing suitable infrastructure along freight truck routes, ensuring that truck routes avoid neighborhoods and sensitive areas, and providing access to major roadway systems.

Gateways

Gateways are important entrance and exit points for visitors and residents. They indicate when someone has arrived in the city and often seek to creatively represent the cultural, economic, and environmental values of the municipality or neighborhood. Gateways can market a community and promote civic pride. The city may elaborate on its current gateway signage with additional markers or additional landscaping and design. Signage directing visitors is useful, but larger gateway signs can truly help define a city or a district.



Gateways Help Define the City Entrance

Gateways can mark primary entrances into Greenville and welcome visitors, business interests, and residents. Gateways provide the opportunity to announce your entrance into a special, unique, and memorable place. Using distinct design features gateways can communicate Greenville's unique history, diverse population, and commitment to economic and environmental excellence. Gateways can take many forms including signs, graphics, landscaping, lighting, unique buildings, and other forms of public art.

Images:

Above: Carmel, IN Arts & Design District

Below: Greenville's current sign. Signage on additional approaches is possible.



Goals & Policies

Goal 2.1. Safe Streets

Greenville will help Pitt County cast off its AAA designation as the most dangerous county for travel in North Carolina and will take proactive action to improve the safety of its streets. In so doing, Greenville will become a safe city for many different modes of transportation, improving its quality of life, cost of living, and economic outlook.



Policy 2.1.1. Build More Sidewalks

The city should continue to build and require sidewalks along stretches of road where they are missing, prioritizing areas with low income populations and high pedestrian volumes. All new street construction projects should include sidewalks that enhance walkability and accessibility, and improve safety for pedestrians and motorists. Construction of non-residential development should continue to be held to current city requirements to include construction of sidewalks along thoroughfares and boulevards.

Policy 2.1.2. Improve Intersection Safety

Crosswalks should be lighted, highly visible, and/or of a different texture from the street. Intersection corners should be tightened or bulb-outs installed to provide safer waiting areas for pedestrians and shorten crossing distances. Where feasible and as needed, the city should consider roundabouts at major intersections for new development or redevelopment projects.

Policy 2.1.3. Implement Traffic Calming

Traffic calming infrastructure is encouraged on streets experiencing unsafe levels of speeding, including but not limited to facilities identified in the traffic calming toolbox on the following page.

Policy 2.1.4. Educate Bikers and Drivers

Continue to educate motorists, bicyclists, and pedestrians on transportation safety. Education should be used as a tool to promote safety and to increase knowledge among Greenville residents of the various available transportation options.

Policy 2.1.5. Improve Roadways

Apply on-street parking, bike lanes, and vehicular lane width reductions to streets at the time of roadway repaving, restriping, and redevelopment in order to minimize costs.

Policy 2.1.6. Encourage Alley Creation

Alleys are encouraged in new development and redevelopment projects in order to provide access to rear parking, improve pedestrian and driver safety by reducing curb cuts and driveways, and enhance neighborhood aesthetics by placing trash and recycling bins and utilities behind buildings.

Policy 2.1.7. Improve Lighting

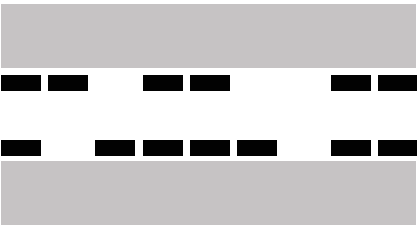
Pedestrian-oriented lighting should be used within neighborhoods and commercial centers and along greenways and sidewalks. The city should promote the use of solar lighting to reduce long-term energy costs, promote sustainability, and reduce light pollution.

Policy 2.1.8. Improve Access Management

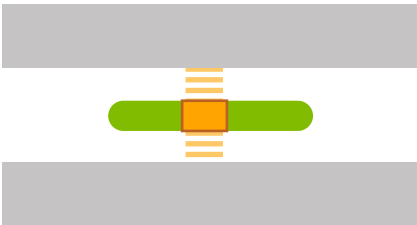
Minimize the number of driveways along arterials to reduce vehicular conflicts, promote pedestrian safety, and improve traffic flow. Encourage rear alleys, rear parking, and combining driveways.

Traffic Calming Toolbox

Below are a few of the traffic calming facilities that our community can use to slow down vehicle speeds and improve travel safety throughout the city.



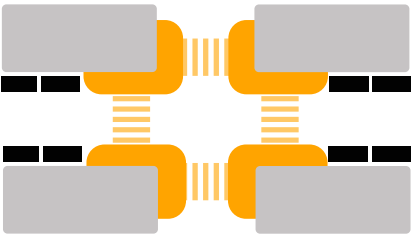
On-Street Parking
On-street parking slows traffic and provides a barrier between moving traffic and sidewalks.



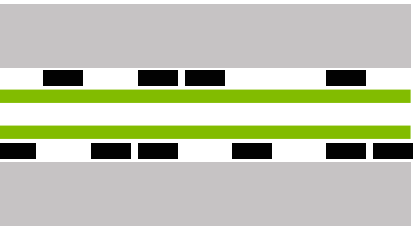
Pedestrian Island
Pedestrian islands provide a safe waiting place for pedestrians crossing the street.



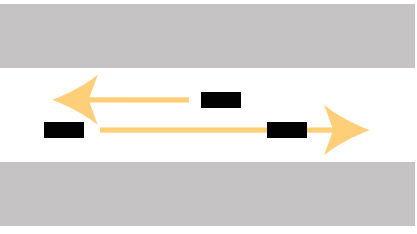
Mid-Block Choker
Mid-block chokers improve safety for pedestrians crossing the street.



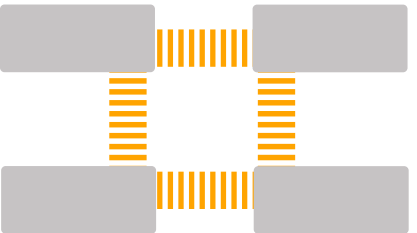
Corner Bulbouts/Neckdowns
Bulbouts slow turning traffic and shorten the crossing distance for pedestrians.



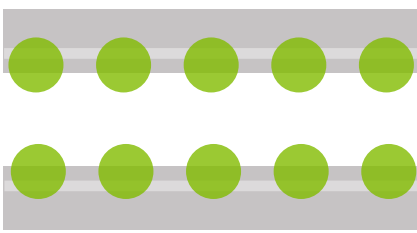
Painted Bike Lanes
Highly visible bike lanes provide additional safety for bicyclists, motorists, and pedestrians.



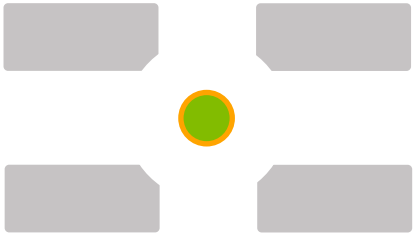
One-Way to Two-Way Streets
One-way streets encourage speeding. Converting them back into two way streets improves safety.



Visible Pedestrian Cross-Walks
Pedestrian cross-walks should be highly visible, sometimes of a textured material like brick.



Sidewalks and Street Trees
Street trees with trees placed at 30-foot intervals between the curb and the sidewalk provide many benefits.



Traffic Circles and Roundabouts
Traffic circles and roundabouts help slow traffic, provide pedestrian safety, and maintain traffic flow.

Goal 2.2. Many Travel Options

Greenville residents and visitors will be able to travel to places throughout the city using a variety of safe, timely, and convenient travel options including, bicycling, riding transit, driving, and walking.



Policy 2.2.1. Expand Safe Bicycle Networks

Where possible, all future road construction and reconstruction projects should incorporate on-street or off-street bicycle facilities. Preferably, on-street bicycle facilities will include a barrier between moving traffic and the bicycle lane.

Policy 2.2.2. Construct Multi-Use Paths and Greenways

Separated multi-use paths are encouraged as both a facility for recreation and a utilitarian mode of travel. Bike paths and greenways should connect neighborhoods to parks and open space, employment and commercial centers, and educational and civic buildings.

Policy 2.2.3. Expand Bicycle Parking

Encourage commercial and multifamily developments and redevelopment projects to incorporate bicycle parking and/or bicycle lockers in an accessible location.

Policy 2.2.4. Plant Trees

All future road construction and, where possible, reconstruction projects should include street trees in order to provide aesthetically pleasing and economically beneficial streetscapes, to provide shade for pedestrians along the sidewalk, and to provide a protective physical barrier between moving traffic and children and others walking on the sidewalk. Preferably trees should be of the appropriate species and located between the sidewalk and the curb either within a planting strip, or in tree trenches with grates. Tree planting best practices should be used to provide for

adequate root zones to ensure the long-term viability of trees and adjacent sidewalks.

Policy 2.2.5. Support Affordable Transportation

When reviewing development proposals, Greenville will consider the affordability of travel between the development and other areas in the city. The purpose of this policy is to promote development in areas that have access to transit, bicycle facilities, existing roads, and are preferably within walking distance of schools, commercial uses, and neighborhoods.

Policy 2.2.6. Supplement Level of Service Measures

In all road construction and reconstruction projects, the city will consider pedestrian, bicycle, and pedestrian quality of service measures in addition to the automobile level of service (LOS) used by transportation planners and engineers. New measures should aim to improve the street's functionality for all users and consider the context of adjacent buildings, circulation, parking, and landscaping.

Policy 2.2.7. Improve Street Connectivity

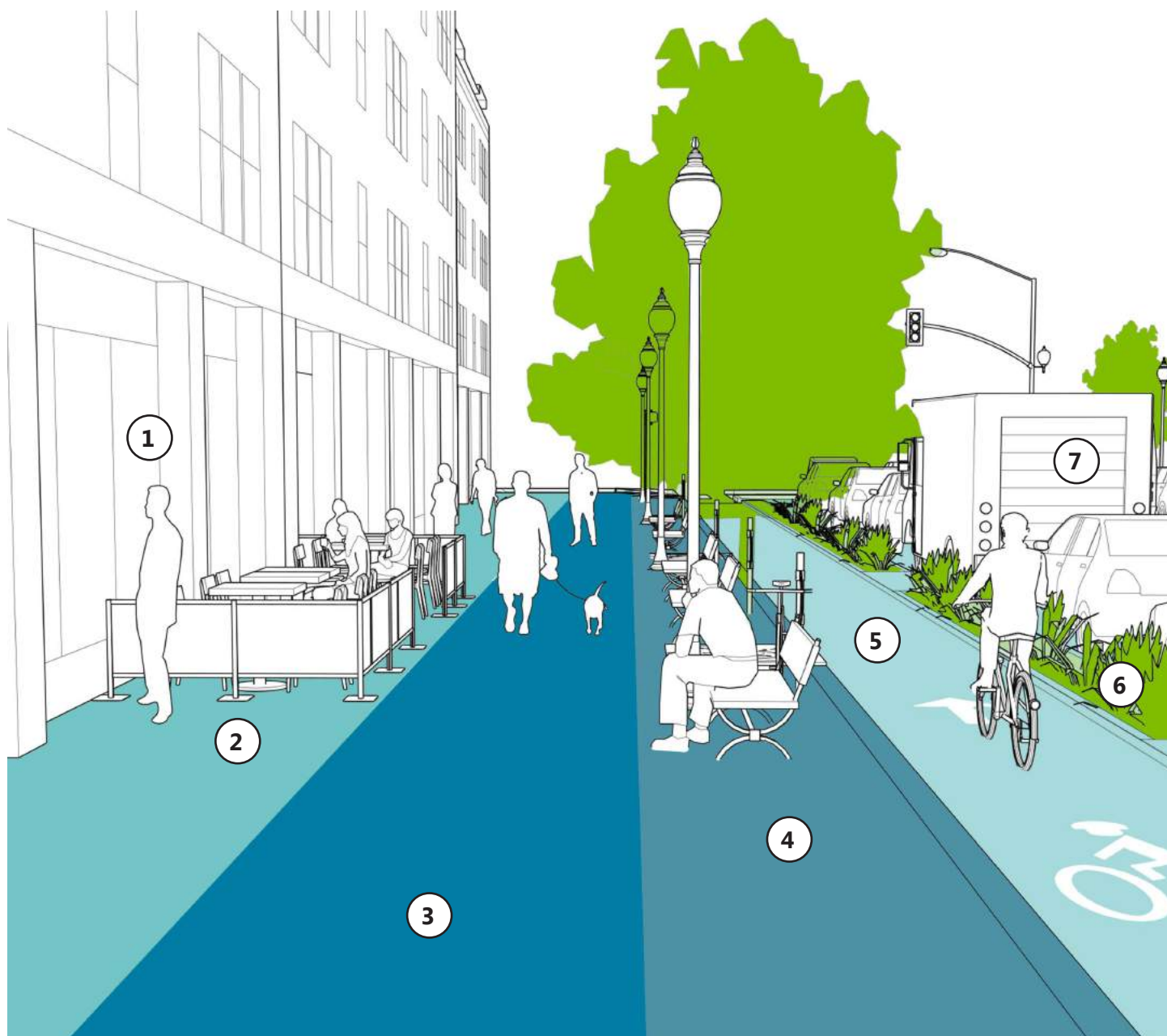
Greenville will increase its street connectivity by requiring shorter blocks and greater connectivity in new developments, and through redevelopment of existing areas.

Goal 2.3. Context-Sensitive Transportation

Most street corridors will serve as more than just passageways for cars. The transportation network in Greenville, including roadway infrastructure and transit systems, will complement Greenville's future walkable development pattern and support the development framework laid out in the Future Land Use and Character Map.



Imagining the Public Realm for Multiple Travel Modes in Greenville



The design of the street and sidewalk influences the way in which we interact with the built environment. This image features important infrastructure within the public right-of-way that improves multi-modal travel options.

- 1 The private realm frames the sidewalk and provides a permeable border, encouraging walkers to flow in and out.
- 2 Space adjacent to the private realm provides a transitional area where businesses can expand outdoor dining spaces.
- 3 The sidewalk allows pedestrians ample space to walk next to one another and peer through commercial windows.
- 4 Utility strips provide space for outdoor seating, pedestrian-oriented street lighting, and street trees that provide shade.
- 5 A cycle track provides an alternative, affordable, and safe travel mode with sufficient space for passing at various travel speeds.
- 6 Bioswales provide natural stormwater filtration services and add additional green space along the city's thoroughfares.
- 7 On-street parking provides additional parking adjacent to businesses, buffers pedestrians and cyclists from moving vehicles, and calms traffic.

Original Image Source: National Association of City Transportation Officials

Policy 2.3.1. Plan Streets in Context

Planning of transportation infrastructure will involve a context-sensitive approach that works comprehensively with the Future Land Use and Character Map to build walkable and accessible activity centers and neighborhoods. The Street and Area Type Model Matrix (see appendix) guides context-sensitive streetscape development and redevelopment projects by translating conventional roadway functional classifications into multi-modal streets. It can also be used to help create new street cross-sections.

Policy 2.3.2. Collaborate with NCDOT

Continue to collaborate with the North Carolina Department of Transportation (NCDOT) to implement its Complete Streets policy, improving safety and including sidewalks, street trees, bicycle lanes, safe crossings, and on-street parking in commercial areas. A draft ordinance was put forward in the *2011 Greenville Bicycle & Pedestrian Master Plan* and the strategy may also be pursued through the progression of the Metropolitan Planning Organization's ongoing efforts toward a Non-Motorized Master Plan.

Policy 2.3.3. Use the Tiered Growth Map as a Guide

The Tiered Growth Map, adopted as part of this plan, should be used to help guide public investment in transportation and prioritize transportation infrastructure development and redevelopment projects.

Policy 2.3.4. Use Low Impact Development Practices

Where possible, street development and redevelopment projects should incorporate low impact development practices that include bioswales and other stormwater best management practices (BMPs) and increase permeable surface area.

Policy 2.3.5. Enhance Gateways

Facilitate navigation into and out of Greenville, and market Greenville's distinctive character, with gateways at key entrance points to the city and between Greenville's various districts and neighborhoods.

North Carolina Department of Transportation Complete Streets Guidelines



NCDOT adopted a Complete Streets policy in 2009. Under this policy, they are to collaborate with NC communities during the planning and design phases of new streets or improvement projects to decide how to provide transportation options needed to serve the community. Its Complete Streets Guidelines provide planning and design strategies for creating streets that safely accommodate multiple travel modes.

2.4. Accessible Transit

Transit will be an integral mode of transportation for Greenville's entire population, especially those who are unable to own or drive a car. By providing excellent transit services, Greenville will improve equity and accessibility throughout the city, reduce traffic congestion, and improve air quality.



Policy 2.4.1. Coordinate Transit Service

Promote and facilitate coordination between Vidant, ECU, and Greenville Area Transit (GREAT) in order to improve efficiency and expand service throughout Greenville.

Policy 2.4.2. Expand Transit Accessibility

Accessibility to transit service should be one of the highest transportation priorities. Routes should continue to service low income neighborhoods, grocery stores and commercial areas, and civic and employment centers. Transit stops should be highly visible and provide comfort for riders.

Policy 2.4.3. Promote Transit Oriented Development

Greenville should focus higher density development within strategically located mixed use nodes, enhancing access to transit for workers and residents and reducing the need to provide automobile parking.

Greenville Area Transit

Greenville Area Transit (GREAT) is owned and operated by the City of Greenville and provides transit services throughout the city. In collaboration with Pitt Area Transit System (PATS), paratransit services are also provided to persons with disabilities. Image source: City of Greenville



Recommended Residential Density Thresholds for Transit Supportive Nodes

Transit Mode	Distance from Transit	Minimum Dwelling Units per Acre
Basic Bus Service	-	7-15
Premium Bus Service	-	15-18
Light Rail Transit	0-1/8 mile	30
	1/8-1/4 mile	24
	1/4-1/2 mile	12

Goal 2.5. Efficient Parking

Greenville will have a sufficient amount of vehicular parking that is convenient and accessible but that is located discretely and does not dominate the city's landscape.



Policy 2.5.1. Promote Shared Parking

Promote shared parking and strategically reduce the total number of spaces that are required to be constructed by developers. Reduce or eliminate minimum parking requirements, especially in areas designated for mixed use development on the Future Land Use and Character Map.

Mixed use compact development helps to create more livable and walkable places, and fosters a market that can support the transit network, and improve service. Greenville has opportunities to coordinate land use and transit planning around bus destinations, and set a long-term growth framework that anticipates the viability of other potential transit services in the future.

Source: Transportation Cooperative Research Program

Policy 2.5.2. Regulate Maximum Parking

Provide a maximum number of allowable parking spaces for new construction in order to avoid the overprovision of parking.

Policy 2.5.3. Promote Structured Parking

Where a large amount of parking is needed in denser built areas, promote structured parking. Ideally, the mass of the structure itself should be obscured with commercial or retail uses closer to the street or other creative architectural solutions that reduce the blank space of a parking garage wall.

Policy 2.5.4. Locate Parking Behind or to the Side of Buildings

Vehicular parking should be placed behind or to the side of buildings. Where parking is located next to a building it should be shielded from the street with landscaping.

Policy 2.5.5. Consider Neighborhood Permits

In most cases, effective management of and reduction of the existing supply of parking is preferred over the creation of additional parking spaces. However, if management strategies result in spillover parking into residential neighborhoods adjacent to commercial centers, neighborhood parking permits can be used to provide priority parking for neighborhood residents.

Policy 2.5.6. Decrease the Need for Parking

The long-term policy of Greenville is to gradually reduce the need for vehicular parking through coordinated land use and transportation that increases the viability of alternative modes of transportation.

Goal 2.6. Quality Regional Transportation

As a regional hub for employment, health, education, culture, and entertainment, Greenville will be highly accessible and navigable for visitors, with well-signed roads, and inspiring gateways.

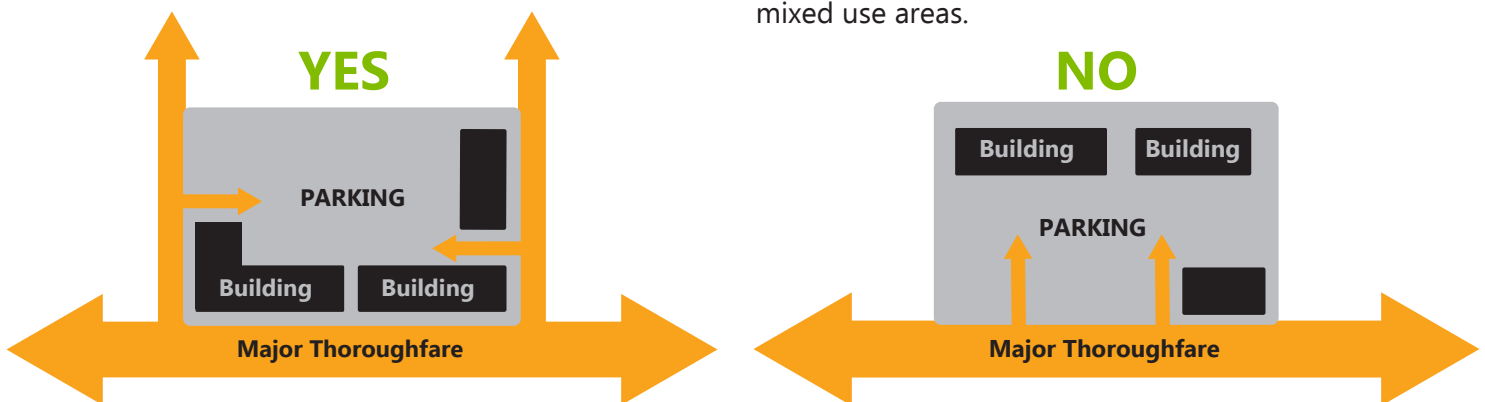


Policy 2.6.1. Promote Interstate Access

Promote interstate designation of Routes US 264 from US 13 Memorial Interchange to US 64 Zebulon, US 13 north of US 264 to US 64, and US 264/NC 11 from Stantonsburg Interchange to I-70 via the Southwest Bypass. Facilitate access to interstates that connect Greenville to areas throughout the Southeast.

Policy 2.6.2. Ensure Industrial Transportation Access

Ensure a high quality transportation system adequate for the flow of goods to and from major industrial and employment areas. Designs should promote access between major industrial areas, heavy commercial areas, and regional roadways, and should minimize the impacts of large freight vehicles on neighborhoods and mixed use areas.



Vehicle Parking should be placed behind buildings with access from side streets

Parking should be shared between businesses and located behind buildings in the center of the block. Access should be provided from sidestreets via shared driveways or mid-block alleys. Primary building frontages should be located on the main corridor.

Policy 2.6.3. Use Shared Parking to Reduce Parking Burden

Allow shared parking strategies in order to reduce required parking lot size.

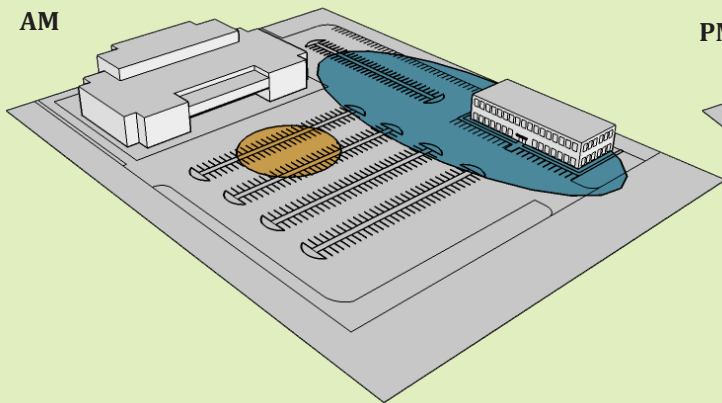
Shared Parking

Under conventional parking regulations each development is required to provide a minimum number of parking spaces, depending upon the uses and the size or number of residential units. The result is generally an overprovision of parking, with parking lots sitting empty for a majority of the time. Shared parking regulations consider adjacent uses and how parking functions between them. Some uses have more parking during the day and less during the evening, while other uses experience a greater demand for parking in the evening or throughout the night. Shared parking arrangements can result in fewer empty spaces, less impermeable surface, and a more efficient use of land.

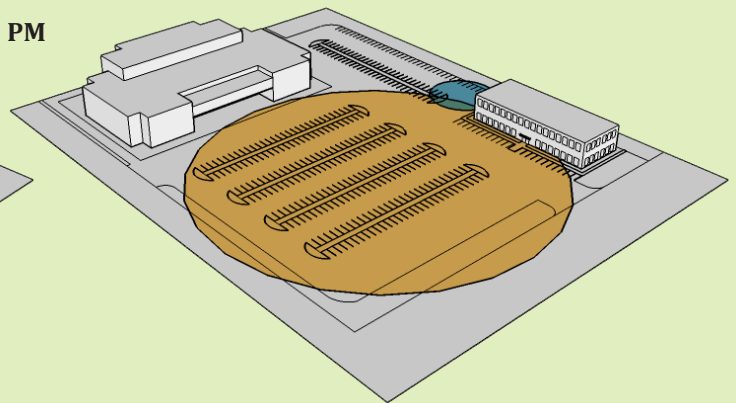
Individual Parking

Under current regulations the movie theater generates the number of spaces included in the orange circle on its busiest day. Most of those spaces remain empty during weekdays. The office building generates the amount of parking shown within the blue oval. These spaces sit empty during the evening and weekend hours.

AM



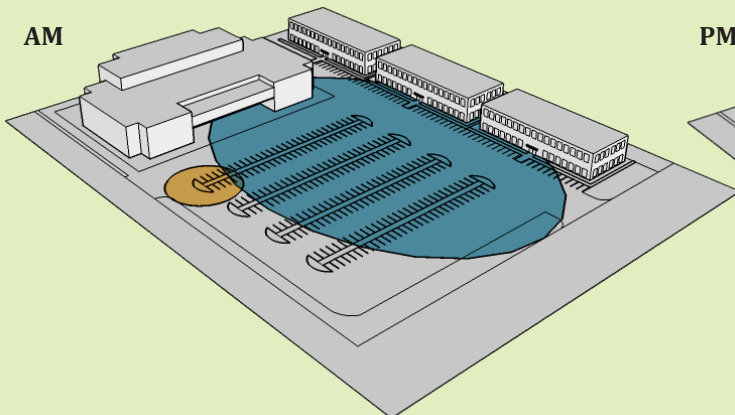
PM



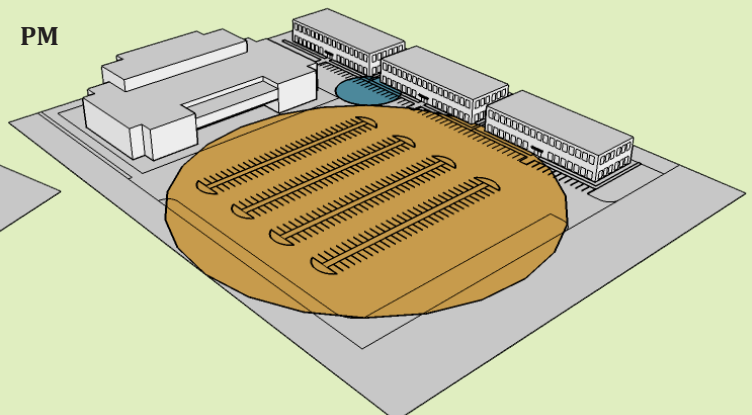
Shared Parking

The shared parking scenario allows more development to occur on the property because multiple buildings and land uses are using the same parking spaces.

AM



PM



Policy 2.6.4. Promote Regional Rail

The city currently has access to Amtrak bus services and should work to bring Amtrak train service to Greenville. While Greenville's size currently precludes the viability of light rail and the city does not have access to regional rail service, the city's continued growth will require long-term planning and visioning for potential future regional rail and light-rail opportunities. Continue to monitor and implement NCDOT's *Statewide Rail Plan*.

Goal 2.7. Well Connected Air Travel

Greenville will be eastern North Carolina's travel hub, with multiple airline carriers connecting to cities across the Southeast. Airport service expansion is vital for Greenville's continued economic development and ability to attract high quality firms and workforce.



Policy 2.7.1. Plan for Growth

Support the Pitt-Greenville Airport (PGV) Authority to ensure adequate space for airport expansion and limiting development near existing facilities on land that might become a future runway or hangar. Limit building heights on adjacent parcels if necessary for later expansion of the airport runway and flight zone. Promote transparency and coordination with neighborhoods that are currently adjacent to the airport to plan for future airport expansion and improvements.

Policy 2.7.2. Expand Transportation Options

Promote transit service between PGV and major commercial and employment areas of Greenville, including the Uptown District and the Medical Area.

Policy 2.7.3. Promote Regional Coordination

Coordinate with local governments in Eastern North Carolina to establish PGV as the regional hub for air travel. The closest passenger-service airports to PGV are Coastal Carolina Regional Airport in New Bern and Jacksonville International Airport.

Actions

Action 2.1. Implement Regulatory Changes

Street Cross-Sections

Adopt new street cross-sections that are consistent with the *Horizons 2026* Land Use and Character Map and the goals of this chapter. Develop a Street and Area Type Model Matrix in order to design the new cross-sections (see example model in appendix). Also consider street design standards from the *Complete Thoroughfares SmartCode Module*. These cross-sections should be reflected in the *Manual of Standard Designs and Details*

Greenville's current Summary of Street Standards follows the functional classification and is divided into arterial (Major and Minor Thoroughfares), collector, and local routes. The arterial is a higher volume facility serving longer trips and connects to local collector routes. Local routes carry lower traffic volumes and provide access to adjacent land uses. Collectors connect these functional types by "collecting" traffic from the local routes and conveying it to the arterials.

The street types in a Street and Area Type Model Matrix describe functional classification, but the matrix would translate arterial, collector, and local roads into a more context-sensitive approach to thoroughfare design.

Connectivity

Revise City Code Title 9: Building, Planning, and Development Regulations to further develop the current maximum block length standards. A complete revision would address maximum allowable block length, maximum allowable block perimeter, and minimum allowable street connectivity index in new developments. Consider the *Connectivity: Community Examples* box and the recommended block lengths earlier in the chapter.

Parking

Develop a comprehensive parking strategy consistent with the goals and policies of this plan. The strategy should include revisions and updates to the city code to modernize Greenville's parking regulations. Use the following parking principles:

- 1. Expand on-street parking:** On-street parallel parking is important because it buffers moving vehicles from pedestrians and bicyclists, is highly visible to drivers, is located within close proximity of on-street retailers, and reduces the need for off-street parking facilities which carry significant direct and indirect costs to the developer, consumer, and community.
- 2. Place parking behind or to the side of buildings:** Where possible, parking should be hidden from important corridors and destinations in order to improve pedestrian environments and the visual experience in downtown.
- 3. Right-size parking supply:** Parking is often oversupplied in commercial and multifamily areas. Excess parking creates barren spaces and does not efficiently maximize use of limited land within the city.
- 4. Ensure availability of delivery parking:** Alleys are ideal locations for convenient deliveries to shops in urban areas. With the absence of alleys, another alternative is to designate special loading zones.
- 5. Encourage shared parking:** Shared parking between establishments helps to reduce the burden to parking space provision and seeks to limit the oversupply of parking.
- 6. Provide bicycle parking:** Bicycle parking should be widely available and easily accessible throughout Greenville.

Action 2.2. Implement a Demonstration Project

Carry out a demonstration project that transforms automobile lanes into pedestrian or bicycle space. The project should be highly visible so that the community has the opportunity to assess the project's impact. The purpose of implementing demonstration projects is to:

- Offer the community an opportunity to be creative with design
- Observe and monitor the impact of the project before deciding to implement similar projects on a citywide scale

The project may include incorporating traffic calming devices onto city streets, retrofitting streets for natural stormwater management, removing travel lanes for on-street parking and bicycle lanes, and other ideas.

The city should also consider allowing temporary community-driven "tactical urbanism" projects (explained on the following page) when there is pressure by residents for swift action to enhance safety and improve design on local roads.

Action 2.3. Establish Flexibility in Roadway Level of Service (LOS) Measures

Enhance Level of Service (LOS) measures with Quality of Service measures for bicyclists and pedestrians. The measure should consider the quality of infrastructure and safe designs on roads for bicyclists and pedestrians. The purpose of this action is to allow flexibility in the measures to allow road diets and bicycle lanes per the goals and policies listed in this chapter.

Action 2.4. Convene Transit Providers to Foster Coordination

Take the lead in convening the three major transit providers (GREAT, ECU, and Vidant Medical Center) in Greenville to enhance coordination and maximize efficiency in service provision.



Street Resurfacing and Restriping

The City of Columbus took advantage of a street resurfacing project to redesign the street and promote multi-modal transportation options along Summit Street, near Ohio State University.

Images Source: usa.streetsblog.org



Bioretention Traffic Calming

The City of Columbus took advantage of a street resurfacing project to redesign the street and promote multi-modal transportation options along Summit Street, near Ohio State University.

Image Source: lowimpactdevelopment.org

Examples: Using Tactical Urbanism for Creative and Cost-Efficient Projects

New infrastructure and retrofits are costly, which is why transportation projects can often take so long to implement following adoption of transportation plans. Now many communities are testing out new ways of retrofitting their existing infrastructure to be more pedestrian and bicycle-friendly.

Tactical urbanism has many different names but the concept is simple: The community decides to test out something new like bike lanes, sidewalk extensions, cross-walks, painted intersections, parklets (small parks embedded in parking spaces), or anything else used to make a place safer for pedestrians. Then temporary retrofits are carried out using simple materials like spray paint, chalk, tape, or plants. The community then can determine if the design should become permanent.

Greenville has the opportunity to explore creative low-cost ways of testing infrastructure retrofits and creatively incorporating art into the city's infrastructure.



Some communities are turning to creative low cost-ways to retrofit infrastructure to be more pedestrian-friendly, such as this example carried out by the City of Austin that improves intersection safety.

Image Source: City of Austin

Tactical Urbanism

Tactical urbanism can be utilized as a low-cost method of testing out new infrastructure designs, such as this bike lane built using plants and tape. A car lane is quickly transformed into a comfortable bike lane.

Image Source: ladyfleur.bike





Greenville City Hall

Maintaining Fiscal Responsibility

Greenville will embrace a culture of transparency and fiscal responsibility in all aspects of city management. The city will foster business investments and collaboration through open governance and a business-friendly culture. Management of public facilities and services will focus on providing a high quality of life for residents, while also achieving fiscal responsibility. Physical planning efforts will grow the city's tax base sustainably and ensure the long-term efficient delivery of Greenville's high quality services.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact Greenville's fiscal responsibility.

Concepts and Best Practices to Address

Community Concerns: This section presents fact-based approaches to solving complex interrelated fiscal policy challenges.

Goals & Policies: This section lists the goals our community seeks to accomplish and the policies to guide us there.

Actions: This section provides key proactive actions that the city and interjurisdictional and community partners will take over the coming decade to bring us closer to our community's vision.

Overview

The fiscal health of the city impacts the quality of services Greenville provides to its residents and how much those services are expected to cost the city's taxpayers. Greenville carefully manages its budget to address current and expected needs for capital infrastructure and for operational expenses. Capital needs include parks and recreational facilities, public safety facilities and equipment, bus transit, stormwater management systems, road maintenance, and general government facilities. Operational expenses include all government personnel, city programs, and other non-capital expenditures.

The city's budget is dependent on a few large categories of income, with the largest proportion coming from property taxes. This means that the approach the city takes to managing future growth has a direct impact on the city's tax revenue generation. The locations of development can also have an impact on the cost of service incurred by the city. Decisions to annex areas into Greenville have an impact both on public revenues and costs.

This chapter establishes principles for maintaining fiscal responsibility as a criterion for making land use and development decisions that positively impact Greenville.



Planning Influences

Key Community Issues

The health of Greenville's fiscal management system is paramount to both the initial implementation of recommendations within Horizons 2026 and their ongoing maintenance. A clear understanding of the budgeting process as well as the other key factors that impact revenues or costs allows for planning to be intentional and within the means of the city. A discussion of some of these key factors follows.

Greenville's Fiscal Management: Operations and Capital Projects

The City of Greenville engages in a regular biennial budgeting process. Taking into account the city's priorities and other plans, an operating budget is

released for the fiscal year along with a financial plan for the following fiscal year. The operating budget includes all the city's annual expenditures including personnel, debt service, public programs and services, city equipment and vehicle fleets, and many other categories.

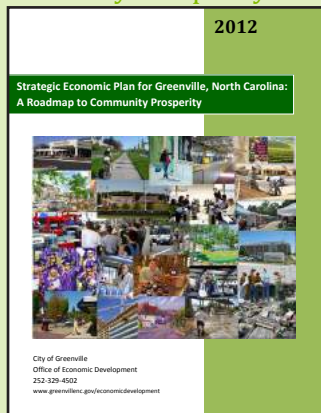
The city also prepares its Capital Improvement Program (CIP). This strategic five-year plan describes the capital projects being undertaken by the city and includes project schedules and funding sources. Capital projects are defined as tangible infrastructure projects that cost \$10,000 or more and have a useful life of 10 years or more. Equipment and improvements to existing facilities are included in the CIP. The city uses a biennial process to identify new projects to include in the CIP,

Relevant Plans

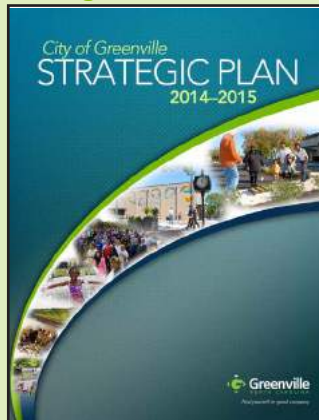
FY 14/15 Operating Budget
& FY 15/16 Financial Plan



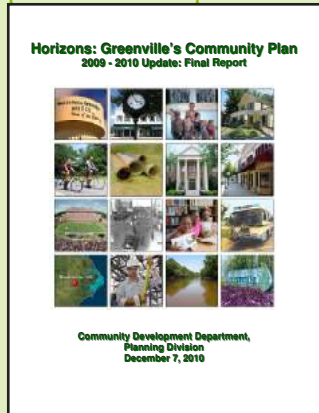
Strategic Economic Plan for
Greenville, NC: A Roadmap to
Community Prosperity 2012



City of Greenville
Strategic Plan 2014-2015



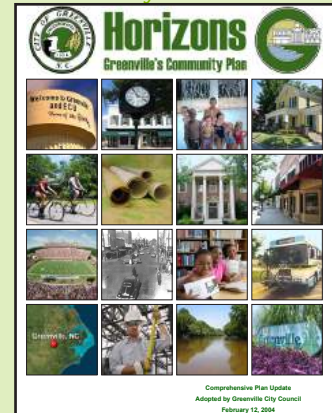
Horizons: Greenville's
Community Plan 2009 -2010
Update: Final Report



Economic Development
Assessment 2013



Horizons: Greenville's
Community Plan 2004



and coordinates this effort with the budgeting process.

These budget documents and the process they represent are responsible for the short-term management of city funds, taking into account the next five years. They may also take into account longer-term expenditures that are anticipated in the future. This community plan is designed to take a longer-term planning approach to connect decisions made about development and growth of the city to the budget and CIP.

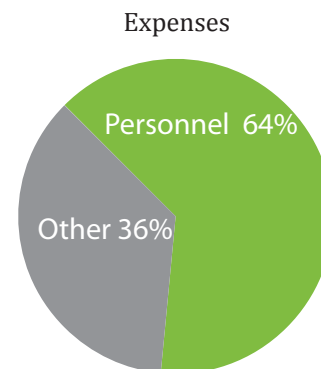
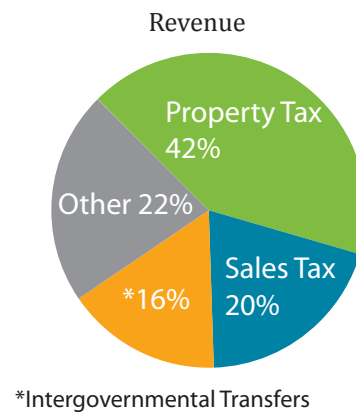
City Revenues

It is important to know where the city gets its funds. Out of a total general revenue pool of over \$78.5 million in 2015, property taxes accounted for \$32.9 million, or 42%. Sales tax accounted for 20%. Transfers from other levels of government (not including sales tax) accounted for 16%. No other single category made up more than 10% of the general revenue fund. On the other side of the ledger, personnel salaries and benefits made up 64% of the budget. These personnel are providing city services to residents. No other single category made up more than 10% of expenses.

Fiscal Implications of City Growth

Typically in Greenville, the city limits have been expanded through landowner initiated annexations. Once annexed, these properties receive city services and the landowner pays city taxes. The city has also initiated annexations to bring in areas into the city's corporate limits. Like many communities throughout North Carolina, areas annexed into the city are often not adjacent to the city's current borders and create "holes" in the city's corporate area. The properties located in these holes are not part of the city and as such don't pay city taxes. They likely do not have public water and sewer service, and don't receive other city services – such as police and fire protection. They instead receive these services from Pitt County. These areas are often part of the city's Extraterritorial Jurisdiction (ETJ), which means they are areas outside of the city for which the city has planning and zoning jurisdiction. The "holes" are clear opportunities for future city annexations because in most cases they can easily tap on to municipal water and wastewater service, and have adequate road infrastructure to support new development.

Large Revenue and Expense Categories



FY 2014/15 Budget; FY 2015/16 Plan



Holes in Greenville's Borders

Over time, the city's boundaries have grown to include areas that are not contiguous to Greenville, creating "holes" in the city. Opportunities exist to encourage development within these unincorporated holes that can maximize use of existing infrastructure.

For most communities, there are fiscal implications to different patterns of growth. An assessment of fiscal analysis of communities around the nation reveals that the locations of growth can have an impact on both the public revenues and the costs to the community.

Regardless of whether new development is residential, commercial, or industrial, there are city services that get provided to newly annexed areas. The location of that development, whether it be within the city's central business district, in an outer area of the city, or outside the city's boundaries, can have an impact particularly on the cost to provide services to these developments. The general rule of thumb is that the further you have to extend services, the greater the potential for increasing costs.

Taking these together, it will continue to be important for the city to manage its growth. When considering future annexations and development proposals, the city should consider not only revenues, but the projected costs to service the area. In some instances, costs can outweigh the tax-revenue benefits of a given proposal. Easily serviced holes in the city can often be developed and annexed with potentially minimal cost to the city.

Provision of Public Services

Greenville residents expect high-quality city services. The city enshrined this expectation in its 2014-2015 Strategic Plan, taking as a mission statement,

"[T]o provide all citizens with a high-quality services in an open, inclusive, professional manner, ensuring a community of excellence now and in the future."

This goal requires effectiveness and efficiency from city staff as well as proper fiscal management to have the funds necessary to meet the high expectations of residents. When services are managed well, they can create a virtuous cycle. Community improvements can make land more valuable, increasing tax revenues. Those revenues can then be put toward more community improvements.

The City of Greenville offers the following services to its residents and property owners:

- Building & Development Services
- Housing & Neighborhood Assistance
- Parks and Recreation
- Public Bus Transit (GREAT)
- Public Safety: Police, Fire, and EMS
- Road Maintenance
- Stormwater Management

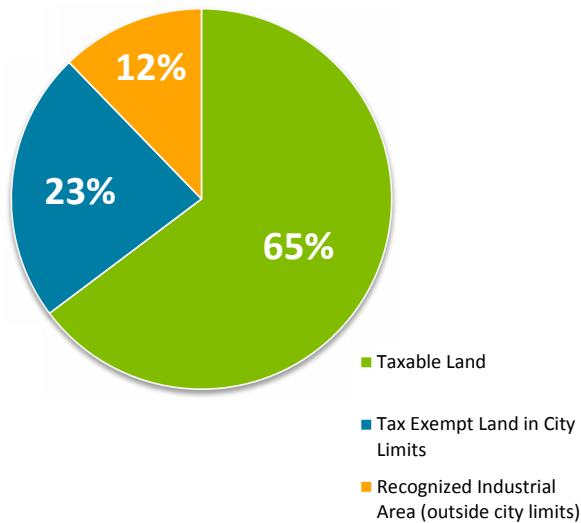
Funding Security

Paying for new public infrastructure and city services requires careful management and forecasting of revenue sources. In addition to local taxes, the city relies on state and federal funding programs and other forms of revenue, including debt obligations. State tax formulas, including sales tax, have been modified in recent years. Although the revenues provided under the new formulas aren't projected to significantly change the amount of funds allocated to local governments, the changes are too new, and there is not enough data to assess the trends of actual allocations in comparison to projected allocations. In studies that measure the volatility of tax revenues (i.e., the degree to which they are subject to change from year-to-year), North Carolina, as a whole, ranks near the national median. However, there has been a general national trend toward more volatility. Prudent cities, like Greenville, expand obligations carefully and strategically if they know revenue may fluctuate.

Non-taxable Land

Greenville's fiscal management is challenged by the fact that nearly 25 % of the city is exempt from paying property taxes. These properties receive public services from the city, but do not pay for these services through annual property taxes. Three of the largest tax exempt entities include the city's economic drivers. Vidant Medical Center and East Carolina University are formally exempted from paying property taxes due to the public nature of their missions, and Indigreen Corporate Park is exempt because it is located directly outside of the city limits. These community partners help drive Greenville's growth and contribute back to the city, the region, and the state by providing high quality services, products, and employment opportunities, and serving as magnets that attract other businesses and services to Greenville. Opportunities exist to develop other areas in the city that can contribute tax revenues to offset non-taxable lands, and ultimately create a better fiscal balance.

Tax Exempt Property in and around Greenville



Serving Businesses

Greenville strives to provide a strong business environment with true economic stability. Greenville is committed to finding programs that benefit businesses while implementing the vision for the city, be it general assistance through the Economic Development Office, or highly targeted initiatives, such as the Facade Improvement Grant Program that improves quality architecture in the city core. *For more discussion on businesses and economic growth in Greenville, see Chapter 4: Growing the Economic Hub.*

Open and Effective Governance

The City of Greenville strives to provide public services in an open, inclusive, and professional manner. An accessible public website, biennial citizen surveys, and a long-history of citizen-based planning are a testament to the commitment of having and sharing information with citizens, and setting priorities for the city based upon this input. The city regularly takes the opportunity to enhance city practices and systems that are more open and accountable to the public.

Concepts and Best Practices to Address Community Concerns

Fiscal Impact Analysis Models

Local governments are under pressure to maintain and improve infrastructure and services for residents. It is important to carefully consider new developments and how they affect a city's fiscal bottom line. There are costs associated with new developments such as improving and maintaining the municipal infrastructure: roads may have to be built or widened; traffic or street lights may have to be installed; and water, storm, and sewer distributions may have to be provided. In addition, there may be an increase in demand for services in the city, including the police, fire and public works departments. A fiscal impact analysis projects and calculates all of the costs and revenues into current dollars so that city officials can more easily decide if a major public action would benefit the city from a financial perspective. That action can be the formal approval of a development project, an annexation, or a capital investment.

Infill Development

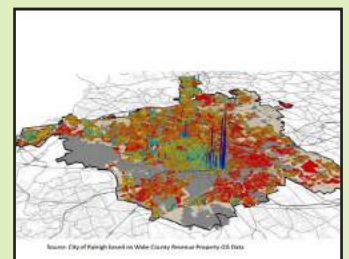
When new development occurs within the fabric of existing city blocks, such as an empty parcel between two buildings, it is called infill development. Infill development is a fiscal strategy to maximize the use of existing public investments such as roads, stormwater facilities, public safety facilities, parks, etc. Generally speaking, infill development is typically less costly for a city to serve than providing service to a new outer lying area that may require expansion of public services.

For example, if new homes are built on an infill site and connect to existing water infrastructure, then the cost of providing the service to the new home is the cost of pumping and treating additional water. Whereas on a new more remote site there will likely be the additional costs of expanding and maintaining new pipes. Roads, bus service, police coverage, and fire coverage all also follow this pattern: new residents moving into existing service areas help the city avoid the cost of expanding services to new areas. Initial expansion costs, particularly for roads, water and wastewater systems, are sometimes financed by developers and paid for by new residents in the purchase price of their homes. However, the ongoing maintenance of the system is paid using city funds.

Infill Development Return on Investment

When it comes to extending or improving infrastructure and services, other communities are looking at returns in value per acre in addition to raw costs. At face value, building a road out into a new area may seem to be a bargain. There are no buildings to avoid or inspect, no existing roads to tear up first, and no neighbors to provide notice to or receive comments from. But when building out to lower density areas, it can take much more land and construction to get the same amount of revenue in return as would an improvement in the city core.

When the City of Raleigh ran through calculations, the value gained by downtown reinvestment was impressive. To gain the same return as improving infrastructure to accommodate a 1.2 acre high-rise, it would have taken a 150-acre subdivision of single-family homes. Greenville does not have the density of downtown Raleigh, but even the difference between acre lots and Uptown multistory buildings is substantial. The city can see gains of relatively large value while using less land. Looking at value per acre or time for return on investment could change which sites the city finds desirable as a focus for growth.



Presentation highlighting the value of infill development in Raleigh, NC: This kind of analysis could benefit Greenville

Example Potential Infill Site Near Dickinson Avenue



Goals & Policies

Goal 3.1. Benefit from Past Investments

Greenville will maximize the benefits of its existing infrastructure and services by encouraging infill development in appropriate locations.



Policy 3.1.1. Promote Infill Development on Underutilized Sites in the Core

Promote the development of underutilized sites within the urban core of the city through development incentives and active advertisement to potential developers or business tenants. The city will investigate any current barriers to development and identify solutions to make infill development a more feasible and valued option.

Policy 3.1.2. Encourage Development to Locate Near Existing or Planned Infrastructure

Encourage new development to occur in areas that can be served by existing or planned infrastructure, particularly public water and wastewater while still respecting the limits of what the land and adjacent waterways can sustain.

Community Voices: We want...

- Improve the tax base
- There is infrastructure that has already been paid for
- Use space already in the city more efficiently
- "Invest in the core of the city — Uptown and adjacent neighborhoods, and control development on the periphery so that a good mix of commercial and residential can develop in the core"

Policy 3.1.3. Promote Rehabilitation and Reuse of Commercial and Industrial Buildings

Promote the rehabilitation and reuse of existing commercial and industrial buildings as another means of achieving the benefits of infill development.

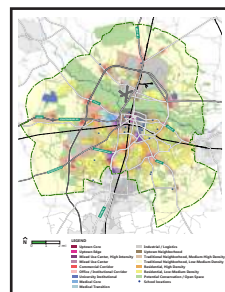
Goal 3.2. Manage Expansion

Greenville will take a strategic approach to expanding municipal borders and growth.

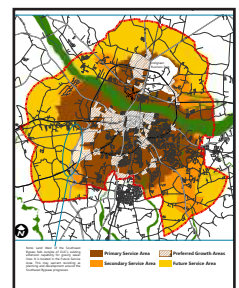


Policy 3.2.1. Use Horizons 2026 Map Tools in Decision-making

Consult the Future Land Use and Character Map and the Tiered Growth Map when considering annexation of new areas planned for future development.



Future Land Use and Character



Tiered Growth Map

Policy 3.2.2. Consider Benefits and Costs of Proposed Annexations

Consider the full range of impacts when deciding to approve or pursue an annexation. The city will evaluate the financial benefits and costs for the short- and long-term, as well as the public or community benefits of a proposed annexation.

Policy 3.2.3. Advertise Appropriate Development Opportunities

Communicate the location of buildings, lots, and general opportunities that support the development of sites located in Preferred Growth Areas and Primary and Secondary Service Areas as shown on the Tiered Growth Map. This policy may be implemented through collaboration of multiple departments including the Community Development Department and the Office of Economic Development.

Goal 3.3. Fiscal Balance

Greenville will create a better fiscal balance by attracting new development to locate within the city.



Policy 3.3.1. Promote Development and Relocation of Businesses into Greenville's Taxable Land

Explore opportunities to encourage development within the city's corporate limits through the use of incentives and through marketing the benefits of locating within the city.

Policy 3.3.2. Consider Additional Funding Sources

When implementing Horizons 2026, consider additional funding sources for some of the policies and actions. Business Improvement Districts could be considered in targeted areas. Municipal Service Districts may be appropriate in some cases.

Goal 3.4. Open and Transparent Government

Greenville will serve its citizens by providing clear and transparent information about government operations and services.



Policy 3.4.1. Expand Government Communications

Continue to explore the feasibility and benefits of future communication technologies throughout the city in coordination with other governmental, non-profit, and private organizations.

Policy 3.4.2. Increase Government Transparency

Support and expand upon practices and systems that are open and accountable to the public.

Actions

Action 3.1. Develop a Fiscal Impact Analysis Model for Evaluating Proposed Annexations and Capital Projects

Build a financial impact analysis model that calculates ongoing benefits and costs associated with annexations. This can help the city make fully informed decisions on expansion of city limits.

Action 3.2. Work With Greenville Utilities Commission, Police and Fire Departments, and Pitt County Schools to Plan for Future Growth

Review service extension policies to ensure a unified strategy consistent with the Tiered Growth Map and the Future Land Use and Character Map when evaluating expansion, development proposals, or extensions of public services to new areas.

Action 3.3. Market Desirable, Taxable Land to Developers, Investors, and Tenants

Publicize the Horizons 2026 plan and maintain a list of infill sites or other development opportunities so that staff can direct developers to targeted housing or employment areas.



James and Connie Maynard Children's Hospital
Vidant Medical Center

Growing the Economic Hub

Greenville, a city that supports business development, entrepreneurship, and labor force training, will have high quality employment opportunities for an increasingly diverse population. The regulatory environment, business incentives, and partnerships will help to grow and sustain local companies, create an adaptive and well-trained workforce, and foster a thriving public education system. New jobs will emerge in a variety of locations throughout the city, including existing industrial parks, new well-planned employment centers, and urban mixed-use hubs. The city's high quality of life will help retain a well-trained and creative workforce.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact economic development in Greenville and the region.

Concepts and Best Practices to Address

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Overview

Since its post-Civil War history as the largest tobacco trading market in North Carolina, Greenville has transformed into a center of research, medicine, and higher education. The city finds itself on the cusp of a potential economic boom. Opportunities abound, and increasingly robust industries and economic development partnerships are possible.

A strong local economy includes a balance between a specialized base - key economic drivers like East Carolina University, Vidant Medical Center, and industry clusters - and an entrepreneurial ecosystem supporting locally-based innovation, entrepreneurship, and homegrown businesses. A diverse workforce helps to support both.

This chapter explores strategies for bolstering ongoing economic development efforts, supporting an inclusive economy that works for everyone, including historically marginalized populations, and thrusting Greenville to the forefront of the new economy.

Planning Influences

Key Community Issues

Greenville is the state's tenth largest city, the seat of Pitt County, and home to key regional economic drivers and prominent employers including East Carolina University, Vidant Medical Center, and advanced manufacturing clusters. Service industries have grown substantially over the past decade. Increasingly, Greenville is also strengthening its role as Eastern North Carolina's retail, art, and entertainment hub. The city draws frequent visitors from surrounding counties and throughout the state. The following community issues highlight important trends and conditions that will impact Greenville's economy over the next 20 years.

Economic Growth

The economy of the Greenville Metropolitan Statistical Area (MSA), which includes all of Pitt County, has grown both absolutely (from \$4 billion to \$7 billion since 2001) and as a share of North Carolina's total output (from 1.45% to 1.55%). By 2035, the Greenville MSA is projected to add approximately 45,000 jobs, with a large proportion of employment growth occurring in the City of Greenville. The industries projected to experience most rapid growth include:

- Health Care & Social Assistance
- Retail Trade
- Accommodation & Food Services
- Administrative & Waste Services
- Professional & Technical Services
- Educational Services
- Finance & Insurance

Because several of Greenville's key economic drivers are exempt from property taxes, fostering new industries within city limits will be crucial for growing Greenville's tax base.

Wages

Average wages have increased since the year 2000 (accounting for inflation). Wages increased dramatically between 2002 and 2007 and dropped during the recession to 2005 levels. As of the beginning of 2016, wages in the MSA showed signs of incremental recovery.

Manufacturing

Manufacturing continues to be a key employment industry in the Greenville MSA, accounting for 1 of 11 jobs. Many of these jobs provide above average wages. Over the past several decades, the change in employment has fluctuated with national business cycles.

For several decades, there was a significant reduction in stable manufacturing employment seen nationwide. A recent trend shows growth in manufacturing jobs again, though work sites typically employ fewer workers and require a higher level of skill. Within the Greenville MSA, as manufacturing employment has decreased, there has been continued growth and diversification in non-manufacturing employment.

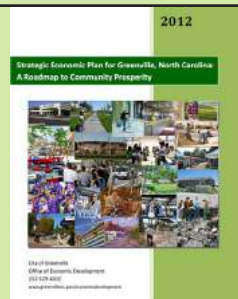
Innovation, Modernization, & Resilience

Greenville is well positioned with the essential ingredients for nurturing innovation districts. Industries that primarily focus on research and innovation can be important in building a resilient economy. ECU plays a vital role in advancing innovation within the region, along with the city's cluster of targeted industries including chemical manufacturing companies. ECU is also a driver of innovation through its continued and growing success in acquiring research grant money. Between 2003 and 2011, research and development expenditures more than doubled from \$13 million to \$28 million.

ECU's 2015 Millennial Campus designation is a turning point for innovation in Greenville, allowing the university to partner with private companies and commercialize new inventions and research. The university plans to redevelop properties within the Uptown District and revitalize key corridors.

There are ongoing efforts to promote innovation. Greenville is designated as a Gig-City with access

Relevant Plans



Strategic Economic Plan for Greenville, North Carolina



Economic Development Assessment

to a fiber optic network. The Technology Enterprise Center of Eastern North Carolina has contributed to success. The non-profit organization Greenville SEED (Supporting Economic & Entrepreneurial Development) located in Uptown helps entrepreneurs cultivate new ventures at no cost.

Industrial Clusters

Industrial sectors that are growing nationally are also growing in the Greenville MSA. Chemical manufacturing is growing in Greenville despite a national decline. The largest industries tend to be those that are growing in the Greenville MSA, which is a positive sign for future employment growth.

When companies derive benefits from locating in central clusters and sharing information, they are said to benefit from economies of agglomeration. Several of Greenville's industries can benefit in this way. These industries, as identified by ECU's Office of Engagement, Innovation and Economic Development, include:

- Chemical Manufacturing
- Advanced Learning Technologies
- Health
- Healthcare and Medical Innovation
- Marine Sciences
- Bio Agriculture
- Aerospace
- Renewable Energy
- Tourism
- Military

These industry specializations demonstrate Greenville's position as a cultural, economic, and administrative hub of eastern North Carolina.

The Indigreen Industrial Park is located on 353 acres north of the Tar River, just outside of Greenville's incorporated area, and it is home to several multinational chemical manufacturing facilities. Companies located within Indigreen provide high quality jobs to many Greenville residents. The city has an opportunity to attract similar industries to places within the city's corporate limits, providing companies with key services and strengthening the tax base. Target industry clusters identified in the Greenville Economic Development Assessment include:

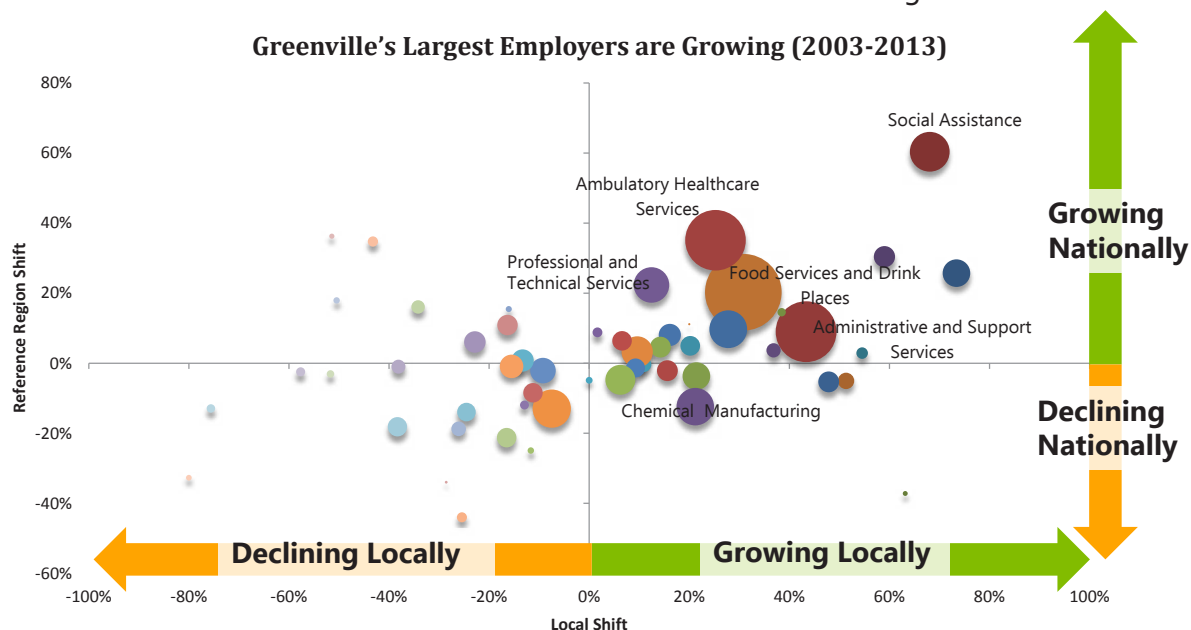
- Back Office and Data Centers
- Digital media / Software / Simulation
- Pharmaceutical Manufacturing
- Medical Device Manufacturing
- Advanced Manufacturing

Inclusive Economy

Like many cities across the Southeast, Greenville continues to face the challenges of addressing deeply rooted inequality between and within racial groups. Home to ECU and Pitt Community College, the Greenville area has many excellent opportunities for education, employment, and workforce development for residents from a full range of socioeconomic backgrounds.

Retail

The retail industry employs a large and growing number of people in Greenville. It plays an important role in providing shopping options for residents, as well as drawing visitors from rural small towns and unincorporated areas throughout Eastern North Carolina. Retail industry jobs account for 6.2% of total MSA jobs and 7.9% of all earnings.



Concepts and Best Practices to Address Community Concerns

Greenville has a strong collection of existing assets for growing its economy in the future. The city can gain more from pursuing its existing strengths. Uptown and a few other nodes have the makings of live, work, play environments, and ECU and PCC send bright alumni out into the workforce every year. Through investing in a variety of neighborhoods, including mixed use districts, the city can attract stable employers and retain talented employees. Quality of life improvements can be more than a benefit to city residents, they can be an anchor keeping some businesses in the area. Having a pool of highly skilled labor can tip the balance in favor of the city when outside businesses are considering relocation. A best practice for attracting wealth is to recruit, retain, and expand businesses and industries that produce goods or services inside the community that are sold outside the community

ECU and Vidant Medical Center are invaluable civic partners for Greenville. The city can help them spur commercialization of cutting edge research and technology by providing for the type of development those companies need. Proximity to research is only one facet. Having available space and appropriate amenities are also essential. The foundation for growth is strong in this community and leaders have already developed a solid framework for industry recruitment and public private partnerships. The following strategies and key concepts are being used by cities throughout the country.

Growing an Innovation Economy

Through strategic catalyst projects and public private partnerships, Chattanooga, Tennessee redeveloped its downtown, leveraged its fiber optic network, and coalesced community partners in order to spur economic development and improve quality of life throughout the community. *Image Sources: nightfallchattanooga.com & chattanoogafun.com*



Innovation Districts

American metropolitan areas in the Southeast have witnessed post-recession economic restructuring. Market preferences have also dramatically changed as populations continue growing, aging, and diversifying. To compete in the new economy, many cities have successfully cultivated innovation districts, which are becoming increasingly accepted as an economic development tool.

Innovation districts bring together entrepreneurs, business and government leaders, venture capital firms, legal council, patent attorneys, and economic drivers in a way that facilitates idea generation and accelerates commercialization. An analysis of dozens of studies and data tied to innovation districts identifies five primary reasons why innovation districts are driving the economies of the future. These places can provide the following substantial local benefits tied to economic development and quality of life objectives:

1. Further the ability of cities and metropolitan areas to grow jobs in ways that both align with disruptive forces in the economy and leverage their distinct economic position.
2. Specifically empower entrepreneurs as a key vehicle for economic growth and job creation.
3. Grow better and more accessible jobs at a time of rising poverty and social inequality.
4. Reduce carbon emissions and drive denser residential and employment patterns at a time of growing concern with environmentally unsustainable development.
5. Help cities and metropolitan areas raise revenues and repair their balance sheets at a time when federal and state resources are diminishing.



Quality of Life

Cities around the country are improving their neighborhoods and commercial areas in order to attract and retain highly skilled workers and companies in high wage industries. This also improves living conditions and environmental quality for existing residents. Many highly skilled workers are demanding live, work, play environments where places can be reached throughout the city on foot and by public transit, and their employers are listening.

Pharmaceutical Clusters

Industrial clusters produce economic benefits not only from the effects of knowledge spillover and information sharing between companies, but also because of the industries that build up nearby to serve them, with contract and legal, real estate, finance, research, and other services. Supporting the growth of the pharmaceutical industry and other related industries is important. The high wages in these industries brings wealth into the local economy.

Business Recruitment

Greenville can highlight its strengths to offer a competitive recruitment and retention package to target businesses. As a part of the city economic development strategy, the city may recruit targeted business sectors ranging from small businesses to larger industrial firms. Analysis of industry surveys show businesses often consider:

- Highway Accessibility
- Labor Costs
- Tax Exemptions
- Occupancy or Construction Costs
- State and Local Incentives
- Corporate Tax Rate
- Availability of Skilled labor
- Inbound/Outbound Shipping Costs
- Energy Availability and Costs
- Availability of Buildings

Workforce Development

There is mounting agreement among economists, policy makers, and researchers that a high quality workforce is key to cities building strong and resilient economies and staying competitive in the dynamic global economy. The city needs a core of workers who are educated, highly skilled and quickly adaptable to changing economic conditions. Other localities promoting workforce development use several strategies including:

Pursue sector-driven initiatives: This approach focuses on the needs of employers in specific industries within a region, strengthening ties with the business community to match workforce demand with job opportunities for workers.

Invest in education and workforce preparedness: Economic changes are constantly spawning new technological innovations in research and manufacturing. Local workforces must also evolve, learn new skills, and adapt to constantly-changing industries. Similar to Greenville, many local governments are fostering collaboration between community colleges, industries, and students to build a strong pool of quality local workers trained appropriately for local jobs.

Advance data-driven approaches: Data-driven analyses provide essential economic information, especially where there are limited government resources in workforce development initiatives. Data availability can help support cost-efficient decisions to attract and support industries and help them meet their needs.

Medical Mixed Use

Communities throughout the country with healthcare driven economies are increasingly competing for medical professionals and patients who want to be able to get around comfortably on foot and with transit. Medical professionals increasingly desire the ability to walk to work. Patients and their families coming from other communities want to be able to park near lodging and access the hospital, retail stores, and restaurants nearby.

Community Voices: We want...

- To be a national center for pharmaceutical development and manufacturing innovation.
- More jobs, other than retail; decent paying positions that are upwardly mobile; not a minimum wage haven.
- To grow targeted economic clusters to support career progression and resiliency and fulfillment.
- To be known as a regional hub for innovation, entrepreneurship, and its maker culture.
- To give businesses a reason to locate here.
- More employment opportunities for young professionals.
- "If Greenville intends to grow and retain the talented, educated personnel that both the hospital and university recruit and hope to draw here, it needs to provide more entertainment and culture."

Goals & Policies

Goal 4.1. A Vibrant & Growing Economic Hub

As the economic hub of Eastern North Carolina, Greenville will continue to experience strong economic growth, with expansion of the city's existing economic drivers, specialized industry clusters, and a growing business community.



Policy 4.1.1. Promote Recruitment and Collaboration

Support Pitt County Development Commission, NC East Alliance, and the Chamber of Commerce in their ongoing efforts to enhance workforce development and company recruitment of large stable employers. Continue to foster collaboration and synergy among ECU, Vidant, and manufacturing companies.

Policy 4.1.2. Expand the City's Role as the Hub of Eastern North Carolina

Continue to be the leader of economic and cultural opportunities in Eastern North Carolina and throughout the state, leveraging partnerships with key economic and educational institutions including ECU, Vidant Medical Center, and PCC.

Policy 4.1.3. Support the Economic Base

Continue to support and offer resources for existing businesses seeking to expand in Greenville. Attract and retain companies within target sectors that benefit from clustering.

In particular:

- Back office and data centers
- Digital media / software / simulation
- Pharmaceutical manufacturing
- Medical device manufacturing
- Advanced manufacturing

Policy 4.1.4. Support a Positive Business Climate

Continue to market Greenville's excellent business climate. Where appropriate, promote flexibility in development regulations to ensure a business climate that encourages growth and expansion. Support business growth, expansion, and retention through strategic public improvements. Ensure land use regulations align with target industry needs.

Policy 4.1.5. Maintain Adequate Access to Regional Transportation Infrastructure

Continue to develop, enhance, and maintain high quality regional transportation accessibility for local industries, including roads and interstates, air travel, and potential future rail. Partner with the state, county, and other municipalities as necessary.

Goal 4.2. Abundant Employment Space

Greenville will be an excellent place to start and grow businesses because it will have employment space to grow a variety of industries, including heavier industries, suburban office buildings, and high tech shared spaces within innovation districts.



Policy 4.2.1. Ensure an Adequate Supply of Employment Space

Using the Future Land Use and Character Map, ensure an adequate supply of appropriately located employment space for a variety of industries, including heavy and light manufacturing, office, high tech industry, flexible work space, laboratories, and commercial space.

Policy 4.2.2. Build Innovation Districts

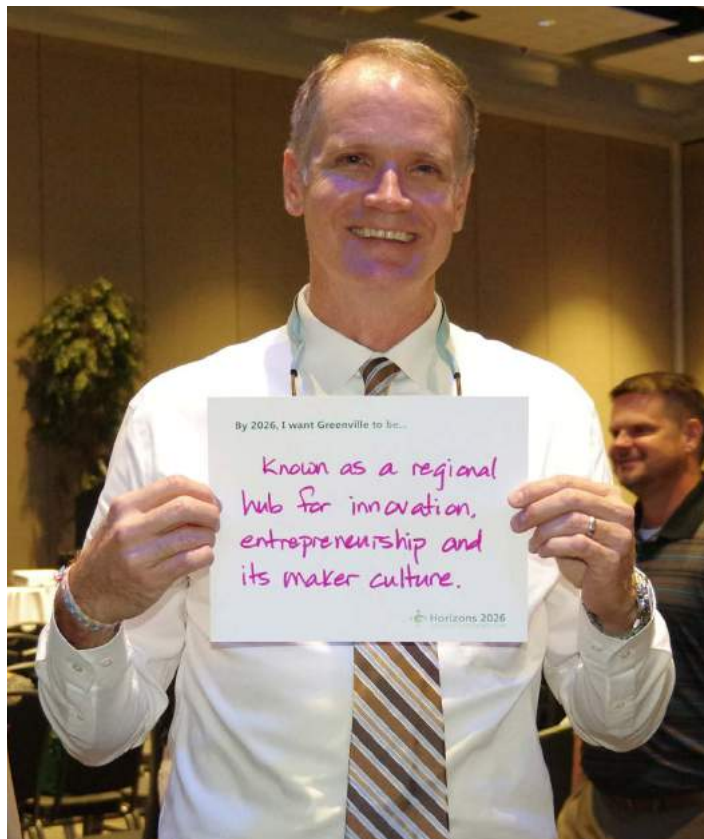
Promote the Uptown District, Dickinson Avenue Corridor, Medical Area, and other mixed use centers as entrepreneurial and innovation ecosystems: fostering the synergistic relationship between people, firms, and place in a way that facilitates idea generation, knowledge spillover, and commercialization of innovation into the market. As opportunities become available, increase the speed and expand the footprint of free wifi in public spaces throughout the city.

Policy 4.2.3. Promote Flexible Office Space

Promote flexible development of co-working spaces with programs to support idea generation and the start up of firms in the Uptown District. Provide affordable and collaborative environments for burgeoning companies.

Policy 4.2.4. Harness Sustainable Design

Encourage and incentivize the use of renewable energy, green infrastructure, and eco-friendly design of new businesses. Environmental practices can decrease long-term costs, and improve energy efficiency for Greenville's businesses while decreasing environmental pollution for the community.



Policy 4.2.5. Support Home Offices and Telecommuting

Support the use of home offices as an essential workspace for small businesses and start-up firms. Many entrepreneurs begin working out of their own home before committing to designated office space. Support infrastructure necessary for telecommuting, which can provide flexibility for workers and businesses looking to expand.

Goal 4.3. A Stable & Resilient Economy

As local and global economies become interlinked, Greenville's increasingly diverse economy and adaptable workforce will allow it to flourish during times of economic growth and bounce back and adapt during global and national economic recessions due to a diverse economy.



Policy 4.3.1. Modernize and Diversify Local Economy

Support the growth of a variety of employment opportunities and businesses that diversify Greenville's economy and provide workers with a range of skill sets and training. Encourage business growth within incorporated areas to expand and diversify Greenville's tax base.

Policy 4.3.2. Foster Entrepreneurship

Support Greenville SEED (Supporting Economic & Entrepreneurial Development) and other initiatives that work to provide the knowledge needed to build new businesses, enhance horizontal collaboration, and promote a culture of openness and network building.

Policy 4.3.3. Expand & Enhance Retail Options

Improve and expand retail options and the shopping experience in order to strengthen Greenville's role as the primary shopping and entertainment destination of Eastern North Carolina.

Policy 4.3.4. Promote a Green Economy

Welcome the development and attraction of industries that are part of the green economy and which develop and manufacture sustainable products using socially and ecologically responsible practices.

Policy 4.3.5. Implement Anchor Projects

Support catalyst projects in and around the Uptown District and other potential innovation districts that encourage activity and development and stimulate additional investment in those areas.

Policy 4.3.6. Support Small Businesses

Continue to provide small business support in Uptown and expand small business support in mixed use nodes throughout the city.

Goal 4.4. Effective Workforce Training

The Greenville region will continue to provide some of the best higher education options in the Southeast, and through partnerships and collaboration, the city will foster opportunities for workforce training that prepare current and future residents for high quality local jobs.



Policy 4.4.1. Support Pitt Community College

Support Pitt Community College (PCC) by enhancing accessibility to the campus and various satellite buildings and offering activity space for classes and workshops. Foster collaboration between PCC, ECU, and employers in the region.

Policy 4.4.2. Support ECU and Vidant Medical Center

Continue to provide ongoing support for and cooperation with ECU and Vidant Medical Center as they expand, redevelop, and modernize their programs and facilities.

Policy 4.4.3. Promote Local Hiring

Collaborate with local employers and other partners to attract and expand employer-provided workforce recruitment and training. Encourage employers to hire locally so that Greenville can retain the talented residents in which it invests. The mix of jobs should include opportunities for individuals beginning new careers.

Goal 4.5. A High Quality of Life

Quality of life is a critical component of Greenville's economic development strategy. Greenville will retain skilled workers and entrepreneurs for business, research, medicine, advanced manufacturing, and other industries. Greenville will be a vibrant, diverse, and inclusive city with myriad cultural opportunities, exciting places, and healthy living options for residents and visitors of all ages, backgrounds, and abilities.



Policy 4.5.1. Expand Walkable Development

Implement the *Horizons 2026* Future Land Use and Character Map, which encourages walkable mixed use development, connected street patterns, and nodal activity centers. There are many indirect benefits to creating a walkable city, including improvements to workforce retention that come from making Greenville a more desirable city in which to live.

Policy 4.5.2. Enhance Civic Opportunities

To cultivate, attract, and retain a high quality workforce, including recent ECU graduates, young professionals, and families. The city should foster a sense of place by promoting tourism and engaging activities. The city should also bolster civic opportunities like urban farms, recreation facilities, parks, libraries, and museums.

Policy 4.5.3. Promote Great Public Schools

Collaborate with Pitt County Schools and other education partners to support and promote the education of the community's public schools students both inside and outside of the classroom. Improve quality of life and opportunities for families in Greenville, and build a high quality 21st century workforce.

Policy 4.5.4. Provide Diverse Housing and Neighborhood Options

Support the development of a variety of housing and neighborhood options located close to employment areas and with access to commercial needs. Encourage a mix of housing options and prices within new developments and infill areas. Promote walkable neighborhood patterns. This policy provides multiple living options for a variety of workers.

Policy 4.5.5. Promote Jobs-Housing Balance

Maintain a balance of housing and jobs throughout the city. Promote a mix of uses in redevelopment and new development projects.

Policy 4.5.6. Create a Healthcare Destination

Encourage development and marketing efforts that establish Greenville as a healthcare destination, where patients and their families choose Vidant Medical Center not only because of high quality care, but also because of the variety of excellent choices in food, shopping, lodging, entertainment, and public space amenities located around the hospital and other areas of the city.

Policy 4.5.7. Build a Green City

Continue to invest in green transportation, energy, and environmental initiatives. This will keep open the possibility of attracting businesses that use sustainable practices as a part of their own corporate identity.

Policy 4.5.8. Create Signature Corridor Gateways

Enhance Greenville's gateways into the city, Uptown District, and Medical Area from surrounding communities and the airport.

Goal 4.6. An Equitable & Inclusive Economy

Greenville citizens will have access to high quality economically-mobile job opportunities that pay fair wages regardless of social or economic background.



Policy 4.6.1. Promote Workforce Housing

Promote workforce housing near transit, education institutions, and places of employment. Encourage and incentivize affordable housing units within new developments and redevelopment projects.

Policy 4.6.2. Enhance Transit & Accessibility

Support a high quality and accessible transit system that provides convenient, fast, and reliable transportation options for residents with or without access to cars, including students and workers. Support transit-oriented development patterns around key nodes that improve the viability of reliable and affordable transit service.

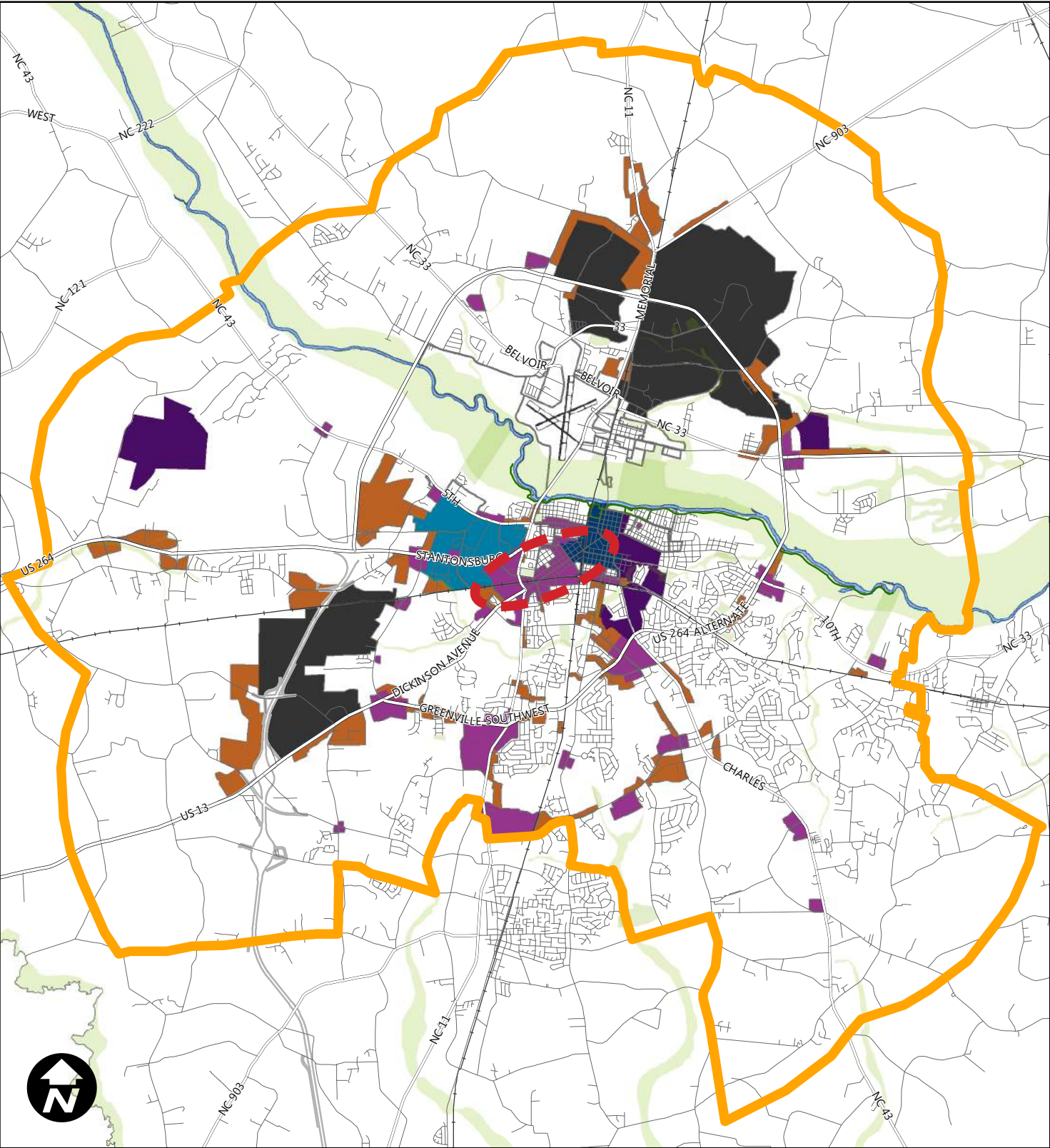
Policy 4.6.3. Support Quality Wage Jobs

The local economy is enhanced when workers earn enough to take care of their needs. By increasing the spending power of local workers and recycling capital throughout the local economy, the city should look to attract employers and provide incentives for hiring workers at wages high enough for the workers to participate fully in the Greenville economy.

Policy 4.6.4. Support Affordable Childcare

The city should work with United Way of Pitt County, Head Start, and other community organizations to invest in social infrastructure and facilitate and expand free and affordable access to childcare services for Greenville working families. When parents are confident in the safety and care of their children, they are more secure in their jobs and more invested in the community.

Economic Development Opportunities Map



Actions

Action 4.1. Initiate Rezonings of Parcels Identified for Economic Development Growth

Work with landowners to initiate rezonings on parcels that have been designated for light industrial/office in the Horizons Future Land Use and Character Map and this chapter's Economic Development Opportunities Map. The purpose of this action is to ensure that there is an adequate and diverse supply of land for industry and other employment uses, especially those that require large building footprints.

Action 4.2. Create an Incentive Program for Development and Redevelopment

Create an incentive program that promotes well-designed development in Preferred Growth Areas consistent with the Future Land Use and Character Map and the Tiered Growth Map. This can help grow mixed use centers, industrial development outside of Indigreen within the city limits, and other targeted opportunities.

In other cities, these types of incentives include: expedited permitting, density bonuses, infrastructure development, and assistance from a city business and development ombudsman. Incentives could be tied to compliance with the prescribed character as set out in the Future Land Use and Character Areas Map.

Action 4.3. Implement and Update Greenville's Economic Development Plans

Implement the actions of the *Strategic Economic Plan* for Greenville and the 2013 *Greenville Economic Development Assessment*. Continue to use these documents for policy guidance. Update and consolidate the plans to reflect progress that has been made in accomplishing each plan's actions and establish new economic development initiatives.

Many of the goals in those plans remain relevant today. For example, the *Greenville Economic Development Assessment* includes several strategic recommendations that enhance and complement the *Strategic Economic Plan*, including:

- Prepare, certify, and develop shovel-ready sites for industries across business sectors
- Develop and expand the recommended industry products, including innovation center, medical research park, multi-jurisdictional park, airport development, public-private partnerships, and short-term product development
- Enhance internal and external marketing
- Leverage partnerships with regional economic development organizations
- Develop the workforce through the creation of a Center for Advanced Technology and Training
- Create incentives for growth

Action 4.4. Convene Key Economic Partners to Foster an Entrepreneurial Ecosystem

Enhance partnerships between leaders from Greenville's drivers of innovation, entrepreneurship and economic development to foster synergistic clustering within the area identified as Opportunities for Innovation Districts on the Economic Development Opportunities Map, particularly around the ECU Millennial Campus. Consider additional opportunities to collaborate with ECU's Office of Innovation and Economic Development, PCC's Small Business Center, and the Chamber of Commerce with its investment in Greenville SEED (Supporting Economic Entrepreneurial Development).

The purpose of this action is to establish a strong platform for communication and collaboration between industries in Greenville and to promote geographic clustering. Greenville has the ingredients for a robust and resilient economy and opportunities remain to coalesce entrepreneurs, leaders in business, education, and government, venture capital firms, legal council, patent attorneys, and local companies in a way that facilitates idea generation and that supports an entrepreneurial and innovation ecosystem.

This action also provides a path to updating targeted employment sectors as the market shifts. Targeted sectors currently include:

- Back office and data centers
- Digital media / software / simulation
- Pharmaceutical manufacturing
- Medical device manufacturing
- Advanced manufacturing



Creating Complete Neighborhoods

Greenville will offer a variety of quality living options for its growing and increasingly diverse population, while supporting established neighborhoods and their existing residents. Complete neighborhoods will offer a variety of housing types, an integrated network of walkable and bikeable streets, access to transit, public schools, civic space in prominent locations, and proximity to grocery stores and neighborhood-serving commercial services needed by residents. With an assortment of high quality housing options that support a variety of income levels, neighborhoods will support multiple generations of families and ensure that someone can grow up, raise a family, and retire in the same neighborhood.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact housing and neighborhoods throughout Greenville.

Concepts and Best Practices to Address

Community Concerns: This section presents fact-based approaches to solving complex interrelated housing challenges.

Goals & Policies: This section lists the goals our community seeks to accomplish and the policies to guide us there.

Actions: This section provides key proactive actions that the city and interjurisdictional and community partners will take over the coming decade to bring us closer to our community's vision.

Overview

Greenville is home to a variety of neighborhoods and housing types, including historic neighborhoods surrounding the Uptown District, multifamily apartment complexes, and single-family housing neighborhoods further from the city core.

Neighborhoods serve as important city building blocks, and range from residential to mixed use areas that provide a live-work-play environment. To support a growing and diversifying population, it is important that Greenville provide its population with a range of housing choices.

This chapter establishes principles for enhancing the places where people already live and for fostering new complete neighborhoods. As housing ages it will become important to nurture and support existing established neighborhoods and work with neighbors and property owners to enhance them. Designing future neighborhoods to provide important amenities and a variety of high quality living options is also important for long term sustainable growth.

Planning Influences

Key Community Issues

Greenville is home to several great neighborhoods ranging in composition and character. These neighborhoods include places like West Greenville and the Tar River/University Neighborhood, older neighborhoods which are defined by a mix of housing types and high street connectivity, and more recently built neighborhoods like Carolina Heights and Lake Ellsworth located further from the city center. The following are key community conditions that currently impact Greenville's neighborhoods and housing.

Housing Supply

Between 1980 and 2010 Greenville's supply of occupied housing units nearly quadrupled to 36,071 units. Over that time span, the number of occupied rental units increased faster than the number of owner-occupied units. In 2010, 37.1% of occupied housing units were owner-occupied. Greenville's homeownership rate is lower than that of North Carolina and the rest of the United States, largely due to the number of students in Greenville. Also reflective of the high student population in Greenville is the average household size, which is lower than the state or nation as a whole.

Annual residential unit construction dropped following the subprime mortgage crisis of 2007-2010, and residential construction didn't increase until 2014. Most new housing being built is either large multifamily buildings or single-family homes. There are very few new units being built as two-, three-, and four- family buildings, resulting in less diversity of housing options. Several multifamily buildings developed primarily for student housing are located in isolated locations away from the city center resulting in concerns for the long-term viability of these complexes as students find housing closer to campus and the Uptown District.

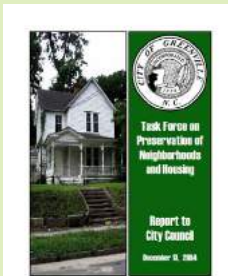
Cost of Housing

Average homes in Greenville continue to be more affordable than across the rest of the state and nation. In 2013, median gross rent in Greenville was \$724 compared to \$776 in North Carolina and \$904 in the United States. Greenville's median home value for all owner-occupied housing units was \$149,600 compared to \$153,600 and \$176,700, respectively. The greater affordability of housing is a major asset for Greenville.

City Programs

The City of Greenville provides a variety of housing and neighborhood programs. The Community Development

Relevant Plans



Taskforce on Preservation of Neighborhoods and Housing

West Greenville Revitalization Plan



Carolina Heights, Greenbrier, Hillsdale and Tucker Circle Subdivisions Neighborhood Report and Plan

Tar River / University Area Neighborhood Report and Plan

College Court & Coghill Subdivisions Neighborhood Report and Plan

Lake Ellsworth, Clark's Lake and Tripp Subdivisions Neighborhood Report and Plan

Oak Grove Estates Subdivision Neighborhood Report and Plan

Department provides services that help residents and homeowners associations find city services and lending expertise. The Neighborhood Advisory Board (NAB), a citizen-led board, works directly with residents to understand key issues. It brings residents together to share information, and helps establish new neighborhood associations. The city has established several programs to encourage neighborhood redevelopment, including Neighborhood Improvement Grants and Community Garden Leases. The city programs also facilitate down payment assistance, development of affordable housing, owner-occupied home rehabilitation, partnerships to provide homeownership counseling, multifamily development, facade and site improvement grants, lead removal, and brownfield development.

Housing and Transportation

Maintaining a sufficient housing stock that is affordable to average workers is a key component of promoting healthy neighborhoods and an equitable economy. Transportation cost tends to be a household's second-largest expenditure after housing costs, and can be highly variable depending upon location. Nevertheless, traditional measures of housing affordability ignore transportation costs associated with housing locations.

Housing and Transportation

Maps below illustrate affordability for Greenville's households. The map on the left shows areas where housing costs are greater than and less than 30% of household income. Generally people pay less than 30% of their income on housing throughout the city. The map on the right considers transportation costs and housing costs, showing that households spend less than 45% of their income on housing and transportation combined only within more compact and walkable places within Greenville.

The average household in Greenville spends nearly \$12,000 per year on transportation alone. This means that while the average household spends 29% of income on housing, an additional 28% of income is spent on transportation, leaving just 43% in remaining income to save and spend on goods and services. Opportunities exist to better connect neighborhoods to destinations and services as areas redevelop over time, allowing residents to participate more in the Greenville community and economy.

Funding Sources

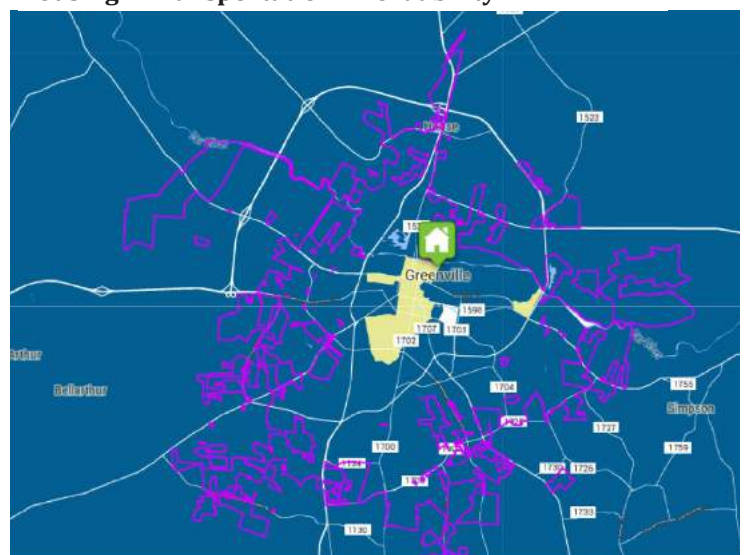
Resources available to support housing and neighborhood revitalization activities in Greenville include \$1.29 million from US Department of Housing and Urban Development (HUD) in fiscal year 2014-15, including funds from the Community Development Block Grant (CDBG) and HOME Investment Partnership programs. Total public investment over the same period was a little over \$1.7 million, adding funds from the general revenue, affordable housing bond funds, and the North Carolina Housing Finance Agency. Private lending institutions and private developers were also a part of the equation for funding affordable housing, special needs types of housing, and non-housing community development.

Housing Affordability



- Can Afford Housing
(Housing payment < 30% income)
- Are Cost Burdened
(Housing payment > 30% income)

Housing + Transportation Affordability



- Can Afford Housing & Transportation
(Housing & Transportation costs < 45% income)
- Are Cost Burdened
(Housing & Transportation costs > 45% income)

Concepts and Best Practices to Address Community Concerns

Neighborhoods are the most fundamental building blocks of the city. They range in character from low density suburban housing developments, to walkable mixed use neighborhoods, to high density live-work-play environments complemented by commercial and employment uses.

Demographic changes throughout the United States have resulted in changing market preferences for housing types and neighborhood options. Increasingly, retiring baby boomers, millennials, and young families are valuing diverse and walkable neighborhoods that foster connectedness to community and offer opportunities for interaction. The following are key concepts and best practices for neighborhoods and housing.

Missing Middle Housing

Single-family homes located in neighborhoods with little housing variety currently make up much of the for-sale housing stock. In the meantime, homebuyers and renters are increasingly seeking diverse, vibrant, and walkable places to live. "Missing Middle Housing" refers to a range of multifamily or clustered housing types that fall between mid-rise apartments and single-family homes in scale. These housing types can help meet the growing demand from young professionals, families, and retirees for home options in walkable neighborhoods.

LEED ND

LEED began as a private environmental certification of the U.S. Green Building Council to recognize individual buildings that met particular environmental goals. There are tiers of recognition depending on how far

the building pushes environmental performance: certified, silver, gold, and platinum. Some of the guidelines have since been extended toward entire neighborhood development. LEED ND is a rating system that ranks neighborhoods based on how sustainable they are, such as whether residents have a variety of transportation options, whether children can walk to school, whether there are parks and green spaces nearby, and whether residents easily reach healthy foods. New developments receive higher scores when they are located next to existing infrastructure and near transit, are safe and comfortable to navigate on foot, and incorporate green features and energy efficient buildings. These guidelines are ambitious and can be challenging to implement on a citywide level. In Greenville, they can provide guidance for developers and city officials to build more sustainable neighborhoods. Regulations or incentive programs can call for *LEED quality* development and take advantage of the clear standards without requiring certification by a private group.



A Variety of Housing Types

Having a mix of housing sizes and styles within neighborhoods provides multiple choices to homebuyers and renters of varying incomes and preferences, such as this example from the Stapleton neighborhood of Denver, CO. Image Source: stapletondenver.com



Missing Middle Housing

"Missing Middle Housing" includes several types of housing, listed in the above image, on small footprints and within a walkable built framework. Image Source: missingmiddlehousing.com

Traditional Neighborhood Design (TND)

Many traditional neighborhoods from before the post-World War II housing boom remain popular places to live. In Greenville, these neighborhoods surround the Uptown District and are identifiable on a map by dense networks of streets forming grids. The way in which these places were designed facilitated walking and, over time, provided multiple housing types, living options, and even commercial needs. Acknowledging the impact of neighborhood design on diversity, livability, affordability, and accessibility, many communities are returning to the TND pattern. TNDs are often defined using the following development principles.

A Discernible Center

Traditional Neighborhoods often have an activity center that provides a meeting place for neighborhood gatherings and commercial needs.

The Five Minute Walk

Providing a neighborhood center, or park, within a five minute walk of homes can change daily routines and improve the quality of life of residents.

A Variety of Housing

Diverse housing options provide singles, families, and retirees with choice, and ensure that someone can find the housing they need throughout their lives without leaving their neighborhood.

Neighborhood-Serving Mixed Use

Many people want to be able to easily access the goods (groceries, small-scale retail, etc.) and services (daycare, barbershop, post office, etc.) that they typically need on a daily or weekly basis. Traditional neighborhood developments encourage access to these opportunities, ideally within a short distance. Over time, walkable commercial opportunities can reduce traffic congestion throughout the city.

Accessory Dwelling Units

Accessory dwelling units, garages with small apartments above, are often accessed via a rear alley and can provide additional space for family members.

Walkable Schools

Community schools well-located within or near neighborhoods can offer safe walking distances for students.



Neighborhood-Serving Mixed Use Can Improve Livability

Neighborhood-serving commercial uses can include small-scale, context-sensitive buildings in a walkable format compatible with the surrounding neighborhood. These buildings, which can take the form of corner stores and live-work units, provide goods and services for local residents, like this one in Louisville, KY

Image Source: Eric Graf Photography

A Connected Street Pattern

In connected street patterns, neighborhood blocks are short and avoid cul-de-sacs. The street pattern provides multiple travel options, slows down traffic, and make neighborhoods more walkable.

Streets For All Users

Narrow, shaded streets that have sidewalks on both sides are conducive to safe walking and bicycling in addition to driving. Where there are alleys and blocks are small, this pattern can improve, not hinder, access for fire trucks, school buses, and trash collection.

An Outdoor Room

Residential streets in TNDs often feel like “outdoor rooms” because they are enclosed by street trees and homes. Front porches foster chance encounters and are sometimes close enough to hold a conversation with neighbors walking down the sidewalk.

Rear-Located Parking

Parking or garages are typically located behind buildings, accessed via a rear alley, or set back from the front of the house.

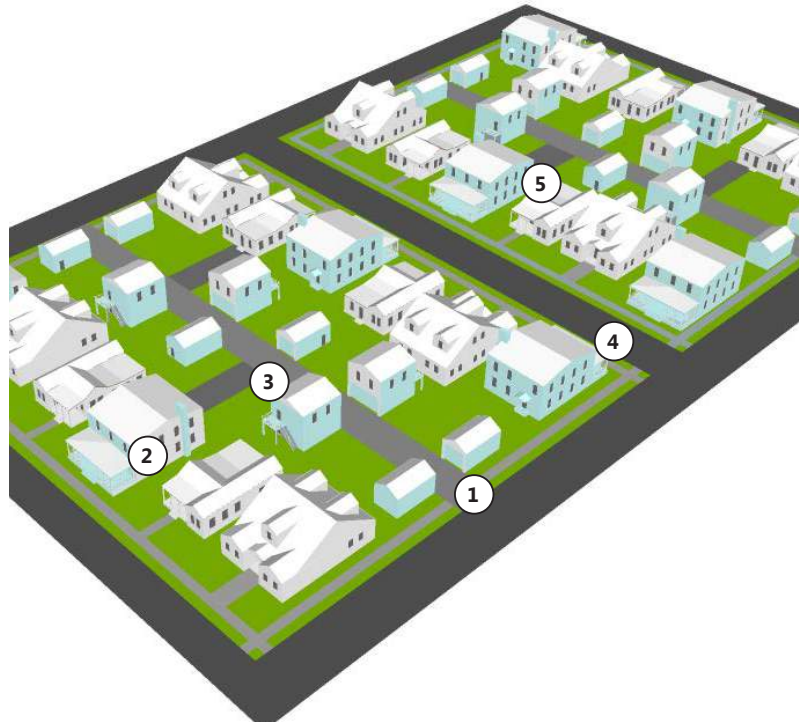
Prominently Located Civic Space: Civic space is prioritized in neighborhood designs, setting aside space for parks, playgrounds, community gardens, schools, and community gathering places. These places are centrally-located and easily accessible.

Anatomy of a Neighborhood Block

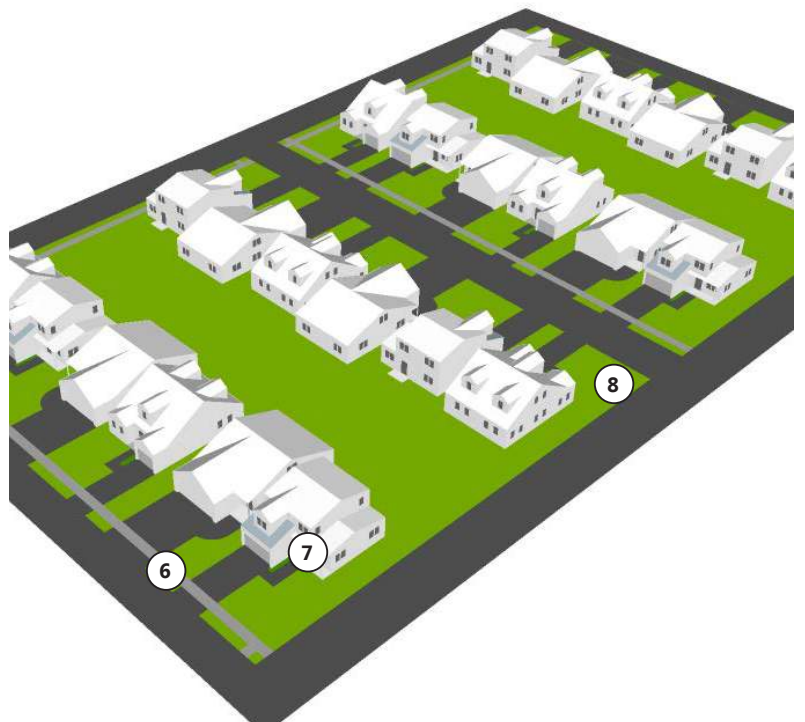
The design of neighborhood blocks has a strong influence on the feel of the entire neighborhood. Subtle design elements can have dramatic impacts on the way people interact with and experience their neighborhoods. Neighborhood design also affects the way residents get around, including how they go to work and how they obtain their daily needs. The following illustrations present some of the key design elements of neighborhood blocks in traditional neighborhood developments and elements of conventional developments that TND avoids.

- ① **Rear Alley:** The rear alley facilitates rear parking access, manages accessory dwellings units, and hides trash and recycling bins and other utilities behind residential buildings.
- ② **Front Porches:** Historic North Carolina homes often include front porches. Families can gather on the porch and interact with the neighborhood. Front porches enhance safety by providing “eyes on the street” and foster relationships among neighbors.
- ③ **Accessory Dwelling Units (ADU):** ADUs are often, but not always, accessed via a rear alley. They offer homeowners an additional space that, in keeping with North Carolina state legislation, they can use to house an elderly family member needing care. They may also be used for additional off-street parking for homeowners.
- ④ **Pedestrian-Friendly Streets:** Great neighborhood streets include reduced pavement with on-street parallel parking, ample room between the curb and the sidewalk for lights, utilities, and street trees, sidewalks on both sides, and homes with short setbacks from the front property line.
- ⑤ **Housing Variety:** Even within primarily single-family neighborhoods there are opportunities to provide diverse options with a variety of lot widths, multiple housing sizes, and a mix of duplexes and single-family homes.
- ⑥ **Front Driveways:** Front driveways are common features in conventional housing developments. Though convenient for driving, parking becomes the predominant feature of homes within the neighborhood, becoming a hazard for pedestrians walking on the sidewalk.
- ⑦ **Front-Facing Garage:** Front-facing garages can be convenient for entering and exiting neighborhoods by car. In many neighborhoods, the garage is the primary architectural feature. Absent a rear alley, the character can be improved by situating the garage to the side of or behind the house.
- ⑧ **Intermittent Sidewalks:** Many conventional neighborhood blocks only include sidewalks on one side of the street, typically directly adjacent to the curb or with a small planting strip. Opportunities exist to enhance walkability with large planting strips and sidewalks on both sides of the street.

Traditional Neighborhood



Conventional Development



Housing Affordability

One of Greenville's many assets is the city's stock of relatively affordable housing when compared to other cities throughout the state and nation. However, homeownership and affordable housing still remain beyond reach for some families. It continues to be important to maintain a stock of housing that is affordable to families who earn less than the area median income.

Anemic housing growth that followed the 2008 mortgage crisis contributed to increased housing costs at the same time that wage growth lagged. This, coupled with tighter lending standards, left fewer low and middle income individuals eligible for a mortgage, increasing demand for rental housing and precipitating an increase in the cost to rent in many places. As state and federal funding for affordable housing decreases, communities turn to creative ways for providing affordable housing to low and middle income residents. Affordable housing provision increasingly requires coordination between a complex patchwork of community partners and funding sources. Many funds are dependent on compliance with the US Department of Housing and Urban Development's (HUD) Fair Housing program, which requires intentional planning from the city.

The location of housing is fundamental to accessing opportunities in order to thrive. Lower income families need housing in healthy neighborhoods with low crime rates, access to quality education, meaningful job opportunities, and affordable and reliable transportation options. Affordable housing already exists in many high opportunity neighborhoods. Safeguarding this housing, and supplying new housing, is essential for maintaining and enhancing access to vital opportunities. This is especially important where affordable units are within walking distance of transit, employment opportunities, and grocery stores.

Several studies suggest that providing adequate amounts of affordable housing plays a key role in bolstering economic development and fiscal health of communities. Although some fear that affordable housing units can lower the property values of adjacent land, studies show that well-managed affordable units tend to have a neutral or positive effect. Affordable units can also attract and retain the local workforce, reduce foreclosure risk and associated direct and indirect costs, increase local buying power, and reduce the social costs associated with lack of affordable housing.

Voluntary inclusionary zoning (IZ) is one of several tools that North Carolina cities and towns have at their disposal to address the availability of affordable housing. In its basic form, IZ is a zoning tool that incentivizes or requires real estate developers to set aside a portion of units in a development to low and middle income individuals. Programs vary significantly in level of complexity across the U.S. and can range from mandatory to incentive-based. There are three general categories of inclusionary zoning in North Carolina: voluntary, conditional, and mandatory.

Community land trusts are another tool being used in communities to make homeownership affordable to low and moderate income people and to improve neighborhoods, promote sound land use practices, and preserve the long-term affordability of housing. It requires an independently established nonprofit trust to manage the program. Successful trusts operate elsewhere in North Carolina, such as the Community Home Trust in Orange County. The way this typically

Mixed Income Housing in Charlotte

In 2013, the City of Charlotte adopted its Voluntary Mixed Income Housing Development Program to promote housing diversity through private sector development of affordable housing. The voluntary program targets Census block groups within single and multifamily zoning districts that are at or above city-wide median home value.

Within these target areas, the incentives-based program permits developers to build up to 3 dwellings per unit area (DUA) above base density in specified single-family districts, and 2-3 DUA above base density across multifamily districts. Additional conditions require that affordable units be mixed throughout development and that exterior design not vary between affordable and market-rate units.

City planning continues to refine the program, exploring means of better promoting its use through expedited permitting and the reduction or elimination of developer fees. Several other cities throughout North Carolina are adopting voluntary, conditional, or mandatory inclusionary zoning ordinances and offering incentives to developers to build mixed income developments.

works is that the buyer purchases the house and a ground lease of the property from the community land trust. The house is purchased by a qualified homebuyer at a reduced rate. When ready, the homeowner then sells the home at an affordable amount to the next homebuyer, or back to the trust, ensuring long-term affordability. The ground lease or deed restriction are the vehicles for maintaining the affordability of the home. Many trusts require buyers to attend money and home management courses before qualifying.

Multigenerational Living Environments

An increasing number of American households now include more than one generation living under one roof. This trend is occurring for multiple reasons: debt saddled millennials, baby boomers caring for aging parents, live-in grandparent babysitters helping to offset the price of child-care, and a rising number of immigrant families for whom intergenerational living is the norm. More than 18% of adults, 57 million Americans, are living in multigenerational households, more than twice the number who lived in such arrangements in the 1980s, according to the Pew Research Center.

Communities built to address the needs of older persons and families are communities that generally serve all residents well. Livable communities have physical and social features that benefit people of all ages. When a wide range of needs is addressed, families and individuals have the option to stay and thrive in their communities as they age. But planners must make the connections between young and old before starting to plan for them. Multigenerational planning uses traditional neighborhood design principles to create livable communities where members of all age groups remain active, connected, and safe.

A walkable and dense development pattern makes staying active easier, and this is a positive feature of multigenerational living environments. Positioning schools, grocery stores, libraries, recreational amenities, and playgrounds within walking distance when designing or redesigning neighborhoods can help achieve the physical activity needs required to remain healthy and combat obesity. Bike lanes, sidewalks, safe and well-designed parks, open space and recreational systems, and pedestrian access are all components of traditional neighborhood principles that promote physical health for all community members.

Zoning

Zoning regulations are essential tools to protect the public health, safety, and welfare, and to promote high quality development and traditional neighborhood design. Zoning can also be used to exclude populations, either intentionally or unintentionally. This can occur when communities set minimum lot size requirements that are too large, resulting in higher costs for homebuyers and renters.

Over time, zoning can also result in neighborhoods that exclude affordable characteristics of housing, like prohibiting small lots with short front and side setbacks, rear alleys that allow accessory dwelling units for aging family members, and corner stores that allow residents easy access to daily needs without the need of a car. Many communities are evaluating their land use regulations and making modifications that better support housing for a variety of incomes.

Neighborhoods and Student Housing

Universities are valuable economic and social drivers in communities, providing jobs and educational opportunities, and drawing bright minds from around the world for studying and researching. Most cities with universities also face challenges arising from the conversion of historic single-family homes in established neighborhoods to student rental housing. This conversion can sometimes bring negative impacts, including illegal parking, late night noise, litter, increased traffic, and decreased supply of for-sale housing.

Student rental conversions occur in established neighborhoods partially because only a portion of the student body at ECU is housed in on-campus housing. This is true of most other universities as well. They rely on the private rental market to supply the remaining housing demand. In response to these problems, communities around the country are seeking collaborative initiatives to ensure an adequate supply of affordable student housing without compromising homeownership and community stability in adjacent and often historic neighborhoods.

Some strategies used in other communities have included:

- Collaborating with the university to acquire and renovate rental properties located in established neighborhoods;
- Working with the university to provide additional on-campus housing and find locations near campus

that are appropriate for private off-campus student housing; and

- Developing and enforcing fair zoning restrictions that protect established neighborhoods.

out existing populations that benefit from living in centrally located neighborhoods. The City, working with neighborhood leaders, may consider strategies that seek to ameliorate the negative impacts that gentrification can have on existing residents.

West Greenville

The West Greenville Neighborhood is an historic neighborhood, located west of the Uptown District. For decades it has been home to a large African American population. It lies within a U.S. Department of Agriculture designated food desert. The city has worked with community partners and a variety of funding sources to improve the West Greenville neighborhood by renovating blighted homes, constructing affordable housing, supporting community gardens, improving infrastructure, providing quality economic development and commercial opportunities, and developing parks and community centers.

These ongoing efforts, guided by the *Center City West Greenville Revitalization Plan*, are providing improvements within the neighborhood and focusing on harnessing development without resulting in displacement. The *West Greenville 45-Block Revitalization Program* is an effort to revitalize depressed areas in and adjacent to the neighborhoods of Cherry View, Perkins Town, Biltmore, and Lincoln Park.

West Greenville was originally built as a compact and walkable neighborhood. The short blocks and connected streets harken back to a time when most people walked around the City more. Although the neighborhood has evolved since then, with some of its historic homes now intermingled with newer and more modern residences, the character has remained similar.

One challenge to redevelopment and reinvestment in the neighborhood has been the city's zoning regulations. West Greenville was originally designed to provide narrow lots. Many of the lots are currently too small for existing zoning regulations, making them impossible to redevelop. Opportunities exist to better support redevelopment and infill development with zoning changes that allow smaller lots.

As the neighborhood continues to benefit from new physical improvements and additional private investment, it is likely to experience some gentrification. While gentrification signals increasing investments and revitalization, it can often times divide and push

Goals & Policies

Goal 5.1. Strong Existing Neighborhoods

Greenville will have strong established neighborhoods, with support for neighborhood organizations, high quality housing, unique character, and robust integration with the rest of the community.



Policy 5.1.1. Support Neighborhood Organizations

Continue to support and assist neighborhood and housing organizations working to improve housing conditions and neighborhood services.

Policy 5.1.2. Promote Context-Sensitive Redevelopment

All retrofitting projects, redevelopment, and infill development should consider the neighborhood context and incorporate appropriate context-sensitive designs.

Policy 5.1.3. Continue to Improve Relations Between Neighborhoods and Students

Continue to collaborate with university partners to improve relations between neighborhood residents and the owners and renters of student housing who coexist in the established neighborhoods around campus.

Policy 5.1.4. Use Neighborhood Plans for Guidance

Use Greenville's adopted neighborhood area plans for development and capital investment guidance. Continue to update, and maintain neighborhood area plans. Audit the plans periodically to ensure implementation.

Policy 5.1.5. Address Disinvestment Occurring at Multifamily Housing Complexes

The City will mitigate the disinvestment in multifamily housing complexes that is occurring on the edges of the City through the land use vision identified on the Future Land Use and Character Map. These multifamily complexes historically served as student housing. As newer, higher quality student housing is being developed closer to the ECU campus, disinvestment is occurring at a few multifamily complexes on the city's edge due to increased vacancy rates, lack of amenities, and distance to campus. The Future Land Use and Character Map and this policy encourage these areas to redevelop to other more appropriate uses, such as commercial or office centers, with existing buildings either eventually replaced or retrofitted to the NC commercial building code. Future multifamily developments should be developed in areas that are supported by transit service, proximate to needed services, employment areas, and the ECU campus, and are walkable and designed with community amenities.

Community Voices: We want...

- Strong intact neighborhoods with great community.
- Neighborhoods connected to the network of bikepaths and parks.
- Neighborhoods near any and all parts of campus that look great and are home to vibrant communities.
- Improved appearance of overall development.
- Have a park within a half mile of every residence.
- Higher density residential.
- Housing options besides apartment complexes and homes for sale.
- A nice apartment/condo for adults in Uptown.
- More affordable senior housing for middle income.
- Developments that promote walkability.

Goal 5.2. Complete Neighborhoods

Greenville will expand its housing and neighborhood variety to provide many living options, striving for excellent neighborhoods home to multiple generations and income levels, where residents of all abilities are able to access commercial and recreational needs.



Policy 5.2.1. Provide Diverse Living Options

New neighborhoods should include a variety of housing options, including single-family detached homes, townhomes, quadriplexes, duplexes, and small-scale apartment buildings. Neighborhood should include a variety of lot sizes.

Policy 5.2.2. Enhance Access to Daily Needs

Promote a mix of supporting uses in new neighborhoods, including social services such as daycare, context-sensitive commercial uses offering daily needs such as grocery stores, and civic uses such as parks and schools.

Policy 5.2.3. Improve Access to Civic Sites

Redevelopment and new development projects should improve access to civic sites including parks, squares, playgrounds, and schools. Ideally, most residential properties will be within a quarter-mile of at least one future or existing civic site. Civic sites should occupy prominent parcels in new development and redevelopment projects, including central locations in neighborhoods, elevated areas, and parcels located at the end of a corridor that provides an opportunity to create a quality terminating vista.

Policy 5.2.4. Promote Professional Housing in Uptown

Allow for and promote the development of housing that is attractive to young professionals, families, and retirees in the Uptown District, including mixed use apartment and condominium buildings, small-scale apartment buildings, and townhomes.

Goal 5.3. Sustainably Designed Neighborhoods

New subdivisions and master planned communities, will be designed to serve the residents who live there. They will provide safe and beautiful local streets with access to commercial and civic needs, all integrated with the fabric of the city.



Policy 5.3.1. Encourage Identifiable Neighborhood Centers

Promote neighborhood designs that include an identifiable neighborhood focal point, such as a low-intensity context-sensitive mixed use node or inspiring civic space.

Policy 5.3.2. Promote Residential Development within a Five Minute Walk of Other Uses

Encourage development of new residential housing within a five minute walk of at least two other uses, such as a civic space or neighborhood-oriented commercial space. The evaluation of new residential developments should include the consideration of walking distance to other uses.

Policy 5.3.3. Promote Pocket Parks

Neighborhood development and redevelopment should incorporate well-designed pocket parks and playgrounds. These parks should be easily accessible to a large number of homes, especially for the convenience of families with small children, and should require minimal maintenance by homeowner associations.

Policy 5.3.4. Promote Development of a Network of Walkable Streets

All new neighborhoods in Greenville should have an integrated and highly connected network of walkable streets with short blocks and limited culs-de-sac.

Policy 5.3.5. Encourage Development of Transit-Oriented Neighborhoods

Neighborhoods should be designed with transit access as a priority. The number of homes that are in short walking distance to a transit stop should be maximized. Where possible, these same strategies should be pursued in existing neighborhoods as well.

Goal 5.4. Neighborhoods that Coexist with Nature

Neighborhoods throughout Greenville will coexist with nature, reducing hazards related to storms and flooding, enhancing environmental quality, and incorporating and celebrating natural features that support healthy livable environments.



Policy 5.4.1. Protect Significant Natural Features

Promote protection of significant environmental features in neighborhood developments. These features include wetlands and wildlife habitats. Support creative designs to make them community focal points and neighborhood amenities.

Policy 5.4.2. Retain Existing Topography as Land is Developed

Promote neighborhood designs that work with the existing topography. Discourage projects that rely heavily on making grade adjustments, including so-called cut-and-fill projects that level the heights of a site to fill the lowlands, creating a flat plain for construction. Preserving existing hydrology protects the watershed and reduces stormwater hazards.

Policy 5.4.3. Consider Low Impact Development Stormwater Management

When designing new neighborhoods, follow existing drainage and percolation patterns. Minimize permeable surface areas. Use stormwater infrastructure as a neighborhood asset by combining recreational features with stormwater infrastructure. Promote the use of rainbarrels and green roofs on residential buildings.

Policy 5.4.4. Build a Network of Green Infrastructure

Where possible, large scale development plans should allocate land for conservation. Developers should demonstrate how neighborhood green areas have been linked into a continuous system beyond the site.

Policy 5.4.5. Encourage Provision of Space for Community Gardens

Where possible, and when desired by the local community, neighborhoods should incorporate space for community gardens and trees with edible fruits.

Policy 5.4.6. Promote Renewable Energy

Allow for and promote the harnessing of low impact renewable energy in neighborhoods, such as small wind turbines and rooftop solar panels.

Goal 5.5. Affordable Housing

Greenville's affordable housing will be well integrated into the greater community and accessible to commercial, transit, and civic uses. It will be provided in neighborhoods with high quality, pedestrian oriented design.



Policy 5.5.1. Use Diverse Solutions

The city should use a diverse array of tools to promote the construction and maintenance of affordable housing units. Continue to find and use funding for affordable housing from a variety of public and private sources, including HUD, CDBG, other federal and state grants, the local budget, private foundations, and other sources. Promote construction of new affordable units.

Policy 5.5.2. Promote Community Integration

Promote affordable housing units that provide seamless integration into the fabric of the Greenville community. Avoid isolated and disconnected affordable housing developments.

Policy 5.5.3. Promote Community Involvement

Promote transparency and openness, and engage with community members whenever development proposals affect existing neighborhoods. Make engagement with the surrounding community a regular exercise.

Policy 5.5.4. Support Long-Term Affordability

Support sustainable and innovative strategies to maintain the city's existing and future stock of affordable housing. Potential strategies might include supporting community land trusts and cooperative housing initiatives, writing long-term affordability into deeds and covenants, and revolving loan funds used for homebuyer assistance.

Policy 5.5.5. Support Community Partners

Support the Greenville Housing Authority and other community partners working to expand housing affordability and build household wealth in Greenville.

Policy 5.5.6. Measure the Affordable Housing Stock

As a part of the City's update to its US Department of Housing and Urban Development (HUD) Housing Consolidated Plan, assess the supply, need, and potential deficit of affordable housing stock in Greenville.

Goal 5.6. Shelter and Assistance for the Underprivileged

Everyone in Greenville will have access to safe shelter that provides protection from the elements, a dignified place to sleep, and the support of their community in hard times.



Policy 5.6.1. Support Homeless Shelter Services

Support community partners working throughout Greenville to provide emergency shelter and stable solutions.

Policy 5.6.2. Support Transitional Housing

Support transitional housing and services that provide support for formerly homeless working people seeking to obtain permanent affordable housing.

Policy 5.6.3. Support Community-Based Assistance for Impoverished Households

Support faith-based community organizations and other organizations working to improve employment, housing, and health opportunities for impoverished households in Greenville.

Actions

Action 5.1. Adopt New Residential Zoning Districts and Standards for Existing and Future Traditional Neighborhoods

Develop and adopt residential zones that allow by-right and promote the uses and neighborhood characteristics described in *Chapter 1: Building Great Places*. The chapter includes an action to overhaul the city's development regulations. While this action could take several years to accomplish, interim actions will need to be carried out to better align the city's zoning and subdivision regulations with the goals and policies of the *Horizons 2026 Community Plan*.

These new residential zones should be created primarily for two types of existing uses that present distinct development opportunities: Greenfield Development and Infill Development. Zoning suggestions are described below.

1. Greenfield Development

New zoning districts should provide opportunities to develop homes using traditional neighborhood design such as:

- Offering a variety of lot sizes and housing types within the same block;
- Decreasing setbacks to promote housing closer to the street;
- Build-to lines to promote short front setbacks;
- Using clustered development patterns that preserve open space;
- Regulations for maximum stories instead of maximum height in feet;
- Recommended development of rear alleys; and
- Maximum block length standards for internal blocks and future street extensions.

As part of this effort, the city may also choose to modify the City Code in Title 9, such as *Article O. Parking Standards*, *Article F. Dimensional Modifications and Special Standards*, requirements in *Article J. Master Plan Community* or other articles in order to facilitate the implementation of the Future Land Use and Character Map.

2. Existing Neighborhoods

Redevelopment efforts in West Greenville currently require consolidation of multiple lots in order to comply with zoning regulations. Consolidating lots can negatively impact the neighborhood by increasing development costs, reducing density, changing the neighborhood's character, and making homes less affordable.

Investigate the options to address nonconforming lot sizes within this particular neighborhood as a part of the next zoning code update. Research how the neighborhood originally functioned with the original lot sizes and determine what modifications are necessary to make the lot sizes work for residents again.

Action 5.2. Convene Organizations to Discuss the Challenges and Strategies for Impoverished Households.

Assemble faith-based community organizations, other organizational partners, and experts to discuss challenges and strategies for impoverished households. Use the conversation to plan future avenues for investigation and action. Continue discussions with community organizations toward ongoing efforts.

Action 5.3. Update HUD Consolidated Plan

HUD Consolidated Plans help to assess local affordable housing and community development needs and market conditions. It is a document necessary for pursuing funding opportunities that can benefit those citizens eligible for affordable housing programs. Updating the plan is a first step in pursuing these funds, and in maintaining a supply of affordable housing in the City.

Action 5.4. Adopt a Voluntary Inclusionary Housing Ordinance

Adopt a voluntary Inclusionary Housing ordinance as the mechanism for encouraging the development of workforce housing. A voluntary ordinance could provide the property owner with two different development options for a single piece of property. The property can be developed as defined by zoning, or additional incentives could be offered as of right when certain affordability conditions are met.

Incentives that Greenville should offer could include:

- Density bonuses;
- Smaller setbacks, lot sizes, and buffers;
- Reduced parking and landscaping requirements;
- Direct financial assistance; and
- Expedited permitting and administrative support.

These incentives help make a development more profitable and are defined by ordinance and applied uniformly to any owner that is granted a permit for that conditional use.

Inclusionary Housing ordinances are common tools used for providing affordable housing units mixed with market rate units. These ordinances are used by cities around the country, including several municipalities in North Carolina. This action could also help foster infill development and investment while minimizing displacement of existing communities over the coming decades.

Action 5.5. Develop Neighborhood Reinvestment Strategy

Establish strategies that build off of the Task Force on Neighborhoods and Housing report in order to strengthen neighborhoods, maintain high quality housing, and enhance existing neighborhoods. Strategies may also address relations between private sector providers of off-campus housing, ECU student housing services, and surrounding neighborhoods.

Action 5.6. Continue to Conduct Audit of Neighborhood Area Plans

Conduct audits of existing neighborhood area plans in order to determine progress made on the implementation and current relevance of each plan's goals and policies. Set out a strategy to determine implementation priorities. Determine whether restrictive covenants have been placed on the land that impact the form of the neighborhood.

Action 5.7. Develop a Strategy to Address Disinvestment in Peripheral Apartment Complexes

Develop a strategy that addresses concerns about declining student housing complexes on the periphery of the city. Identify the location of each site and work with landowners to encourage redevelopment to other appropriate uses. Look at long-term strategies to better connect them to workplace and other destinations. Before rezoning areas in the periphery as multifamily in the future, specific criteria should be developed that consider transit service and walkable proximity to employment and commercial uses.

Action 5.8. Develop Strategies to Stabilize and Revitalize the University Neighborhood

Develop a set of strategies intended to stabilize and revitalize the University Neighborhood and surrounding areas. This could include providing financing incentives for potential homebuyers, stricter enforcement of existing regulations, assessment of additional regulations to address nuisance and blight issues, partnering with ECU to develop programs to educate student renters about expectations for living in established Greenville neighborhoods, infrastructure improvements, and other strategies.



Fostering a Resilient City

Greenville will grow safely by protecting our natural water systems and managing development in hazardous areas. The city will be prepared for the impacts of powerful storms, and shifts in climate. It will grow sustainably by using design approaches that serve to minimize impacts on the natural environment. Conservation efforts will maintain the health of the Tar-Pamlico River and Neuse River watersheds, manage stormwater flows, and help to guarantee supplies of clean water for future generations. Greenville will have room for proven renewable energy initiatives, clean transportation opportunities, and green building technologies. Greenville will support nature not just in parks, yards, and open spaces, but along streets, in open lots, and atop buildings.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact resiliency in Greenville and the region.

Concepts and Best Practices to Address

Community Concerns: This section presents fact-based approaches to solving complex interrelated challenges.

Goals & Policies: This section lists the goals our community seeks to accomplish and the policies to guide us there.

Actions: This section provides key proactive actions that the city and interjurisdictional and community partners will take over the coming decade to bring us closer to our community's vision.

Overview

Building a sustainable resilient city is the prudent challenge of communities worldwide. Greenville has seen the harm that comes from hurricanes and floods. In the subsequent years since Hurricane Floyd, increasing understanding of the risk of natural hazards has spurred cities to adapt and innovate. Ecological systems of the natural environment can be the first line of defense when disaster strikes, and urban areas must learn to coexist with these systems.

This chapter addresses key challenges for Greenville today and in the future. It builds on the city's laudable sustainability initiatives and natural assets to foster a resilient city. Greenville can harness its strong leadership, its innovative spirit, and its hard-earned experience with floodwaters to enhance environmental stewardship and increase the safety and well being of its citizens.

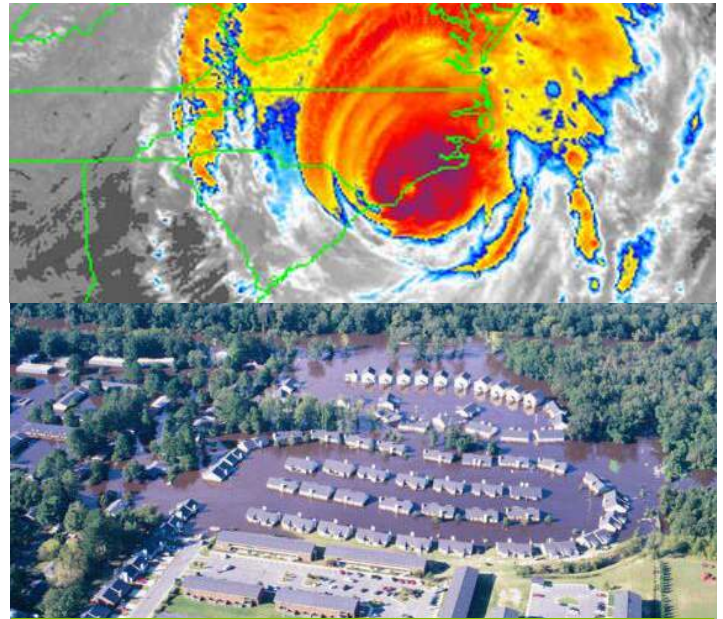
Planning Influences

Key Community Issues

Following the destruction caused by Hurricane Floyd in 1999, Greenville took swift action to respond to the needs of its citizens and ensure that the city will be prepared for the future risk of storms of equal or greater intensity. As the city grows it will be important to maintain the collective memory of such disasters and to implement policies and strategies that bolster natural defenses, harness renewable energy, and promote sustainable building and transportation planning that reduce negative impacts on the environment in the face of threats from a volatile climate. The following are some existing conditions in Greenville.

Environmental Assets

The Tar River is a critically important natural resource and makes up part of the Tar-Pamlico River Basin. The river provides natural beauty, opportunities for recreation, a habitat for plants that sequester carbon, and a source of drinking water. The North Carolina Department of Environment Quality Division of Water Quality classifies the Tar River as a Class C river within Greenville's city limits and immediately downstream. This designation means the river is protected for secondary recreation, fishing, and wildlife among other uses. Secondary recreation includes wading and boating. Immediately upstream from Greenville, the Tar River is classified as Water Supply IV, which has all the same uses as Class C in addition to water supply for drinking and culinary or food processing. There are



In 1999, Hurricane Floyd caused damaging flooding in Greenville along the Tar River. Image Sources: NOAA & USGS

many tributary streams of the Tar River within the city, including:

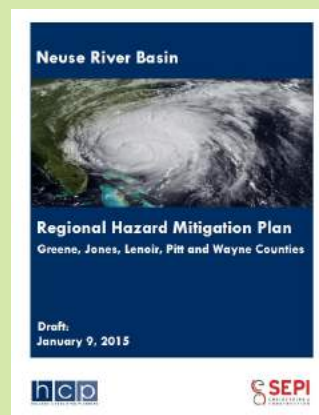
- Sams Branch
- Johnsons Mill Run
- Schoolhouse Branch
- Parker Creek
- Greens Mill Run
- Fornes Branch
- Reedy Branch
- Meeting House Branch
- Bell Branch
- Hardee Creek

Fork Swamp, which flows toward the Neuse River, is also within the city.

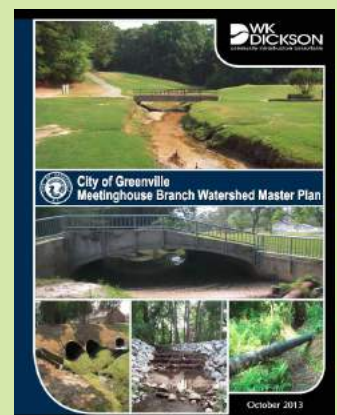
Relevant Plans



Tar River Legacy Plan



Neuse River Basin Regional Hazard Mitigation Plan



Meetinghouse Branch Watershed Master Plan

There are also small lakes located within the study area including city-owned lakes in River Park North and in the Phil Carroll Nature Preserve. Located throughout the community, wetlands provide flood protection, water filtration, runoff treatment, natural habitats, and other benefits.

The Environmental Advisory Commission (EAC) is an advisory commission to the City Council. It reviews environmental resources within Greenville, makes recommendations on environmental and sustainability issues, and sponsors programs for Greenville residents. One such initiative is the EAC Grant Program, which provides funding for youth projects that make improvements to the community environment.

The Tar River Legacy Plan presents a vision and plan for improving the quality and accessibility of the Tar River and other local natural assets. The plan includes recommendations and identifies potential funding resources.

Stormwater Control and Hazard Mitigation

Environmental conservation, stormwater control, and long-term hazard mitigation are growing in importance as weather patterns are increasingly identified as volatile. Policies addressing each of these issues overlap. Greenville has experienced the consequences of flooding from storm events of many sizes.

Through community leadership and hazard mitigation planning, development was regulated and limited within environmentally-sensitive areas susceptible to natural hazards. In Greenville, there are over 11,500 acres of land with total building improvement values of approximately \$400 million located in vulnerable floodplain areas. *The Neuse River Basin Regional Hazard Mitigation Plan* includes strategies for the City of Greenville to protect existing and future developments, reduce flood damage, and enhance stormwater control measures.

The Stormwater Advisory Committee implemented a utility fee to support the city's comprehensive Stormwater Management Program to meet federal and state mandates for water quality protection, reduce the risk of flooding, improve existing stormwater facilities, and engage the public. Revenue generated by the Stormwater Utility is derived from a fee charged to residential and non-residential customers based upon total impervious surface area located on their property.

Revenue from the fee funds programs goes toward compliance with Tar-Pamlico Nutrient Management State Regulations and Federal National Pollutant Discharge Elimination System (NPDES) regulations for water quality. It also supports maintenance of the city's drainage system, protects property damage from flooding, and improves streams and wetlands.

Flood Damage Prevention Ordinance

For some of Greenville's longtime residents, the memories of Tropical Storm Dennis and Hurricane Floyd are a reminder of nature's power. In September of 1999, Floyd brought heavy rainfall and resulted in flooding and property damage. In Greenville, the Tar River rose nearly 15 feet above flood stages.

Greenville's Flood Damage Prevention ordinance applies to all special flood hazard areas within the city and ETJ as identified by FEMA. It specifies additional standards for development that are intended to reduce community damage from flooding.

Community Rating System Strategy

The Community Rating System (CRS) is a voluntary program developed by FEMA as a part of the National Flood Insurance Program (NFIP) to encourage communities to improve stormwater and floodplain management. Participation in the program results in a discount on flood insurance premiums for all NFIP policy holders within the corporate limits of a participating jurisdiction. There are 10 classes in the CRS system with Class 1 being reserved for the most comprehensive strategies and Class 10 being the entry level into the program. Lower numbered classes are eligible for higher flood insurance discounts. Greenville is Class 7 entitling property inside the 100-year floodplain to 15% insurance premium discount, and the rest of properties in Greenville a 5% discount.

Watershed Planning

The *Greenville Watershed Master Plan* (WSMP) project recently achieved a major milestone: completion of the stormwater drainage system inventory. Close to 100 surveyors inventoried 1,161,000 linear feet (or 220 miles) of stormwater pipe within the city limits. Field crews also inventoried more than 16,000 structures including catch basins, culverts, and stream channels. Throughout the inventory process, the city has been able to identify numerous structures that were

previously unrecorded. The Public Works Department has cleared many of these locations of obstructions, thus improving numerous drainage conditions.

Impermeable Surfaces

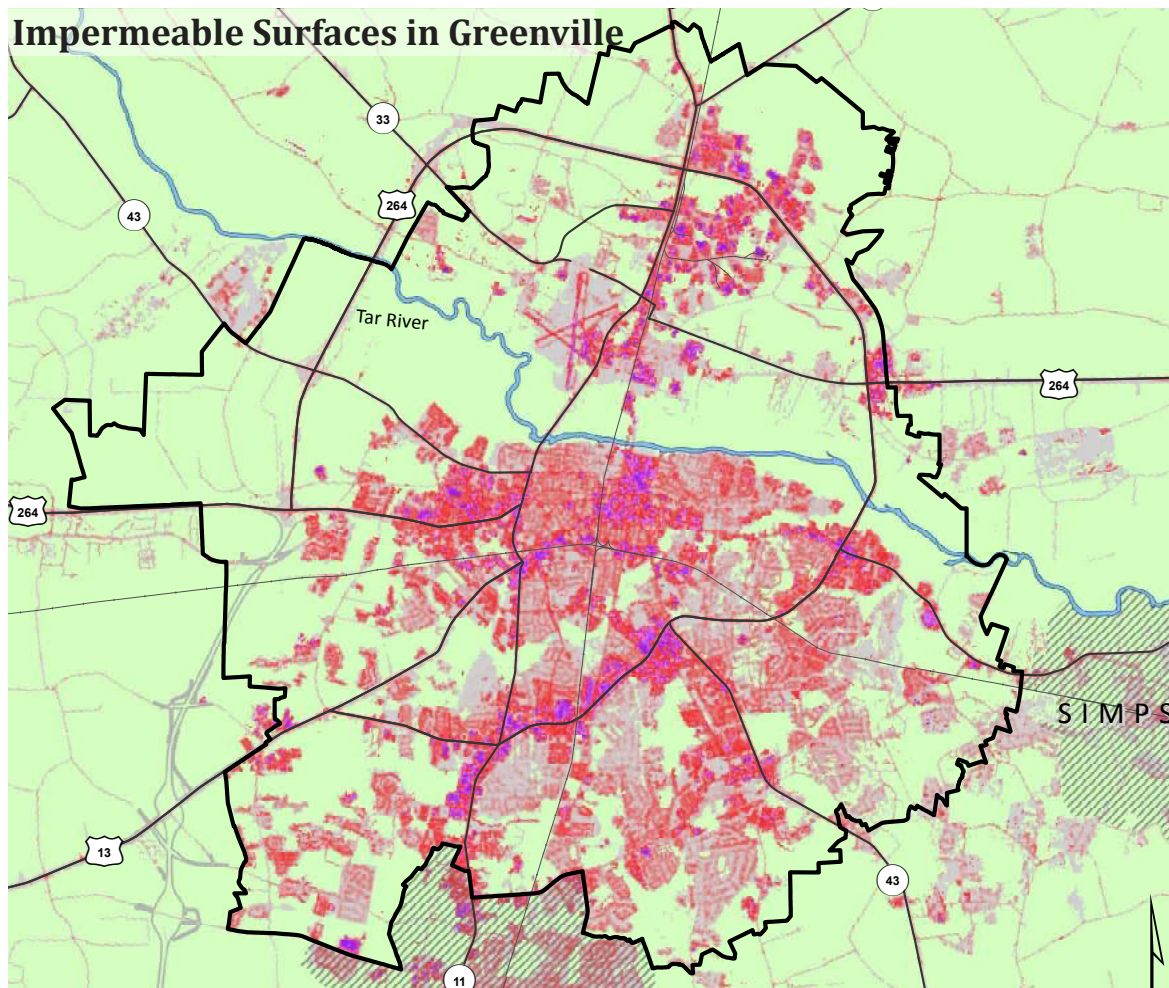
All development includes the creation of impermeable surfaces. It takes more space to accommodate growth at lower density than higher density, and so lower density results in more impermeable surface area for the same amount of growth. A large amount of surface area covered by impermeable surfaces such as parking lots and driveways, can be detrimental to the watershed and Tar River.

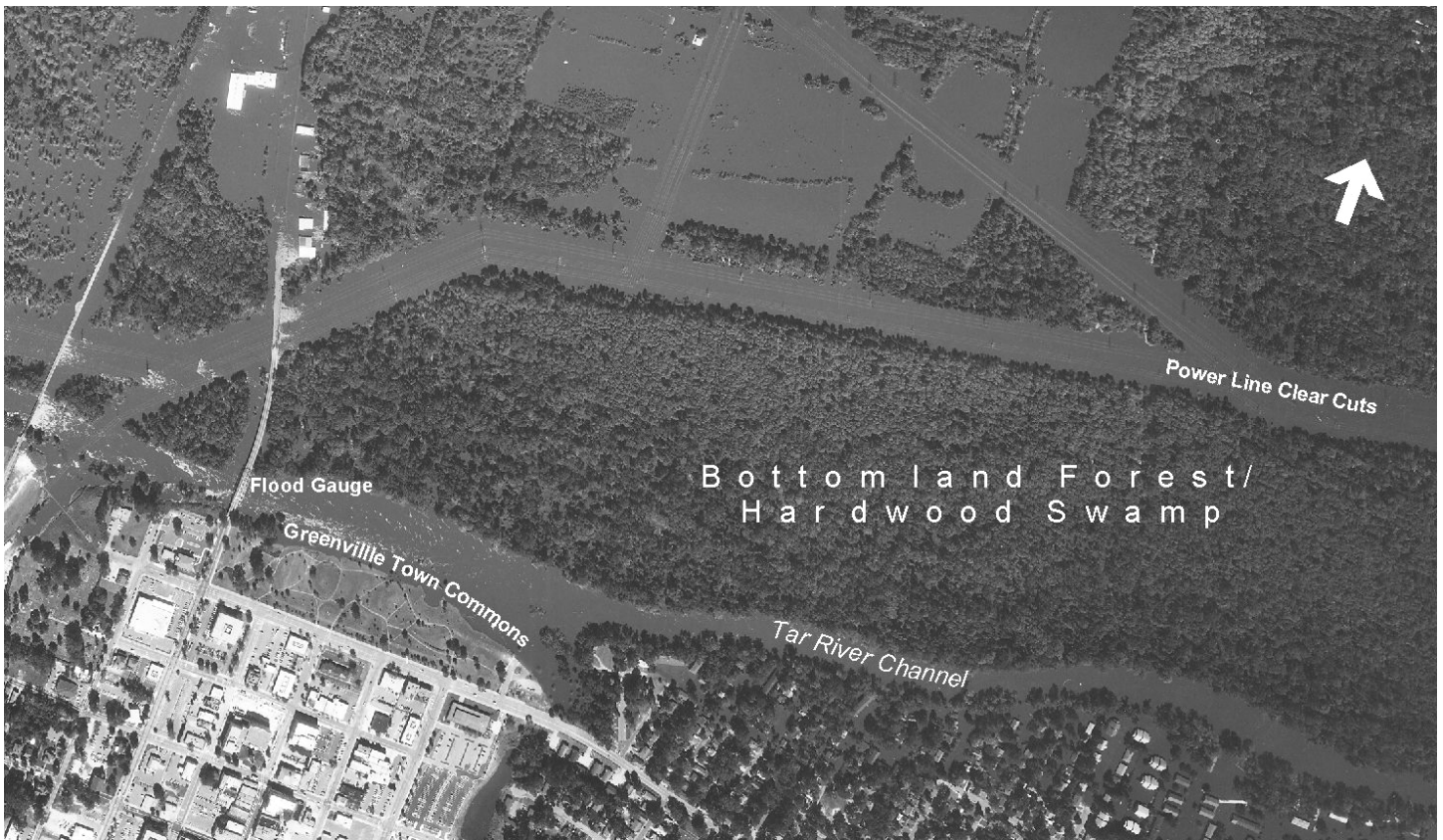
When water cannot seep into the soil where it falls, it flows faster and harder toward the river. High velocity stormwater runoff causes flooding when the flow exceeds what channels can hold, causes soil erosion from the more intense flow scouring channel and stream banks, and causes property damage as a result of both. Impermeable surfaces are also often covered with oil or particulates coming from cars. If high velocity flows take the runoff to the river before

it can be naturally filtered or diverted for filtering, that pollution enters the stream. Because the water is collecting pollution from a diffuse area, the pollutants cannot be regulated as point sources, especially if they do not collect in a channel and instead flow over a wide area.

Some of these pollutants actually act as nutrients that promote the growth of microbial or plant life. One common example is home lawn fertilizers. These can run off the lawn in a storm and be carried across impermeable surfaces before soil or wetlands have a chance to filter them. When these enter the stream or river, "nutrient loading" can occur, whereby all the new growth sparked by the nutrients use up oxygen in the water and can kill off fish and other aquatic life. This can be a problem on Greenville's stretch of the Tar River or in downstream rivers or wetlands. Over time, this can also lead to negative impacts on economic development.

The map of impermeable surfaces in Greenville shows their concentration along major commercial thoroughfares where surface parking is a predominant feature.





Hurricane Floyd Flooded Coastal Communities and Stormwater Runoff Polluted Water Bodies

The top image was taken by satellite during the days following Hurricane Floyd, which flooded communities up and down the eastern U.S. coast and caused billions of dollars of property damage. The bottom image shows water pollution resulting from water runoff.

Image Sources: University of Colorado Boulder & National Aeronautics and Space Administration (NASA)



Building Resilience to Natural Hazards

When Hurricane Floyd hit Greenville in September 1999, the ground was already saturated with rainwater from Tropical Storm Dennis. The Tar River rose nearly 15 feet, displaced thousands of residents, impacted nearly 2,000 structures, and resulted in property damage estimated at \$23.5 million for city-owned properties and \$68 million to residential and commercial properties. The city held public meetings to discuss disaster relief, relocation of homes and residents, development moratoriums, and hazard mitigation. City Council created the Flood Recovery Center, a temporary institution, to aid in disaster relief. Greenville's first Hazard Mitigation Plan was adopted in 2001.

Greenville adopted the *Flood Land Reuse Plan* and updated the *Hazard Mitigation Plan* in 2004. The *Hazard Mitigation Plan* was updated again in 2010. In 2015, the city adopted the *Neuse River Basin Regional Hazard Mitigation Plan*.

Although not the city's official hazard mitigation plan, Horizons 2026 incorporates and promotes hazard mitigation planning, and works to prepare for future natural hazard events in order to minimize property damage and loss of life.

Concepts and Best Practices to Address Community Concerns

Resilience is the capacity of communities and systems within a city to survive, adapt, and grow in the face of both long-term stresses and short-term hazards or natural disasters. Because so much of the risk to cities comes from natural forces, environmental concerns are strongly linked to resilience. Communities around the country are using a variety of strategies to foster green and sustainable growth that minimizes risks from future natural hazards. Many communities have also discovered that these strategies improve quality of life, reduce public costs, and help grow the local economy.

Many communities manage stormwater runoff through networks of pipes, tunnels, and ditches designed to carry water quickly away from buildings and neighborhoods. Rain that once soaked into fields and forests now runs off of hard surfaces like rooftops, parking lots, and highways in ever increasing amounts and at high velocities. Stormwater runs off from these surfaces flows into storm drains and ultimately into local rivers, lakes, and streams, carrying heavy metals, bacteria, and other pollutants that can negatively impact water quality, including water used for drinking and recreation. Fast moving stormwater can erode stream banks, cause flash floods, and contribute to sewer overflows where raw sewage is directly discharged into local waters.

Broader changes in climate are likely to place greater strain on local infrastructure. Many regions, especially in coastal states, are expecting to experience more frequent and intense storms. Around the country, communities are already experiencing changes to their long-term precipitation patterns.

Low Impact Development (LID)

The impacts of stormwater pollution and the need to provide stormwater prevention, management, and treatment all create costs for communities and their residents. These costs can often be offset or reduced by making different choices about how the built environment is planned and infrastructure is built. Communities and developers can conserve valuable natural resources and incorporate low impact development (LID) practices. These practices mimic natural hydrology and help to control stormwater runoff, reduce energy costs, diminish the impacts of flooding, improve public health, and reduce overall infrastructure costs. They rely on natural processes like infiltration (allowing water to percolate into the soil down to the water table), evaporation (water

on the surface being taken into the air as vapor), and plant transpiration (essentially water evaporating off leaves in the normal course of plants drinking up water). These approaches prevent stormwater from flowing into surface waters or overburdening sewer systems. These can effectively and affordably complement traditional “gray” infrastructure that relies heavily on engineered and structural solutions. The combination gives stormwater managers the ability to create integrated solutions to better serve their communities.

There are additional benefits to LID strategies. They improve air quality, increase habitat and green space, enhance human health, and reduce flooding. Where they have been widely adopted, communities have found that the enhanced aesthetic experience of local residents has improved quality of life and raised property values. Local waters, improved by reducing runoff, can provide healthier aquatic habitats and water supplies, becoming resources that provide environmental and public health benefits to all residents.

What is Bioretention?

Bioretention systems are soil- and plant-based features used to treat and filter runoff from developed areas. Bioretention systems, like bioswales and rain gardens, are designed to mimic natural hydrologic functions for water infiltration, along with pollutant removal by soil filtering, absorption and other processes, such as in the below example in Greensboro, NC.

Image Source: North Carolina State University Biological & Agricultural Engineering





Green Roof



Water Harvesting



Permeable Pavement



Bioretention

Low Impact Development Tools Provide Multiple Direct and Indirect Benefits

Benefit:	Green Roof	Tree Planting	Bioretention & Infiltration	Permeable Pavement	Water Harvesting
Reduces Water Treatment Needs	+	+	+	+	+
Improves Water Quality	+	+	+	+	+
Reduces Grey Infrastructure Needs	+	+	+	+	+
Reduces Flooding	+	+	+	+	+
Increases Available Water Supply			+		+
Increases Groundwater Recharge		+	+	+	+
Reduces Energy Use	+	+		+	+
Improves Air Quality	+	+	+	+	+
Reduces Greenhouse Gas Emissions	+	+	+	+	+
Reduces Urban Heat Island Effect	+	+	+	+	
Improves Aesthetics	+	+	+		
Provides Urban Agriculture Opportunities	+	+			
Improves Wildlife Habitat	+	+	+		

Community Rating System (CRS)

Greenville participates in the CRS, which is a voluntary program for National Flood Insurance Program (NFIP) participating communities. The goals of the CRS are to reduce flood damages to insurable property, strengthen and support the insurance aspects of the NFIP, and encourage a comprehensive approach to floodplain management.

The CRS has been developed to provide incentives in the form of premium discounts for communities to go beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding. Taking particular actions or having particular policies result in credit points, and having more credit points and a more comprehensive strategy results in a greater insurance premium reduction.

Greenville is Class 7 entitling owners of property inside the 100-year floodplain to a 15% insurance discount, and the remaining properties in Greenville to a 5% discount. As of 2014, the most comprehensive program in North Carolina was in Grifton, a Class 5 community, though the most recent updates to the program's accounting policies may make it more difficult for Grifton to maintain that class. The discount schedule inside and outside of the Special Flood Hazard Area (SPHA) is available in the Goals and Policies section of this chapter. It is left to communities to determine what class fits best.

Solar Energy Systems

Some communities permit accessory solar energy systems by-right in all zoning districts while others have special permitting processes that take into account site design and impacts to adjacent property owners. Recently, it has become increasingly common for communities to adopt specific standards for accessory solar energy systems to address placement issues without requiring a discretionary review.

Protecting Wetlands

During rainstorms, runoff from farm land, highways and urban areas wash into rivers and sounds. This runoff may contain toxins, bacteria, sediment, or nutrients that can harm aquatic life and contaminate drinking water. Stormwater runoff is a major contributor to water-quality problems in coastal North Carolina.

Wetlands are natural buffers between uplands and waterways. By trapping sediment, removing nutrients and detoxifying chemicals, wetlands act as efficient and cost-effective filtration systems. When runoff enters a wetland, many of the harmful components are removed before the water enters a stream.

Wildlife Habitat

Wetlands and other natural elements of a resiliency strategy can also serve as wildlife habitat for at-risk species. In Pitt County, there are 88 species or communities with some form of protection recognized by North Carolina: 16 plant species including the endangered grassleaf arrowhead, 16 natural communities and colonies, 12 bivalves species including 4 endangered ones like the Tar River spiny mussel, 12 fish and crustacean species including the endangered shortnose sturgeon, 12 insect species, 11 reptile and amphibian species, 6 bird species including the endangered red-cockaded woodpecker, and three mammal species including the endangered West Indian manatee which winter in North Carolina. Diversity of the wildlife community leads to healthier wetlands that benefit resilience. Some of the species, especially the bivalves, also contribute directly to improving or maintaining water quality on the Tar River.



Red-cockaded Woodpecker
Source: Jim Hanula/USFS via
USFWS



Tar River Spiny mussel
Source: Chris Eads via USFWS

Protected wetland areas can lessen the impact of development elsewhere on native species' ability to thrive. Keeping natural spaces open to retain the ability to absorb stormwater or to prevent erosion simultaneously provides habitat for wildlife. Preventing various pollutants from being washed into a stream in a storm event and protecting river access for people simultaneously maintains a working ecosystem for aquatic life. The value of land for wildlife habitat grows when it forms contiguous habitat so that species can travel through without having to run through gaps. In weighing options for making Greenville more resilient, wildlife habitat is an important value-added for many of the policies and actions in this chapter.

Light Pollution

Lights affect the biological rhythm of the organisms that make up wildlife communities. Having too much light scattering through the area at night can disrupt the balance of the ecosystem. This plan calls for relying on natural wetlands and other parts of the environment for the resilience of the city; a less healthy ecosystem has reduced potential to achieve that mission. Light pollution increases with the amount of development in an area as well as with the brightness of city and private lighting. With the rise of energy- and cost-efficient LED lighting, skies have been getting brighter at night as cities make the switch. Prudent cities are choosing fixtures that direct all light downward to limit light from scattering in the air, and are choosing light bulbs that emit less blue light, which are the most disruptive wavelengths. Excessive lighting at night can also impact the health and comfort of people in an area, and limit the recreational enjoyment of the night sky. Of course, light is also associated with safety, and so a balance must be achieved.



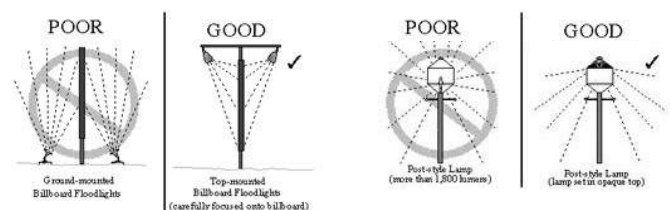
Composite satellite image of Eastern North Carolina at night, with Greenville marked
Source: NASA

Environmental Justice

Land that is particularly at risk to storm events and to the ill effects of varying weather is often less valuable land. For years flood insurance premiums were also kept low by policy. The cumulative impact is that in many communities, the neighborhoods at greatest risk are also the neighborhoods whose residents can least afford to absorb the cost of disasters. In some communities these neighborhoods have historically flexed less political power as well. It is important for all communities to recognize this impact and to treat stormwater management and other resilience measures as an issue of justice in addition to economics or pragmatism. These measures must be considered in city-wide decisionmaking. Land use decisions inland and upland can harm vulnerable populations living elsewhere in the city.

Global Resilience

Local impacts are only one facet of resilience. Some cities also aim to lessen their individual effect on the global output of greenhouse gasses. Sometimes there is a strong desire from current citizens to pursue this course as a reflection of community values and sometimes there is a desire to attract businesses that include sustainability and resilience as corporate goals important to talent or customers. There are programs where cities can opt in to use a framework, such as the Cool Cities Campaign. Greenville signed onto the campaign, organized through the US Conference of Mayors and the Sierra Club. The city pledged to strive to meet climate change targets through actions such as taking inventory of emissions in city operations, improving the building code to make it more energy efficient, increasing recycling rates in the city, and maintaining healthy urban forests. There are also actions being taken by larger cities through programs like C40 Cities or 100 Resilient Cities that can be mimicked and adapted for others.



Simple alternatives for city lighting that scatter less light into the air
Source: skykeepers.org

Goals & Policies

Goal 6.1. Environmental Conservation

Greenville will limit waste, provide clean air and water, and use development patterns that simultaneously ease traffic and reduce carbon emissions. Conserving its natural infrastructure to bolster stormwater infiltration and management, the city will gain the additional benefits to economic development and quality of life of all residents.



Policy 6.1.1. Protect Stream Buffers

Protect stream buffers, including buffers of intermittent streams, to reduce erosion, protect habitats, and filter nutrients and other pollutants. Strengthen stream water quality and prevent impairment of biological communities.

Policy 6.1.2. Protect Wetlands

Promote wetland protection through regulation and incentive, as well as by educating developers and members of the public about the important stormwater functions they provide.

Policy 6.1.3. Preserve Natural Infrastructure

Preserve valued open space in floodplains and other environmentally-sensitive areas through regulations including overlay districts, incentives, conservation easements, and/or public acquisition. Conserve and grow contiguous forests.

Policy 6.1.4. Ensure Increased Tree Canopy

Aim for a net neutral or net positive tree canopy in Greenville by promoting new tree plantings for each tree that is removed for development, continued protection of existing mature trees, encouragement of new tree plantings, and requiring street trees between the curb and the sidewalk in street right-of-ways. Use a shade-providing tree species suitable to the specific site and that is disease and drought resistant.

Policy 6.1.5. Promote Clustered Development

Support clustering of development and increased densities in areas where risk of the impact of hazards is low in order to preserve contiguous open space in more vulnerable places. See *Chapter 2 Enhancing Mobility* for associated maximum parking requirements.

Policy 6.1.6. Conserve Wildlife Habitat

Conserve natural land and aquatic wildlife habitats through protection of contiguous cores and corridors that mitigate habitat destruction and fragmentation.

Community Voices: We want...

- To "Keep Greenville Green"
- Stewardship of the environment
- Address flooding impacts
- Beautiful natural places
- Clean the banks of the Tar River
- More greenways
- More shade trees
- Protect mature trees

"We have a moral obligation, a mission, and a mandate to get out there and leave this little planet a little greener, a little cleaner, and a little more peaceful for generations yet unborn." -John Lewis, Civil Rights Leader

Policy 6.1.7. Reduce Light Pollution

Preserve dark skies for the health of natural systems and the enjoyment of Greenville's citizens. Explore appropriate measures which may include regulating new light fixtures or selecting appropriate light bulbs for the city.

Policy 6.1.8. Reduce Solid Waste

The city should promote solid waste reduction among government departments and encourage households and businesses to decrease waste using a variety of incentives, regulations, education initiatives, and by continuing to promote recycling.



Goal 6.2. Hazard Mitigation

Greenville will be a resilient city and will be able to bounce back from disasters of varying size, especially hurricanes and floods. The city will plan ahead in order to reduce the long-term risk to human life, property, and infrastructure from hazards.



Policy 6.2.1. Minimize Public Investments in Hazardous Areas

Minimize public investments in areas within risk-prone areas, including limiting public infrastructure and prohibiting enclosed public buildings in the 100-year floodplain.

Policy 6.2.2. Support On-Going Education Initiatives

Continue to support education about hazards including mailings, advertisements, and distribution of other educational materials.

Policy 6.2.3. Maintain the Emergency Operations Plan

Continue to maintain the *Emergency Operations Plan* that operates in concert with Pitt County Emergency Management.

Policy 6.2.4. Limit Development in Flood Plain

Limit private development within the 100-year flood plain using a variety of regulatory and incentives tools, including the current *Flood Damage Prevention Ordinance*. The ordinance should include limiting high density residential development.

Policy 6.2.5. Enhance Participation in the Community Rating System

Continue to participate in FEMA's National Flood Insurance Program (NFIP) Community Rating System (CRS). Investigate the actions required to achieve more stringent classes and evaluate whether the insurance discount incentive is enough to inspire consensus for action.

CRS Class	Credit Points (cT)	Premium Reduction	
		Inside SFHA	Outside SFHA
1	4,500+	45%	10%
2	4,000-4,499	40%	10%
3	3,500-3,999	35%	10%
4	3,000-3,499	30%	10%
5	2,500-2,999	25%	10%
6	2,000-2,499	20%	10%
7	1,500-1,999	15%	5%
8	1,000-1,499M	10%	5%
9	500-999	5%	5%
10	0-499	0	0

Goal 6.3. Energy Security

Greenville will be an energy resilient city able to quickly adjust to volatile fossil fuel prices. The city will use energy from many sources, including a significant proportion of total energy from clean and renewable sources.



Policy 6.3.1. Promote Compact Development

Promote compact mixed use development that improves access to multiple modes of transportation, improves energy efficiency, and reduces emissions.

Policy 6.3.2. Consider Energy Saving Proposals

Consider long-term energy savings and not just short-term energy costs on energy saving proposals by using Total Cost of Ownership (TCO), life-cycle analysis, and/or payback analysis for new public facilities.

Policy 6.3.3. Support New Energy Sources

Enable placement of new clean energy sources, like active, passive, and photovoltaic solar energy, fuel cells, and others. These help diversify the region's energy supply. Evaluate regulations to allow alternative viable strategies where appropriate, including geothermal systems.

Policy 6.3.4. Support Education Initiatives

Provide education about and incentives for installation of renewable energy sources, including state and federal tax rebate incentive programs.

Policy 6.3.5. Encourage Energy Efficiency

Encourage energy efficiency among local businesses with incentives and education initiatives in order to decrease energy costs and reduce demands on the energy system.

Policy 6.3.6. Encourage Car Sharing

Support car sharing services to decrease the need to own a vehicle and increase transportation options for the community.

Policy 6.3.7. Improve Lighting

Consider solar lighting to reduce long-term energy costs to the city and expand lighting where it is needed throughout the city. Limit the impacts of light pollution.

Policy 6.3.8. Encourage Electric Vehicle Use

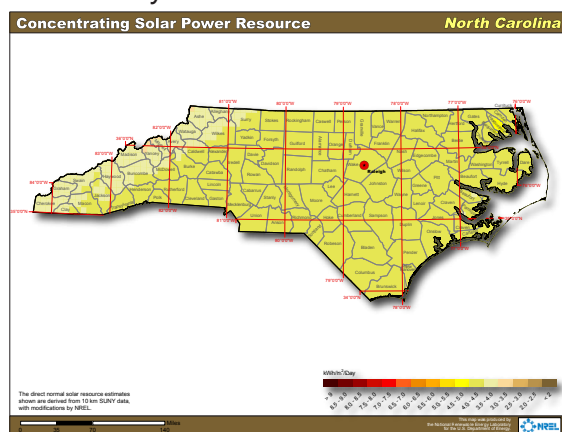
Support electric vehicles by providing charging stations at locations around the city and consider purchasing electric vehicles for the city's fleet.

Policy 6.3.9. Continuing to Promote an Energy Efficient Bus Fleet

Promote energy efficient public transportation and reduce air pollution by considering hybrid buses when growing or replacing the city fleet.

Policy 6.3.10. Support Green Energy Production

Promote large-scale solar and wind farms where such energy production is viable, supported by community members, and limits its impact on Greenville's viewshed and community character.



The potential for solar power in Greenville is typical of the rest of North Carolina. With changing technology the viability of solar energy is on the rise. Source National Renewable Energy Laboratory (NREL)

Goal 6.4. Low Impact Development (LID)

Greenville will reduce and manage stormwater runoff and improve the health of the local watershed with a robust network of decentralized stormwater management practices, including green roofs, trees, rain gardens and permeable pavement, that can capture rain where it falls and allow it to percolate into the soil.



Policy 6.4.1. Use Stormwater Best Management Practices (BMPs)

Promote water quality best management practices (BMPs) to naturally handle stormwater runoff and treat the first inch of rainfall on-site.

Policy 6.4.2. Increase Urban Tree Canopy

Increase tree canopy street trees on all new streets between the street curb and the sidewalk, and use a shade -providing tree species. Ensure trees are disease resistant, drought tolerant, and suitable to the site.

Policy 6.4.3. Combine Parks and Stormwater Detention Ponds

Promote park-ponds as a way of combining recreational and stormwater drainage uses. Use creative stormwater management designs that improve utility and aesthetic value.



Park-ponds can be attractive park amenities while simultaneously helping to manage stormwater, such as this stormwater detention pond in Edenton, NC.

Source: NCSU BAE

Policy 6.4.4. Incorporate Bioswales

Incorporate bioswales on new streets and road redevelopment projects.

Policy 6.4.5. Support Watershed Master Plans

Support the policies provided in the local watershed master plans.

The Tar River floods in intense storms and the city needs to be prepared. This is not only a new issue since Hurricane Floyd. This image from the 1950s shows a recorded high water mark from a 1919 flood. The full watershed can contribute to flood conditions.

Source: Daily Reflector, via the Joyner Library and ECU Digital Collections



Policy 6.4.6. Promote Stream Restoration

Where streams have been covered or diverted into pipes, they should be returned to the surface. Innovative and creative solutions should be used wherever possible.

Policy 6.4.7. Incorporate Permeability

Permeable surfaces should be maximized by limiting paving, decreasing parking requirements and road widths, promoting permeable pavement, and using french drains and other low impact development (LID) methods.

Policy 6.4.8 . Reuse Wastewater

Promote water reuse, especially when non-potable water is acceptable for the task.

Goal 6.5. Green Building

Greenville will welcome green building design, with buildings that are energy efficient and minimize their impact on natural systems.



Policy 6.5.1. Lead by Example with LEED

Aim for government buildings to achieve LEED Silver status. Encourage private developers to meet LEED standards for buildings and LEED ND standards for neighborhoods.

Policy 6.5.2. Promote Green Building Design

Encourage LEED quality buildings in all public/private partnerships. Promote green roofs, rooftop solar, energy efficiency, rain barrels, and other methods of improving the sustainability of the built environment.

Policy 6.5.3. Promote Green Site Planning

Minimize environmental impacts during site planning and construction. Promote practices that limit erosion, reduce stormwater runoff, improve water quality, protect wildlife habitat, and provide natural buffers between development and streams.

Goal 6.6. Cultural Resilience

Greenville will grow sustainably and foster cultural resilience by growing community pride, displaying its rich cultural heritage, and preserving its history.



Policy 6.6.1. Promote Environmental Justice

Promote the fair treatment and meaningful involvement of all people regardless of race, color, origin, or income with respect to development and environmental decisions.

Policy 6.6.2. Enhance Access to Greenway System

Ensure fair access to Greenville's environmental assets, including natural areas, trees, and the city's growing greenway system for all community members. Enhance access for households located in low income neighborhoods.

Policy 6.6.3. Attract Industries in the Green Economy

Promote the city's growth of industries involved in the green economy including those that produce green technologies and renewable energy and use sustainable practices.

Policy 6.6.4. Maintain an Inventory of Public Art, Historical Markers, and Buildings Having Historical and Architectural Significance in the City

In the wake of natural disasters, cities can become unmoored from their culture and history. Floodwaters can cover and damage significant cultural resources. Keep an inventory of public art, historical markers, and buildings with historical and architectural significance so that after a disaster, once lives have been saved, responders will also know where there is significant culture to rescue, protect, or restore. Keeping the inventory online and accessible allows it to be monitored by citizens and allows it to double as a cultural marketing tool.

Actions

Action 6.1. Implement a Low Impact Development (LID) Demonstration Project

Carry out at least one low impact development project within urban parts of the city, such as bioswales or rain gardens in medians to catch stormwater that demonstrate the benefits of LID.

Action 6.2. Develop a Green Energy Plan

Develop a green energy plan that moves Greenville toward more renewable energy use within the next 20 years. Identify local renewable energy providers and companies. Set goals for fossil fuel reduction, carbon emission reductions, and target renewable energy goals.

- Include an audit of energy use of all public facilities to identify opportunities for energy and public expenditure savings;
- Implement retrofitting programs based off of audit; and
- Investigate GUC potential incentive-based programs.

Action 6.3. Develop a Green Marketing Initiative

Develop a marketing campaign that promotes Greenville's commitment to sustainability, green energy and green infrastructure. This action will help raise awareness of sustainability and resiliency within the community and add visibility for companies looking to relocate in the city.

Action 6.4. Implement Greenville's Watershed Master Plans

Make it a priority to implement the recommendations included in the Fork Swamp, Green Mill Run, Hardee Creek, Harris Mill Run / Schoolhouse Branch, Johnsons Mill / Parker Creek, Meeting House Branch, and Swift Creek Watershed Master Plans. This includes supporting the implementation of capital projects to meet Watershed Master Plan goals, and updates to the City's Stormwater Ordinance.

Action 6.5. Develop a Tree Planting and Preservation Policy

Develop a citywide policy for protecting the tree canopy. It may need to investigate how to protect older canopy-providing trees during development process, how to coordinate tree planting with sidewalk maintenance, and the appropriate countermeasures when it is necessary to remove trees.



River Park North

Source: Greenville Recreation & Parks Department

Action 6.6. Review the Hazard Mitigation Plan

Review the city's *Flood Damage Prevention Ordinance* and assess whether any revisions and/or updates have been mandated by FEMA or North Carolina Emergency Management (NCEM). Consider whether regulatory options are available to provide more effective floodplain management.

- Consider revising to increase the one foot freeboard requirement to two feet
- Consider revising so that new single-family residential development must be elevated two feet above base flood elevation
- Consider requiring multifamily subdivisions provide two or more access points for easier evacuation
- Continue to establish a flood recovery center when needed to address post-disaster issues, using existing staff and creating temporary positions
- Maintain and update local Flood Insurance Rate Maps (FIRMs). These maps will be reviewed and formally updated as revisions become available through NC Floodplain Mapping Program
- Explore ways that the city might acquire additional properties in flood prone areas
- Continue and enhance coordination of existing public education resources pertaining to natural hazard planning and mitigation
- Develop public art initiative that incorporates hazard mitigation theme and illustrates river heights during floods.

Action 6.7. Develop a Citizen Training Program

Partner with NC Cooperative Extension, ECU, and PCC to develop green practice programs that train local students and residents in implementing green building and green infrastructure, installing solar panels and green roofs.



Old Greene St. Bridge, Town Common

Growing a Healthy City

As the cultural and healthcare hub of eastern North Carolina, Greenville will offer residents and visitors, regardless of their income, the opportunity to maintain a healthy lifestyle. Residents will have access to community gardens, farmer's markets, and high quality grocery stores. Sidewalks, greenways, and bike lanes will promote active travel by connecting housing to jobs, recreation, healthy foods, and shopping. Parks will be destinations for active recreation. These benefits will be accessible by allowing aging residents, those with a physical disability, and visitors to the health hub of Eastern North Carolina to participate.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact public health and recreation in Greenville and the region.

Concepts and Best Practices to Address

Community Concerns: This section presents fact-based approaches to solving complex interrelated challenges.

Goals & Policies: This section lists the goals our community seeks to accomplish and the policies to guide us there.

Actions: This section provides key proactive actions that the city and interjurisdictional and community partners will take over the coming decade to bring us closer to our community's vision.

Overview

The healthcare institutions within Greenville provide the strong seed of a healthcare hub. The city can grow that identity and improve health, not just of patients, but of the entire community by focusing on providing a built environment and community amenities that promote health.

Physical activity is one of the largest determinants of personal health that can be impacted by something as large as the comprehensive planning of the city. By understanding what makes people engage in different kinds of physical activity, Greenville can provide the opportunity for its citizens to make those choices conveniently. The comprehensive plan can also facilitate the provision of access to fresh, local food options, and positive influences on mental health.

By the very nature of the actions described in this chapter, many relate to either transportation or to recreation and parks.

Planning Influences

Key Community Issues

Health in a city is not to be taken for granted. Intentional planning can impact the health of residents by providing them with convenient healthy options as they go about their routines. There is an economic focus on health in Greenville, and there should be a focus on the health of its residents. In addition to opportunities for physical activity, the city can plan for better accessibility to food options and general community resources.

Healthcare Focus

Greenville has the foundations for a strong brand as the healthcare hub of eastern North Carolina, bolstered by Vidant Medical Center and East Carolina University's Brody School of Medicine. While planning for the health of its residents, the city can simultaneously strengthen that identity. By growing a healthy city, Greenville can be both a place to get healthier and to live healthily.

In 2015, Vidant Medical Center produced a Community Health Needs Assessment for the entirety of Pitt County in conjunction with partners including ECU

and others. Adjusted for age, the assessment found that the leading causes of mortality in the county were heart disease, cancer, and stroke. Risk factors for these include high blood pressure, elevated cholesterol, diabetes, smoking, overweight/obesity, and inadequate physical activity. Many of these risk factors can be at least partially managed by individual health choices, and the City of Greenville can cultivate and maintain an environment where those choices are both possible and convenient.

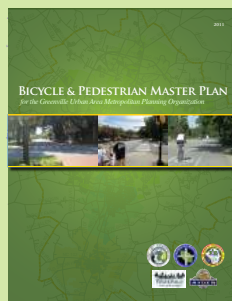
The healthcare core of Vidant Medical Center and ECU's Brody School of Medicine should be encouraged to continue to periodically monitor area health in line with their missions. They also regularly engage in community outreach that can help educate or create opportunities for healthier living. Much occurs through the Pitt Partners for Health community partnership and its subcommittees on nutrition and physical activity, chronic disease, and access to care. These programs can be built upon and the city can pursue strategies that work with the healthcare actors to accomplish larger goals.



Relevant Plans



Community Health Needs Assessment



Bicycle & Pedestrian Master Plan



Comprehensive Recreation and Parks Master Plan



Tar River Legacy Plan

Promoting Physical Activity

Physical activity is directly tied to personal health. Generally, increasing everyday physical activity leads to healthier individuals by addressing the risk factors for some common ailments. The Center for Disease Control lists as benefits to physical activity: controlling weight, reducing risk of cardiovascular disease, reducing risk of type-2 diabetes, reducing risk of some cancers, strengthening bones and muscles, improving health and mood, improving ability to do daily activities and prevent falls, and increasing chances of living longer. The form of the built environment and the amenities of a city can have an impact on what options for physical activity are available. Most physical activity can be described as for transportation, for recreation and leisure, or for chores and work. There exists a variety of opportunities for the city to act within each of these categories:

Physical Activity for Transportation:

Being able to walk or bike to get to desired destinations is dependent on infrastructure. More people are willing to walk or bike for transportation if there are sidewalks and bike paths. If there is a mix of land uses nearby each other, then walking and biking can be convenient options. If streets are well connected in a comprehensive network with easy access to many intersections that give more direct paths to destinations, these modes of travel become easier. Crosswalks and traffic lights make the streetscape safer for pedestrians and cyclists. People are more willing to leave their car behind when the route is through neighborhoods free from crime. In general, measures that increase connectivity are particularly effective at promoting physical activity for adults, while measures that increase safety are particularly effective at promoting physical activity for children, though there are generally positive effects for any of these measures on the total population. It is unclear whether people reduce their exercising or recreational physical activity when transportation itself becomes a physical activity, but providing the option to walk or bike is an important step in providing the environment to help grow a healthy city for Greenville residents.

Physical Activity for Recreation and Leisure:

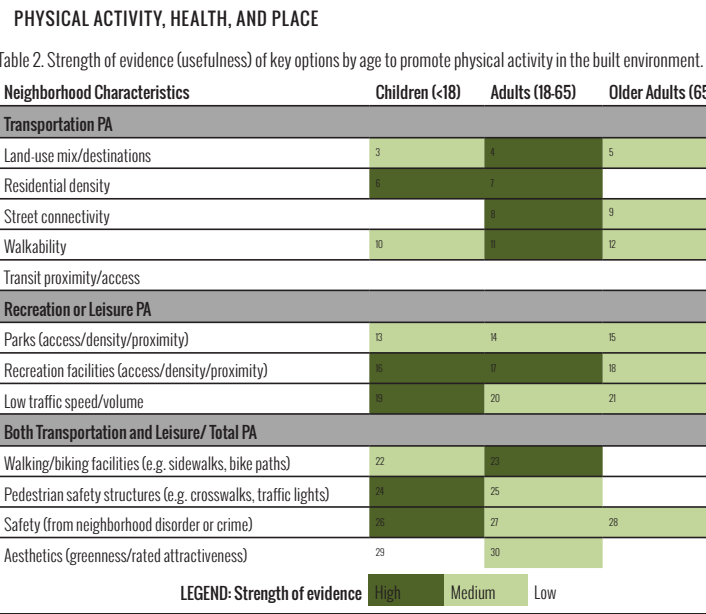
Many of the changes that make for a more pleasing transportation network for walking and biking to a particular destination also make those networks attractive for walking or biking for purely recreational purposes.

Recreational facilities are an important civic resource for growing a healthy city. Parks can be connected to those same transportation networks that allow residents to access them on bike or on foot, but even as destinations to access by bus or by car, parks provide an outlet for physical activity. Whether the park is manicured or wild, a passive space or programmed for a particular activity, parks form an important part of providing access to healthy living options. Along with other active community centers, these options are particularly important for children who, on the whole, are less prone to get their activity from transportation. Children’s activity centers were mentioned multiple times during the surveys of the Horizons Community Profile process, with additional respondents calling for a museum like Marbles in Raleigh by name.

The city needs both true destination parks like River Park North and the Town Common as well as neighborhood parks that are even more accessible to residents. The city can also make sure there are limited barriers to private activity centers like gyms and active play spaces. Accessing opportunities for healthy activity should be easy.

The chart below compiles current research into how to promote physical activity using the built environment. The research brief surveyed discoverable research and evaluated the strength of evidence for claiming a positive relationship. Different ages are impacted more or less by different options, possibly due to mobility or independence. For example, children are likely walking to other houses or to school. Adults may be walking to other destinations throughout the community. That difference showed when collecting a variety of studies.

Source: Health And Places Initiative, Physical Activity, Health and Place research brief version 1.0 (Sept 2014)



Physical Activity for Chores and Work:

For some residents, chores and work make up a significant portion of their physical activity. This can be as simple as a child raking leaves or as complex as a career fully dependent on physical exertion. Unlike the other categories, there is little the city can do to directly influence people's options, and there is very little in existing research to suggest that governments should take an active role in regulating this category beyond workplace safety. The first two categories, transportation and recreation, provide most of the opportunities for health impacts at the city and neighborhood level.

Accessibility to Resources

There is a connection between accessibility of resources and amenities and growing a healthy city. Residents need convenient access to healthy choices. In compact neighborhoods with a diversity of land uses near to each other and with varied options for both housing and employment there is high accessibility because residents can get where they need to go. This includes access to shopping and key services. High accessibility means that residents have multiple options for getting around conveniently, which may include walking, biking, driving or taking public transportation. Having multiple non-driving options is especially important for residents who are economically disadvantaged and may not have a car.

Accessibility does not have to be centered on the home, but it helps. When the resource or amenity is integrated into the neighborhood, the entire household can access it and it can be reached on bike or on foot.

Providing healthy food options is an ongoing process. New grocery stores have been built in Greenville periodically for decades. As new neighborhoods are developed and as some older neighborhoods have seen grocers move, it is important to see what is being built and to provide incentives if current regulations leave some neighborhoods behind.

Image: Harris Supermarket construction August 1967; from the Daily Reflector via the Joyner Library and ECU Digital Collections



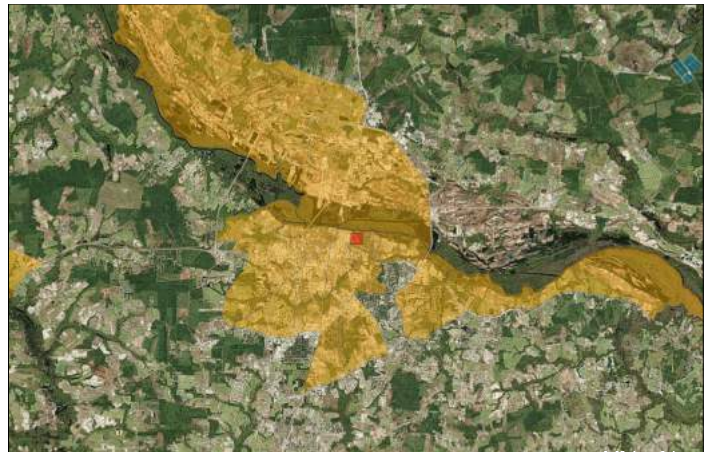
However, if there are amenities near work instead, such as gyms or supermarkets with healthy food options, can still provide some access. Increasing access within the community can thus be managed on two scales. On the scale of the whole city, the city can make sure there are no barriers to developing healthy community assets. Actions like larger farmers markets can serve wider areas. On the scale of the neighborhood, there can be a more targeted impact that improves the healthy options for those residents in the immediate vicinity.

Food Options

The ability for residents to make healthy choices is dependent on the resources around them. Food is essential to life. Access to healthy food is essential to living healthy. When the food options surrounding a neighborhood or community are primarily fast food restaurants which make most of their sales on high-calorie-low-nutrition offerings, the health of

The top map shows census tracts where there are low income urban neighborhoods more than a half mile from supermarkets and low income rural neighborhoods more than ten miles from supermarkets. The bottom map shows census tracts where some populations have low vehicular access. *Source: USDA*

Low Income Low Access Census Tracts



Low Vehicular Access Census Tracts



the community can suffer. People do not only make food choices based solely on taste. Convenience and price are other factors. Affordable grocery stores with healthy options are not equally accessible to all parts of Greenville. When a neighborhood is disadvantaged by its lack of affordable healthy options, it is said to be a food desert. The United States Department of Agriculture defines food deserts as low income census tracts where a substantial number or share of residents has low access to a supermarket or large grocery store. The definition is important. It can be a substantial share or number, so even if the majority of a census tract is well connected, a community in need of access to healthy foods within the tract is still accounted for and not lost in the average.

Many tracts within Greenville are counted as low income - low access, meaning they contain food deserts. An associated issue is the area covered by tracts with low vehicular access. There are areas of Greenville not near supermarkets or a grocery store and in some of these areas, a sizeable number of residents don't have cars and therefore cannot easily drive to other healthy food sources. They are relying on their neighborhood to serve their food-related needs and the resources to do so in a healthy manner are lacking.

Clean Air and Water

Growing a healthy city requires attention be paid to even the most basic needs. Clean air and water protect the health of residents and visitors alike. Pollution of either can lead to acute or chronic harms. Clean air and water in Greenville are regulated by an array of national and state laws. As of the 2015 Community Health Needs Assessment, the air and water in Pitt County were largely clean and in compliance with state and federal guidelines. It is essential to the health of community members that they remain that way. For more discussion on the water in the Tar River in particular, see *Chapter 6: Fostering a Resilient City*.

Concepts and Best Practices to Address Community Concerns

Best practices regarding health include improvements to the streetscape and transportation network to address barriers to more physically active modes of transportation. Parks, the location of so many residents' physical activity and recreation, must also be successfully managed. Food is an underlying facet of health that is dependent upon available accessible options, and mental health can benefit from both physical activity and connection to nature. Health-oriented improvements to the city are ultimately lifestyle improvements to the city that benefit citizens.

Complete Streets

As quoted in North Carolina Department of Transportation (NCDOT) policy documents, the National Complete Streets Coalition states:

Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.

These measures are about more than mere citizen preference—the ability to walk or bike to destinations is an issue of providing the opportunity for healthy living. Design elements for complete streets emphasize safety, mobility, and accessibility. NCDOT differentiates between streets and highways and recognizes that highways serve the purpose of moving cars swiftly over long distances, but supports the implementation of a complete streets program off of those highways—including on the major streets immediately off of highways. Further guidance is available from NCDOT and in *Chapter 2: Enhancing Mobility*.

Parks

Healthy cities need parks. Part of enabling healthy choices includes having venues for residents' preferred activities. There are a range of parks, from ones that serve as open space for a neighborhood to large destinations that inspire people to get outside and move. In its 2008 *Master Plan*, the Greenville Recreation and Parks Department identified a collection of different park types. These include:

Complete streets are accessible to all modes of travel



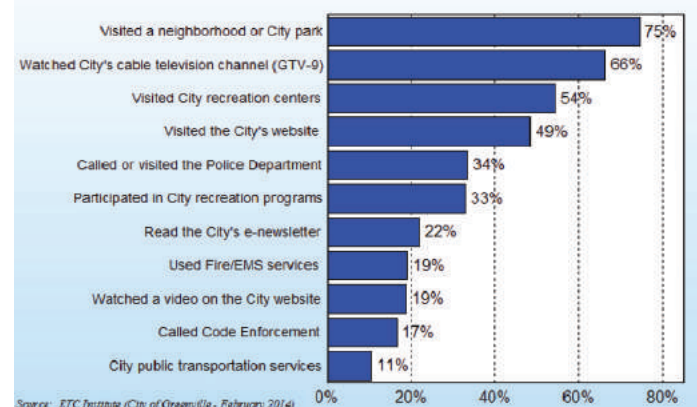
Source:NCDOT

The Public Face of the City

In addition to being good for health and well-being, parks are also in many ways the public face of the city. In a Greenville Community Survey, more respondents visited a neighborhood park in the past year than used any other listed public service. Recreation centers came in third, with the city television channel falling in between.

Q18. City Services That Residents Have Used During the Past 12 Months

by percentage of respondents (multiple choices could be made)



Source: ETC Institute (City of Greenville - February 2014)

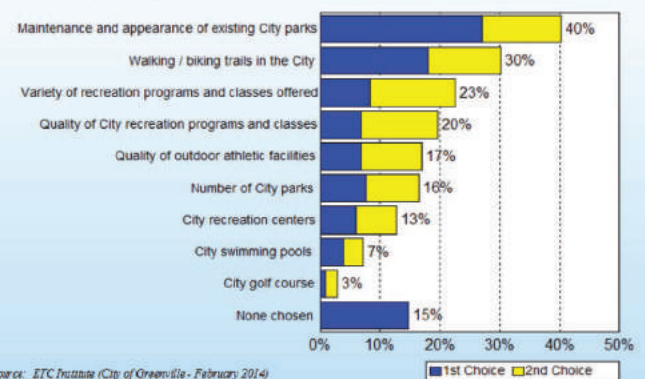
- Mini Parks—sometimes less than an acre and providing for a need in tight quarters;
- Neighborhood Parks—often with playgrounds, picnic facilities, and some sports fields;
- Community Parks—often with large outdoor and indoor recreation spaces and dedicated sports fields;
- Regional Parks—as large as hundreds of acres with walking trails, a nature center, and natural habitats;
- Sports Complexes—specifically dedicated to sports fields to serve an active population
- Civic Parks—varying in size but framing public space in the city;
- Special Use Facilities—serving dedicated uses like extreme sports, golf, or open dog areas;
- Recreation Centers—providing indoor space for sports and recreation and sometimes attached to outdoor parks;
- Greenway Trails—providing for runs or hikes in a pleasant environment; and
- Undeveloped Parks—truly left to nature for preservation or held for future recreation needs.

Community Voices: We want...

- Child-friendly activity centers
- A walkable city
- “There is a sidewalk on the other side of Arlington from where I live on Mulberry. A crosswalk would be wonderful. I will not cross Arlington with my toddler without one. I could walk to his doctor or the mall area if I could only cross the street safely with a stroller.”
- Neighborhood parks

Q8. Aspects of Recreation and Parks That Are Most Important for the City to Provide

by percentage of respondents who selected the item as one of their top two choices



Adventure Parks and Playgrounds

Some modes of active recreation are timeless, but others are always evolving. A new game can often use the same open fields that are already used for informal soccer or football, but others require special accommodations. Adventure parks and playgrounds are some of these newly popular options. Adventure playgrounds operate by giving children the freedom to build, create, destroy, and generally get messy with limited structure. Clean but rough play material like tarps, lumber, tires, and foam are provided in areas more or less curated and supervised depending on the park. The Adventure Playground in Berkley California is one of the oldest. There are also Adventure Parks that tend to focus on giving children places to play that take them through nature, with rope lines or zip lines that allow them to walk between tree trunks. An adventure park north of the Tar River was called for in the *Tar River Legacy Plan*. Greenville already experiments with more adventurous forms of play, including firehouse-themed water features shown at right. The city can build on its experience with experimentation in serving children and other residents in exciting ways.



Berkeley, CA



Berkeley, CA



Greenville

The best practice is to serve the community and provide access to healthy recreation options. This includes not just the variety of parks, but their location. Parks large enough to be considered a destination, and special use parks that can serve niche needs of residents throughout the city, are only reaching their potential if they are accessible. While some parks may be in more natural areas and far from main roads, where possible, providing transit access can increase accessibility and effectiveness at helping to grow a healthy city.

Fixing Food Deserts

Food deserts can be eliminated by providing new food amenities within a neighborhood or by providing good connections to other parts of the city that have affordable healthy food. Some communities provide incentives to bring grocery stores and supermarkets into underserved communities. Others, at a minimum, make sure there are not barriers to developing these uses where they are needed. Still others find alternative ways to attract healthy food suppliers to the area. Farmers Markets can be a part of the solution. Farmers Markets in general bring healthy foods, often at

affordable prices, to the community. There are already multiple markets within the city including the Pitt County Farmers Market and portions of the seasonal Uptown Umbrella Market. Getting markets into underserved neighborhoods can be a challenge, and may take anything from providing a location to tying access to other markets to committing to serve multiple locations. Mobile markets that stock fresh produce and drive to multiple food deserts are another option that has been tested elsewhere in North Carolina. Markets must be open at a time when working individuals can access them in order for city residents to receive the full health potential.

Community Gardens

Community Gardens can be both a source of outdoor recreation and affordable healthy produce. Gardens are often managed on undeveloped or otherwise unused land and carved into plots for community members to cultivate. In some cities, putting the vacant land to use and under community watch is as much a benefit as the added nutrition. Gardens can be in a permanent location or leased for a term on land to be developed



Greenville has current successful programs within its borders for community gardens. Some are run by city departments and some are a part of nonprofit organizations like Greenville Harvest which runs a network of gardens throughout West Greenville. A planter box from a West Greenville garden is pictured at right.



Source: www.GreenvilleHarvest.org

in the future. There are already community gardens thriving in Greenville, both publicly and privately run.

Gardening

In general gardening in a home yard can also provide additional healthy food options. Occasionally communities are hindered in promoting gardening by regulations that prevent the growing of produce in front yards, either because of a code-enshrined preference for lawns or as left over regulation that sought to differentiate residential from agricultural land. Still other communities have moved in the other direction, even allowing vegetable gardens in the public right-of-way. Much like with lawns, fertilizer runoff must be considered for regulation if enough has a chance to wash into natural waterways.

Edible Landscaping

In addition to home gardens and community gardens, food can be grown on the otherwise ornamental trees and shrubs on private or public property. As streetscapes are improved, edible landscaping in planters can support other local efforts. The Center for Sustainable Tourism at ECU includes information about edible landscaping for those using their property as a tourist destination, but the benefits are more wide-reaching. The center cites as benefits:

- Improved nutrition by reducing the time between harvest and consumption;
- Increased food security;

- Reduced food costs;
- Convenience; and
- Fun and exercise while growing the crops.

Using crops appropriate for the climate in North Carolina is important for success, especially since ideally plants will remain in place year round. Blueberries, raspberries, and hazelnuts are just some of the possibilities.

Ecotourism

There are ways to build healthy options for residents that simultaneously benefit the city in other ways. Two facets of ecotourism are preserving nature in a state clean and pristine enough that tourists want to visit, and pursuing environmental practices by both the municipality and individual businesses. The first facet additionally benefits the health of Greenville residents by placing a premium on clean air and clean water and by preserving natural sites for recreation. Places to hike or kayak serve both purposes well.

The second facet of ecotourism in North Carolina is promoted by the North Carolina Department of Environmental Quality (NCDEQ) NC GreenTravel Initiative. According to NCDEQ,

"The NC GreenTravel Initiative is a free program to help promote robust economic growth and environmental stewardship in the travel and hospitality sector through the recognition of "green" travel-oriented businesses."

Through programs like NC GreenTravel, more programs and funds are available to make healthy city goals possible.

Two major Greenville entities already participate in the GreenTravel initiative: The Greenville-Pitt County Convention and Visitors Bureau is listed as a NC Green Attraction, and the Uptown Greenville Umbrella Market is listed as an NC Green Festival.



Attractive edible plants are the centerpiece of edible landscaping.

Source: Center for Sustainable Tourism, East Carolina University

Mental Health

Contact with nature has a positive impact on mental health. Multiple studies identify this connection, however the degree of benefit and the definition of nature are fluid. In the Health And Places Initiative's survey of studies, as little as a view of nature or five minutes of exercise can produce modest benefits. Nature is not limited to unchanged wilderness. Cultivated gardens, lawns, and tree-lined streets can all provide short-term mental breaks in times of stress. This suggests that nature in some form should be provided not just in the places people live, but also near where they work.

Hospitals have taken the idea of nature as a stress reducer seriously. As a soothing amenity for hard working medical professionals, patients, and patient families, many hospital grounds include gardens or natural walking paths on or near hospital property. On hospital campuses that are often hard pressed for space to expand to provide more service to the community, this dedication of space serves as an endorsement to the mental health benefits of nature.



The Live United Courtyard in Uptown is Greenville's first pocket park. Making use of small spaces can bring parks to built areas where there wouldn't be room for something larger.



Duke Raleigh Gardens at Duke Raleigh Hospital “offer a unique haven for patients, visitors , and employees including an event lawn for special occasions and tranquil nooks for sitting and resting.”

Source: www.dukeraleighhospital.org

Goals & Policies

Goal 7.1. Opportunities for Physical Activity for Transport

Greenville will connect its residents to networks of sidewalks and bicycle infrastructure that enables them to make healthy choices by making trips that take a degree of physical exertion more convenient.



Policy 7.1.1. Support the Infrastructure and Land Use Pattern Necessary to Create Walkable Neighborhoods and a Walkable City

Continue building sidewalks in new neighborhoods. Where possible, add sidewalks to existing neighborhoods that are missing them. Integrate walking infrastructure with improved public transit. Allow residential density and land use mixes in plans to allow residents to choose the healthier option of walking or biking to their destination.

Policy 7.1.2. Continue Improving Pedestrian Safety to Create a Walkable City

Maintain and add sidewalks, crosswalks, and other pedestrian infrastructure necessary for residents to feel safe walking through the community. Include sidewalks on both sides of the street where possible.

Policy 7.1.3. Support a Network of Infrastructure to Promote a Bikeable City

Expand the portion of the city that is accessible by bicycle by adding lane designations, trails, and separated cycle tracks. Take care to connect these routes to each other and to places of work, schools, homes, and shopping.

Policy 7.1.4. Continue Improving the Safety for Cyclists to Promote a Bikeable City

Improve the safety and quality of bicycle infrastructure in the city, including adding full bike lanes, trails, or separated cycle tracks where possible, replacing sharrows with full lanes when feasible, and adding bike parking throughout the city.

Goal 7.2. Opportunities for Physical Activity for Recreation

Greenville will provide residents of varying needs and preferences with the ability to make healthy choices for recreation. High quality parks will be successful both in their internal programming and in their accessibility from different parts of the city. Neighborhoods will have access to some physical activity for recreation within their borders.



Policy 7.2.1. Require Neighborhood Recreation Parks

Require space for neighborhood recreation parks in new developments. Keep an inventory of access to parks in neighborhoods and ensure existing neighborhoods without access are granted neighborhood or mini parks if land becomes available.

Policy 7.2.2. Encourage Recreation Space for Children

Provide active recreation options for Greenville's youngest residents. Investigate the necessary conditions to support non-city-run play destinations such as children's museums. Explore opportunities for Adventure parks and playgrounds.

Policy 7.2.3. Maintain Active Recreation Facilities in Parks

Residents need easy access to active recreation. Ensure programmed space is a part of the balance with more natural parks, and that walking trails are a part of natural areas where appropriate.

Policy 7.2.4. Continue to Provide Recreation Opportunities for All Physical Abilities

Continue to seek grants and provide for facilities necessary for activities like the Exceptional Community Baseball League, and for play structures like wheelchair-accessible playground equipment. Consider appropriate locations for senior-focused parks and playgrounds.

Goal 7.3. Access to Healthy Food

The residents of all of Greenville's neighborhoods will have convenient access to healthy food. Food deserts will be addressed through new grocery stores or farmers markets. Residents will have the opportunity to grow their own produce in their own yards or in a robust network of community gardens.



Policy 7.3.1. Remove Barriers that Prohibit Gardens on Residential Property

Ensure zoning codes that allow residents to responsibly grow vegetable gardens in front, back, and side yards.

Policy 7.3.2. Develop Additional Community Gardens and the Capacity to Manage Them

Build upon the successful community gardens already in Greenville and support additional land being opened to community gardening, either managed through the City, or through nonprofit organizations like the successful efforts of Cultivate Greenville and Third Street Community Center.

Policy 7.3.3. Grow the Presence of Greenville's Farmers Markets

Work to make farmers markets accessible to both the majority of residents and to residents with fewer healthy options. Give farmers markets a prominent accessible location and incentivize satellite markets if necessary.

Policy 7.3.4. Work to Eliminate Food Deserts

Work to promote accessibility to healthy food in all neighborhoods. If necessary, offer incentives to break up food deserts with new grocery stores that provide the opportunity for residents to make healthy choices. Support home and community gardens as well as farmers markets within areas with low access to healthy foods. Investigate whether mobile markets that take healthy affordable produce into multiple food deserts for sale are a part of the solution.

Policy 7.3.5. Continue to Support Services that Provide Healthy Food to the Less Fortunate

Provide the support necessary for charitable health initiatives to bring healthy food to those with no other options for access.

Goal 7.4. Access to Community Resources

Greenville will be a well connected city where residents can reach the amenities and community resources necessary to make healthy decisions.



Policy 7.4.1. Ensure Land Use and Density Support Community Connectivity

Develop the City in line with the rest of *Horizons 2026* to foster a well connected city with easy access to amenities and multiple land uses from each residential neighborhood.

Policy 7.4.2. Coordinate the Development of Recreational Facilities with the School System

Schools are often embedded in locations convenient to the surrounding neighborhood. Coordinate with schools to allow community access to outdoor recreation space on school grounds in off-hours.

Policy 7.4.3. Encourage Clinics, Programming and Health Services from Hospitals and Research Institutions

Continue to partner with the City's necessary healthcare institutions so that the skills being honed within their walls continue to provide benefits to residents in the broader community.

Policy 7.4.4. Plan Events

Plan and advertise events that educate residents by giving them an additional reason to come to and explore parks and potentially encourage them to revisit the parks as a part of more regular routine.



Policy 7.4.5. Make Health a Part of the Neighborhood Improvement Grant Program

Promote use of the existing Neighborhood Improvement Grant program toward healthy neighborhood initiatives. Investigate options to increase total grant funding.

Goal 7.5. Mental Health Benefits of Nature

Greenville will be interspersed with parks that can provide a welcome mental break during the day. Nature will be a visible part of the fabric of the City. This will benefit residents, workers, recreational and business visitors, and medical care visitors.



Policy 7.5.1. Preserve Green Space in a Network for Activity

Protect natural areas for the mental health benefits of nature-based recreation at a variety of scales. Nurture a network of spaces so users can travel to and from park destinations.

Policy 7.5.2. Preserve Views of Nature and Parks

Protect views of nature to benefit the mental health aspects of residents and visitors. Add natural elements to all districts so residents, workers, visitors, and patients can all gain the calming health benefits.

Policy 7.5.3. Create Pocket Parks Near Employers

Create pocket parks, especially near employment areas, as an amenity to benefit the mental health of workers in Greenville during stressful workdays.

Policy 7.5.4. Require Continued Tree Planting

Trees in yards, parks, and along streets are easily visible natural elements. Continue planting them so Greenville's residents, visitors, and workers can experience short-term mental health benefits and longer term clean air and water benefits. Retain pre-existing trees and consider an appropriate ordinance to require the replacement of tree canopy lost during redevelopment. *See also Chapter 6: Fostering a Resilient City.*

Goal 7.6. Clean Air and Water

Greenville will continue to preserve its clean air and water to benefit the health and enjoyment of residents and visitors.



Policy 7.6.1. Monitor, Preserve, and Improve Air and Water Quality

Clean air and water are cornerstones of a healthy City. Monitor changes, quality, and pollutant levels. Take action as needed to keep lead, particulates, and other pollutants out of the air and water, regulating emitters and enforcing anti-idling or muffler ordinances if necessary.

Actions

Action 7.1. Institute Appropriate Complete Streets Updates as Roads are Improved or Constructed

The City should implement a complete streets program so that streets are accessible to all modes of transportation. The program may be implemented through a new *Comprehensive Transportation Plan* and the subdivision ordinance. There should be a focus on safety and convenience in connections so that there are fewer barriers to engaging in physical activity for transportation. Greenville should follow the guidelines set out by NCDOT for building and maintaining complete streets.

Action 7.2. Identify Potential Parkland in Existing Underserved Neighborhoods and Work to Secure it

All residents in Greenville deserve access to some measure of neighborhood recreation facilities as an easy means of providing physical activity for recreation. Nearby options are especially necessary for those who, because of age, ability, or income, cannot drive to find recreation. Greenville should secure any land that becomes available in locations that can become promising neighborhood parks or mini parks, especially in underserved neighborhoods.

Action 7.3. Update Development Regulations to Require Open Space / Park Space as Part of New Neighborhoods

The City will amend its subdivision standards and other related development regulations to require new subdivisions to include open space / parkland as part of the development. These spaces could serve as passive or active recreational spaces, or natural lands. Regulations should ensure that these open spaces are

integrated into new neighborhoods to provide access to all residents. Many communities throughout North Carolina have similar requirements, and typically tie the acreage of the open space set-aside be relative to the size of the development. Often these open spaces are made accessible to residents through greenways and meandering trails, creating unique neighborhood amenities.

Action 7.4. Support Personal and Community Gardens

Greenville should promote gardening. Gardening provides access to nature, general recreation, and nutrition. Any regulations that limit vegetable gardens on personal property should be reexamined. Community gardens should be promoted by the City either providing space or helping nonprofit and community actors secure the space necessary for community plots.

Action 7.5. Provide Greater Accessibility to Food Options for Food Deserts

Greenville should actively work to eliminate or reduce the burden of food deserts. Appropriate action may include attracting grocery stores to underserved neighborhoods through incentives, helping to establish affordable farmers markets in those neighborhoods, facilitating mobile markets that cater to multiple food deserts, helping support community gardens in underserved neighborhoods, and by ensuring Greenville is a well connected City so residents can access these amenities outside their neighborhood.

Action 7.6. Continue to Maintain the Parks System

Greenville's parks are one of the most visible aspects of its government, and they provide health benefits for residents. Greenville should continue to maintain park systems and to ensure it stays in line with the needs of residents.

Action 7.7. Continue to Work with Healthcare Institutions to Expand Community Health Services

Greenville residents should continue to enjoy the benefits of hosting preeminent healthcare institutions. The City should work with Vidant Medical Center and ECU's Brody School of Medicine to expand community services provided by knowledgeable institutional staff for the benefit of community health.

Action 7.8. Develop an Iconic Pedestrian Bridge that Connects North of the River to Uptown

The City should work with public and private partners to build an iconic pedestrian bridge that connects areas north of the river to the Uptown District. A pedestrian and bicycle connection across the river would add value to parks on either end as destinations and centers of physical activity while simultaneously serving as a catalyst for better connections within and around the City core. It can become a highly visible access point to experiencing the Tar River and the surrounding natural environment and it could be a key community amenity that could increase ecotourism potential for Greenville.



Swamp Tupelo in River Park North



Bob Kerry Pedestrian Bridge between Omaha, NE and Council Bluffs, IA



November *How Will We Grow?* Workshop

Growing Together

Greenville will be a place where people and organizations work together to achieve vitality and character that cannot be accomplished without purposeful coordination and collaboration. This is a community rich with resources and leadership. Multiple governmental jurisdictions, institutions, organizations, and businesses have worked over the years to contribute to the success and unique character of the City of Greenville. Relationships and partnerships will continue to evolve in a way that moves the community forward, Growing Together.

In this Chapter

Key Community Issues: This section highlights important trends, conditions, policies, and community concerns that impact required coordination and collaboration

Concepts and Best Practices to Address

Community Concerns: This section presents fact-based approaches to solving complex interrelated challenges.

Goals & Policies: This section lists the goals our community seeks to accomplish and the policies to guide us there.

Actions: This section provides key proactive actions that the city and interjurisdictional and community partners will take over the coming decade to bring us closer to our community's vision.

Overview

A recurring theme throughout discussions leading to preparation of this *Horizons 2026 Plan* has been the importance of interjurisdictional cooperation, along with focus on the opportunities that exist for collaboration among organizations working on related topics. This chapter focuses on the means of leveraging the work of individual organizations, connecting related efforts, such that “the whole is greater than the sum of its parts.”

This chapter reviews the array of entities contributing to community life in Greenville, along with summaries of their missions and jurisdictions. Connections will be made to the issues that have been articulated in Chapters 1-7. This chapter includes a discussion of collaboration models, descriptions of entities and organizations with projects/functions that have citywide interest, a review of current mechanisms in place for information-sharing and collaborative action, and recommendations for additional partnership possibilities.

Exploring these possibilities and keeping a focus on Growing Together will help assure that Greenville achieves its goals efficiently, will help minimize redundancy and conflict, and will further contribute to the community pride and identity that characterize this place.

Planning Influences

Key Community Issues

Greenville's most prominent jurisdictional/institutional partners today are Pitt County and East Carolina University. There is also a robust array of entities in the city, and a review of their missions and relationships to the city is critical to moving forward with a full understanding of the institutional context.

Descriptions of jurisdictions, institutions, and organizations follow, along with a summary of Greenville issues that would benefit from collaboration, and a table highlighting the connections among key issues and institutional partners.

Jurisdictions and Organizations

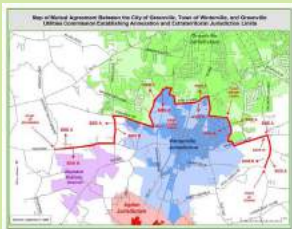
Following are descriptions of key entities whose missions and functions relate directly to the needs and objectives of the City of Greenville.

East Carolina University: Founded on March 8, 1907 as a teacher training school, ECU has grown from 43 acres to almost 1,600 acres today. The university's academic facilities are located on four properties: Main Campus, Health Sciences Campus, West Research Campus, and the Field Station for Coastal Studies in New Holland, North Carolina. The nine undergraduate colleges, graduate school, and four professional schools are located on these four properties. All of

the non-health sciences majors are located on the Main Campus. The College of Nursing, College of Allied Health Sciences, The Brody School of Medicine, and School of Dental Medicine are located on the Health Science Campus. There are over 300 registered clubs on campus including fraternities and sororities.



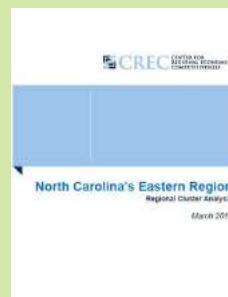
Relevant Plans



Map of Mutual Agreement Between the City of Greenville, Town of Winterville, and GUC



ECU Comprehensive Facilities Masterplan



North Carolina's Eastern Region Regional Cluster Analysis



2015 Report to the Community - Vidant Health

Pitt County: Pitt County is home to the City of Greenville and neighboring municipalities. Multiple County services are provided to Greenville residents, businesses, and institutions. Most relevant to this plan are services provided by the Pitt Development Commission, Pitt Area Transit, Environmental Health Division, Planning and Development, Pitt County Health Department, and the Department of Social Services.

Vidant Medical Center: Vidant Medical Center (previously Pitt County Memorial Hospital) is the primary teaching hospital for ECU's Brody School of Medicine and is the flagship medical center for Vidant Health. Vidant is a Level 1 Trauma Center, one of six in the state of North Carolina. It is the only trauma center east of Raleigh, and thus is the hub of medical care for a broad and complex rural region of over 2 million people. Vidant Medical Center is the largest employer in Eastern North Carolina and 20th overall in the state.

Pitt County Schools: Pitt County Schools currently serve more than 23,500 students in 37 schools. The Pitt County school system operates 1 pre-kindergarten school, 16 elementary schools, 6 K-8, 7 middle schools, 6 high schools, and 1 early college high school. The school bus system transports approximately 12,500 students daily during the school year.

Greenville Utilities Commission: GUC provides electric, water, sewer, and natural gas services to the City of Greenville and 75% of Pitt County. GUC serves a combined total of over 150,000 customer connections. GUC is owned by the citizens of Greenville but operates under a separate charter issued by the North Carolina General Assembly.



Relevant Plans



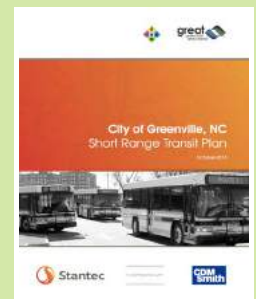
Pitt County Schools
Long Range Facility
Plan



At Your Service -
Greenville Utilities



Neuse River Basin
Regional Hazard
Mitigation Plan



Short Range
Transit Plan

Town of Winterville: Winterville is an incorporated municipality with a population of approximately 10,000 people. Winterville is located adjacent to and immediately south of the City of Greenville and its planning jurisdiction.



Town of Farmville: Farmville is an incorporated municipality with a population of approximately 5,000 people. Farmville is located west of the City of Greenville and its planning jurisdiction.



Town of Ayden: Ayden is an incorporated municipality with a population of approximately 5,000 people. Ayden is located south of the City of Greenville just beyond Winterville. Though the town does not share a border with Greenville, it is covered by the Greenville Metropolitan Planning Organization, and it is another key jurisdiction located along the future Southwest Bypass.



Village of Simpson: The Village of Simpson is an incorporated municipality with a population of approximately 500 people. Simpson is located adjacent to and immediately east of the City of Greenville and its planning jurisdiction.



Pitt-Greenville Airport (PGV) Authority: The airport was constructed in 1940 on land that was jointly owned by the City of Greenville and Pitt County. It is located two miles from ECU, three miles from Vidant Medical Center and easily accessible from Interstates 40 and 95. It is currently serviced by American Airlines, and a thriving general aviation sector. The Pitt-Greenville Airport Authority is a body corporate and politic created by the North Carolina General Assembly and by joint resolution of the City of Greenville and Pitt County in 1967, as amended in 1979, for the purpose of administering the activity of operating a municipal airport. The Airport Authority is charged with the operation, maintenance, and improvement of PGV. Since 1985, PGV has been solvent and financially self-supporting.



Pitt County Development Commission: The Pitt County Development Commission recruits new industry and supports existing industry in Pitt County. Its mission is to promote job growth, diversify the County's economy, and expand the local tax base. Research data, printed materials, and prospect missions are components of the Commission's efforts. The Commission maintains a free listing of available industrial and major office buildings and sites. The Commission works closely with the North Carolina Department of Commerce, North Carolina's Eastern



Region Partnership, local Chambers of Commerce, ECU, PCC, and Vidant Health.

Greenville-Pitt Chamber of Commerce: The Greenville-Pitt County Chamber of Commerce focuses on business success, strategic economic growth, and community development. The Chamber has been a major player in bringing new business and development into the county, and plays a vital role as a uniting force between business and citizens to ensure continued progress. The Chamber is a volunteer organization of business, professional, industrial, and community leaders working together. Its objectives are designed to advance the development of the community, to ensure effective government, to maintain a favorable climate for sound economic growth, and to improve the overall quality of life for Pitt County's citizens. The Chamber has more than 1,000 members and is managed by a member-elected Board of Directors. A professional staff working closely with the Chamber's various committees handles the Chamber's day-to-day operations. Ayden, Grifton, and Farmville affiliates, though an integral part of the Greenville-Pitt County Chamber, are independent and financially self-supporting organizations with their own members.

Greenville Area Transit (GREAT): Greenville Area Transit (GREAT) is owned and operated by the City of Greenville as the Transit Division of the City's Public Works Department. The system serves the greater Greenville area, and operates six routes.

ECU Transit: ECU Transit operates during the academic year, beginning the first day of class of each semester and summer school session. Service is free for students, staff, and faculty. There is a reduced service area during the summer sessions. ECU Transit does not operate on holidays, reading days, or during school breaks. The mission of ECU Transit is to provide transportation services, which are safe, dependable, and cost effective to the ECU community and to facilitate learning and involvement for student success thereby enhancing the quality of life in our community.

Pitt Area Transit: The mission of Pitt Area Transit System (PATS) is to provide safe, reliable, cost effective transportation that enables eligible individuals to access necessary medical care and other essential resources that improve and enhance their quality of life. PATS is an on-demand point-to-point public transportation system open to all citizens of Pitt County living outside the city limits of Greenville. It provides over 500,000 miles of service each year, more than 66,700 trips, and consists of a fleet of 20 vehicles. The system operates on weekdays.



Pitt Community College (PCC): PCC, is a two-year accredited institution of higher education and technical training school, and is located in Winterville in Pitt County. The school, established in 1961, is part of the North Carolina Community College System, a state-supported body of 58 institutions throughout North Carolina. The school has an enrollment of over 9,000 undergraduate students with a total of 11,771 students enrolled in the Curriculum Program. PCC is accredited by the Southern Association of Colleges and Schools to award Associate's Degrees.



Uptown Greenville: Uptown Greenville is a private nonprofit dedicated to revitalizing the city's center—the Uptown business district. It provides a safe atmosphere that is refreshing and engaging, rich with historical architecture, well-maintained sidewalks, storefronts and parking lots, public art and parklets; brings fun events where you can hear live music, see people from all over the city, learn new things, celebrate pirate pride, eat great food, and just have fun. Uptown Greenville connects people, ideas, and policy regarding the district, and partners with public and private organizations to sustain and create new projects and events.



United Way of Pitt County: United Way creates change by addressing the underlying causes of community issues, providing a safety net of basic needs services. The organization also focuses on school success and workforce development with two specific goals: all children enter school ready to learn and all youth graduate high school. Known as the United Way of Pitt County (UWPC) since 1991, the organization has grown in strength and stature through the years. UWPC raised \$1.4 million in its 2011 campaign and invested in 18 community programs.



NC Department of Transportation (NCDOT) / MPO: The Greenville Urban Area MPO is a regional transportation planning organization that is made up of elected officials and representatives from various local governments that are located within the Greenville urban area as well as representatives from NCDOT. The MPO provides the regional cooperative planning process that serves as the basis for the expenditure of Federal transportation funds in the area for aviation, rail, streets, highways, bridges, public transit, bicycle, and pedestrian paths. The members of the Greenville Urban Area MPO include the City of Greenville, the Towns of Winterville and Ayden, the Village of Simpson, and Pitt County Government. The MPO is responsible for carrying out an annual planning work program, part of which must address updating the Metropolitan Transportation Improvement Program (a 10-year project programming schedule) and a long-



range transportation plan, which is a 20-year forecast of projects and programs. The Engineering Division of the City of Greenville's Public Works Department is the lead planning agency for the Greenville Urban Area MPO. The MPO works directly with NCDOT to prioritize road projects that enhance traffic flow within the Greenville Urban Area MPO boundary.

Greenville's Internal Collaboration

The City of Greenville acts through its mayor, city council, professional staff, and its city services. It also acts through citizen boards empowered to hear, investigate, or act on issues. GUC and the Pitt-Greenville Airport Authority are listed separately, but the other boards include:

Affordable Housing Loan Committee, Board of Adjustment, Community Appearance Commission, Environmental Advisory Commission, Firefighters Relief Fund Committee, Greenville Bicycle and Pedestrian Commission, Historic Preservation Commission, Housing Authority, Human Relations Council, Investment Advisory Committee, Neighborhood Advisory Board, Pitt-Greenville Convention and Visitors Authority, Planning and Zoning Commission, Police Community Relations Committee, Public Transportation and Parking Commission, Recreation and Parks Commission, Redevelopment Commission, Sheppard Memorial Library Board, Youth Council

The contribution of participating citizens is invaluable, and their actions play a role in furthering relations between the other organizations.

Issues to Benefit from Collaboration

Chapters 1-7 of this Horizons 2026 Community Plan identify key issues needing attention in Greenville. For many of those issues, responsibilities for action are clear and direct. For many others, however, the issues are being addressed by multiple parties, creating circumstances where coordination and collaborative actions might enhance prospects for successful outcomes. Following is a summary of issues, each described earlier in this Plan, that might benefit from additional information-sharing, cooperation, and collaborative actions.

Establish and Implement a Tiered Growth Framework: A key recommendation of this plan is that a Tiered Growth Framework be established to guide land use and infrastructure decisions. Once in place, the Framework will be used to help establish timing and priorities for installation of public infrastructure: water lines, sewer lines, roads, and services. Multiple agencies, organizations, and jurisdictions will become partners in implementing a system that aligns the timing of growth and land use patterns to the availability and extension of public services.

Promote a Mix of Housing Types: This plan highlights the need and aspiration for a variety of housing options to be available throughout the Greenville community, with a range of housing costs. Multiple organizations, public and private, need to work together to design and implement programs that can help assure variety and mix in housing types and costs as development moves forward throughout the Greenville area.

Coordinate Transit Service: Three entities provide public transportation services in the Greenville area. The two key systems are those run by the City of Greenville and by ECU. As the City, and ECU and its Medical Campus continue to grow, coordination and collaboration will help assure efficiency and coverage in providing the necessary bus services. Future plans for extension of services and a new transportation center need to be coordinated with land use policies.

Maintain Greenville's Fiscal Health: Different growth scenarios can result in different fiscal impacts on local government operations. Coordination between city and county departments and neighboring jurisdictions in preparing plans for capital improvements can help achieve efficiencies in service delivery. Efficient delivery of services, combined with desirable land use patterns and mixes, can help assure Greenville's fiscal stability.

Promote Job Growth and Workforce Development: Coordination among entities recruiting new business and promoting business-friendly environments will help attract the job growth and business investment that will help assure Greenville's long-term fiscal health. Coordination with and among Greenville area's education and workforce training providers will help assure a skilled workforce for emerging business opportunities. Coordination with ECU in promoting business innovation will help stimulate the local economy.

Promote Great Public Schools: Ensuring excellence in public schools is a community responsibility. Coordinating the siting of new school facilities with land use and infrastructure plans is highly desirable. Multiple agencies and organizations, working in conjunction with Pitt County Schools, can help achieve community involvement in schools, which can enrich the educational experience. Coordination with business development and recruitment efforts can help align workforce skills with future opportunities.

Promote Revitalization of West Greenville: Revitalization of the West Greenville area has been a community goal, and a focus of community investment. Continued attention to nurturing the vitality, growth,

and redevelopment of West Greenville is a priority, and is best approached by partnerships among entities that plan for infrastructure, recruit businesses, and make decisions about community investment choices.

Current Mechanisms for Information Sharing

A number of mechanisms are currently in place to facilitate sharing of information among jurisdictions and organizations. These arrangements are important and form a base for expanding opportunities for cooperation and collaboration. A description of key interagency relationships follows.



November How Will We Grow? Workshop

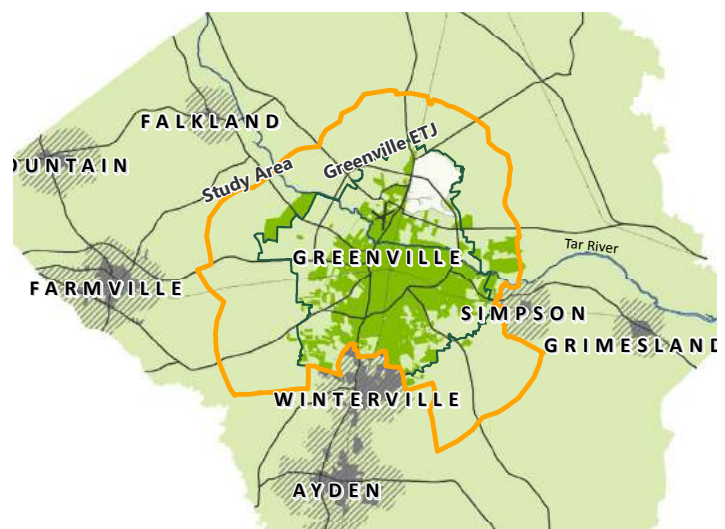
City – East Carolina University: The town-gown relationship is critical to Greenville’s identity and vitality. ECU contributes to most every aspect of community life in Greenville, and the list of shared interests between the university and city is very long. Staff-to-staff communications are frequent, and information is shared as new initiatives are begun and key events regarding existing operations take place. When circumstances call for a gathering of leadership, meetings are arranged between university leaders and the Greenville City Council. An ongoing important issue is the presence and development of off-campus student housing. Greenville and the university both operate bus transit systems. A significant new initiative underway that will benefit from town-gown coordination is ECU’s plans to rehabilitate a 7-block area in Greenville’s warehouse district as a millennial campus -- a site where the university can collaborate with private companies to commercialize research discoveries and offer advanced training to benefit the region’s high-tech industries.

City – Pitt County: North Carolina’s governance systems are set up to authorize municipalities and counties to provide a full array of public services to residents. For some services, counties are responsible for providing services to all residents of the county (e.g., social services, public schools). For many services, both jurisdictions have authority and provide services – the city to residents and property owners within the city limits and planning jurisdiction, the county to residents and property owners outside of municipal jurisdictions (e.g., zoning and land use regulations). The potential benefits from sharing information and coordinating actions are extensive: siting of new public schools, coordinating land use regulations at jurisdictional edges, coordinating public improvements, and many more. Currently, there is regular staff-to-staff communication between county staff and Greenville staff, and periodic joint meetings of the City Council and the County Board of Commissioners.

City – Greenville Utilities Commission: GUC is an independent entity, responsible for providing electric, water, sewer, and natural gas services to the City of Greenville and 75% of Pitt County. Greenville Utilities is governed by an 8-member Board of Commissioners. Regular staff-to-staff communications take place as new areas of the city and its planning jurisdiction are developing, and where land development needs to be coordinated with provision of public utilities. Sanitary

sewer service provided by GUC has the greatest impact on land development patterns. The City of Greenville and GUC have joint policies that require (1) anyone requesting connection to GUC’s sanitary sewer system to request a voluntary annexation into Greenville, and (2) any sanitary sewer extension outside of the city’s ETJ must be approved by the Greenville City Council. As a result, development opportunities often hinge on annexation into the city. Because the City of Greenville and GUC are two separate entities, the need for coordination in plans for future land use is very important. There are additional opportunities for coordinating implementation, particularly regarding the implementation of the city’s Tiered Growth Framework.

City – Transit Providers: The Greenville Area Transit System (GREAT) is operated by the City of Greenville’s Public Works Department. Service is provided Monday through Saturday along six city-wide fixed routes. Fares are \$.50 - \$1.00 for a one-way trip. ECU Transit offers both on- and off-campus service. Throughout the academic year and both summer sessions, buses operate on several fixed routes which circulate around main campus and connect to outlying areas, such as the Health Sciences Campus and commuter park-and-ride lots. Service is also provided to off-campus housing and several shopping, dining and entertainment areas around Greenville. Additionally, a point-to-point, on-demand van service helps ensure safe connections to evening routes, as well as, safe travel around campus and adjacent areas at night after most regular daytime service has ended. Staff-to-staff communications between GREAT and ECU Transit are frequent.



Concepts and Best Practices to Address Community Concerns

Many communities face the challenges and opportunities of multiple jurisdictions and organizations engaged in the operation of related programs. Of course, the first objective of focusing attentions on related interests is avoiding redundancy or confusion regarding responsible parties. The second objective is to share information so that adjustments can be made in services or programs, taking into account information about the operations of related initiatives. The third, and potentially most valuable objective, is taking advantage of opportunities for joint or collaborative action, where the mission or services of one entity can be enhanced or made more efficient by “combining forces.” Opportunities may exist for collaborative actions where outcomes can be greater than the sum of individual parts. Following are examples of initiatives that leverage the presence of related interests.

Information Sharing

Two examples of information-sharing are commonly used by local governments. They focus on connecting relevant organizational levels and constituencies respectively.

Staff-to-Staff: The easiest and most logistically important form of information-sharing occurs between staffs of organizations/jurisdictions pursuing related initiatives. Most commonly this kind of communication takes place on an ad hoc, as-needed basis, when new information or events arise. Many governmental departments and agencies, however, take a more proactive approach and have regularly scheduled meetings at predetermined intervals to be able to share current news and events, and also to discuss more long-range issues and ideas. Depending on levels of activity, these regularly-scheduled meetings typically occur on a monthly or quarterly basis during the work day. This type of collaboration is especially important for plans impacting other entities’ planning areas.

Leadership Meetings: Governments in circumstances like Greenville’s, with multiple jurisdictions and organizations integrally woven into community life, often find need for gatherings involving the leadership of each entity. Sometimes these are ad hoc as events occur, other times they are scheduled on a regular

basis. Sometimes these leadership meetings involve two entities (e.g., City Council and University Board of Trustees), and sometimes they take more the form of a roundtable, with chief executive officers of multiple entities meeting together (e.g., City, County, University, Utilities Commission, Public Schools, Chamber of Commerce, Civic Organizations).

Regularly scheduled meetings and briefings involving all elected officials from jurisdictions located in a given area is another common approach to “working together,” with quarterly or semi-annual or annual meetings convened to jointly hear briefings on important topics.

Collaborative Action

The most effective form of working together, and the most rare, is the achievement of collaborative action. This occurs when jurisdictions and/or organizations jointly decide to take independent actions that are coordinated with other independent actions, and which can result in one jurisdiction’s actions enhancing the effectiveness and efficiency of the actions of a partner entity.

Examples include execution of intergovernmental agreements regarding land use regulations (e.g., managing the edges of jurisdictions to achieve uniform approaches to land use, agreeing to jurisdictional boundaries such as annexation agreements and extraterritorial planning area boundaries, joint planning efforts). Sometimes the collaborative actions can take the form of coordinated investments, such as utility extensions, land use development, redevelopment, and economic incentives to encourage certain types of development in certain locations.

Opportunities for collaborative action are not always present, and cannot always be anticipated well in advance of needed action. But information-sharing mechanisms as described above often lead to early identification of collaboration opportunities. When jurisdictional and organizational leaders meet regularly and understand the missions, plans, and resources of potential partners, opportunities for collaboration often emerge.

Summary of Shared Issues

		Community Issues						
		Tiered Growth	Mix of Housing	Transit Service	Fiscal Health	Job Growth	Public Schools	West Greenville
Community Entities	East Carolina University		+	+	+	+		
	Pitt County	+	+		+	+	+	
	Vidant Medical Center			+	+	+		
	Pitt County Schools	+				+	+	+
	Greenville Utilities Commission	+			+	+		
	Town of Winterville	+	+				+	
	Town of Farmville	+	+				+	
	Town of Ayden	+	+				+	
	Village of Simpson	+	+				+	
	Pitt-Greenville Airport Authority			+		+		
	Pitt County Development Commission	+			+	+		+
	Greenville-Pitt Chamber of Commerce	+			+	+		
	Greenville Area Transit	+		+				+
	ECU Transit	+		+				+
	Pitt Area Transit	+		+				+
	Pitt Community College					+	+	+
	Uptown Greenville	+	+	+	+	+		
	United Way of Pitt County		+				+	+
	NC Department of Transportation	+		+		+		

Goals & Policies

Goal 8.1. Coordination with Jurisdictions

Greenville's major jurisdictional and institutional partners today are Pitt County, Winterville, Farmville, Simpson, Pitt County Schools, and ECU. The City of Greenville will explore mechanisms to enhance existing coordination with these jurisdictions, and look for opportunities to establish new partnerships focusing on issues of joint interest.



Policy 8.1.1. Share Information

The city should continue to share plans, data, and programmatic information with neighboring jurisdictions and governmental entities operating within Greenville.

Policy 8.1.2. Identify Shared Interests

The city should regularly engage neighboring jurisdictions and governmental entities in dialogues with the objective of identifying shared interests. Opportunities for joint and coordinated action by multiple parties will be explored to help leverage the effectiveness of individual actions.

Policy 8.1.3. Establish Intergovernmental Agreements

The city will continue to explore possibilities for construction and adoption of intergovernmental agreements with partner jurisdictions, to formalize agreements and coordinate policies and operations.

Goal 8.2. Coordination with Organizations

The City of Greenville will be a place where people and organizations work together to achieve vitality. Greenville's major organizational partners today are Vidant Medical Center, GUC and the PGV Authority. The City of Greenville will explore mechanisms to enhance existing coordination with these jurisdictions, and look for opportunities to establish new partnerships focusing on issues of joint interest.



Policy 8.2.1. Establish Community Inventory of Initiatives

The city will expand current efforts to create and maintain an inventory of organizations operating within Greenville that have missions and programs contributing to achievement of the city's goals.

Policy 8.2.2. Identify Related Resources

As the community inventories are prepared and updated on a regular basis, the city will give specific attention to identifying specific programs and initiatives of organizations that present opportunities for coordinated approaches.

Policy 8.2.3. Encourage Joint Initiatives

Greenville will reach out to public and private entities that are operating programs within the city that present opportunities for collaboration and coordinated action, to explore possible partnerships with the city.

Actions

Action 8.1. Enhance Arrangements for Information-Sharing

Review existing mechanisms for information-sharing with Greenville's most prominent jurisdictional/institutional partners. Identify ways these existing mechanisms can be enhanced with protocols for assuring that all parties have current information regarding related activities. Establish protocols and regular timetables for staff-to-staff meetings involving personnel from Greenville's major jurisdictional and institutional partners.

Action 8.2. Establish Roundtable Gatherings

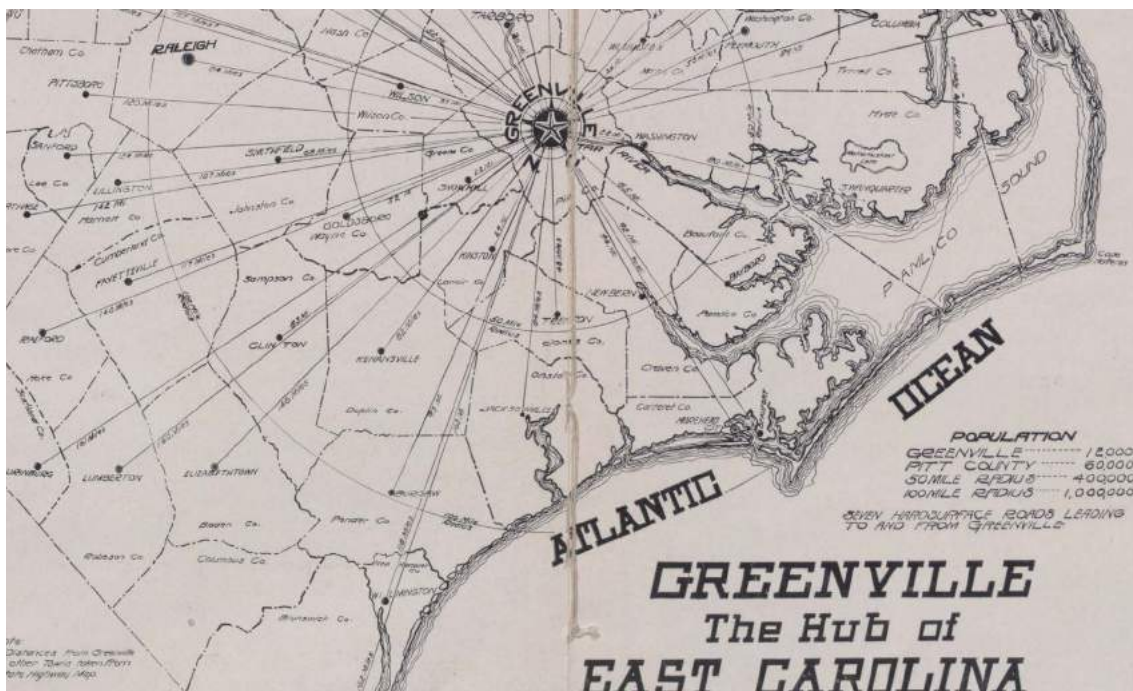
Create mechanisms for regularly-scheduled meetings of Greenville's leadership to jointly receive information and presentations, and to discuss topical issues. Consider annual roundtable meetings with invitations to board members and leadership teams from organizational and institutional partners. Consider quarterly or semi-annual meetings of elected officials from all jurisdictions within Pitt County.

Action 8.3. Encourage Collaborative Approaches

Formally invite institutions and organizations that have missions and programs contributing to achievement of Greenville's goals to join in partnerships with the city to construct mechanisms for collaborative approaches.

Action 8.4. Adopt Intergovernmental Agreements

Construct additional formal intergovernmental agreements for consideration by multiple jurisdictions that would codify agreements regarding land use policies and practices, and service delivery systems.



Greenville has a long history of regional thinking.

Image Source: Greenville : the hub of eastern North Carolina; Pamphlet by the Greenville, N.C. Retail Merchants Association, 1930; via ECU Digital Collection

*"Our
Greenville
Yours
if you come"*



*The Hub of
Eastern
North Carolina*

Action Plan

Greenville will use *Horizons 2026* as a framework for maintaining and improving the quality of life of Greenville residents moving toward the future. This plan will be consulted when development, capital improvement, and public services decisions are made. The city's progress on implementing this plan will be monitored as a way to ensure city accountability. This plan will be updated regularly to preserve its relevance as a guiding document.

In this Chapter

Priority Implementation Actions: These actions have been selected as the first priorities for city actions.

Secondary Implementation Actions: This section includes a table of all actions collected from throughout the vision framework chapters.

Plan Monitoring and updating: This section outlines the need to monitor the progress of the plan and the potential to make changes to the plan.

Overview

The Greenville City Council, Planning and Zoning Commission, and city staff will use *Horizons 2026* as a guide for the decisions they make concerning the physical development of Greenville. This comprehensive plan will be consulted during the regular course of creating and adopting strategic plans that set shorter term priorities for the city, and capital improvement plans that consider expanding community facilities and public improvements. It can again be used as a framework for city council exercises and public meetings.

The comprehensive scope of this plan is not meant to be tackled all at once. This chapter offers a specific plan for implementation by identifying priority implementation actions for the city and partners to undertake. These actions were taken from previous chapters and prioritized to reflect the city's main focus areas for the next 10 years.

Secondary implementation actions are not as pressing a priority as the priority implementation actions and should be addressed after the priority actions, or sooner if staff capacity and resources are available. If the plan is updated, priority implementation actions may be removed as completed, and secondary implementation actions may be promoted in their place.

This chapter closes with recommendations for continued monitoring of progress and updating of the plan.

Previous Page: *Greenville: the Hub of Eastern North Carolina*, Pamphlet by the Greenville, NC Retail Merchants Association, 1930, via ECU Digital Collections



Action Plan

Priority Implementation Actions

This section sets out the top priority implementation actions that should be initiated within the next ten years. Weight was given to the preferences expressed by the public as well as to actions that are prerequisites to enacting parts of the plan.

Priority Implementation Action #1: Adopt Mixed Use Zoning Districts

Action 1.1.

Mixed use development is not a current part of Greenville's zoning and subdivision ordinances, but vertically mixed use buildings and mixed use developments are a part of the vision of the Future Land Use and Character map of this plan. Having districts for Mixed Use High Intensity and Mixed Use defined within the ordinances will expedite the ability of City staff to deploy the plan in areas where that designation has been given on the map. Along with other regulations, incentives, and programs, mixed use districts can also help preserve and grow the vibrant uptown neighborhoods. This action adds to the City's tool kit for overall implementation. This action was a top ten priority at the public open house.

Priority Implementation Action #2: Adopt Mandatory Design Standards in Uptown

Action 1.4.

Uptown is a unique asset for the citizens of Greenville. Maintaining and enhancing its character through design standards will help to solidify the identity of the area and the identity of Greenville as a whole. This action was a top ten priority at the public open house.

Priority Implementation Action #3: Develop Corridor Development Standards

Action 1.9.

Commercial corridor development standards encourage the development of vibrant corridors that are visually appealing, accommodate multiple modes of transportation, and promote connectivity. The standards can either be applied to established commercial zoning districts or through a new overlay district. Standards may be developed as a menu of acceptable options to preserve flexibility for property owners. This action was not a top ten priority at the public open house, but serves to tie together the City as it develops.

Priority Implementation Action #4: Develop Strategy to Address Overdevelopment of Peripheral Apartment Complexes

Action 5.7.

A handful of multifamily apartment complexes on the periphery of the City have the potential to face disinvestment due to overdevelopment. The impact of these properties can extend beyond property lines, and a strategy to tackle the issue should be developed before the full effect of disinvestment hits. This action was not a top ten priority at the public open house, but addresses a condition in particular need of attention from the City.

Priority Implementation Action #5: Create an Incentive Program for Development and Redevelopment

Action 4.2.

Development has an impact on the City throughout the life of the buildings developed or redeveloped. It is also a major mechanism of economic growth. An incentive program can promote high quality growth in preferred areas. An incentive program may include measures such as density bonuses, infrastructure development, or expedited permitting. This was not a top ten priority at the public open house, but it can help the City achieve its economic and built environment objectives.

**Priority Implementation Action #6:
Implement the Dickinson Avenue
Corridor Study**
Action 1.5.

The Dickinson Avenue Corridor Study includes measures relevant to construction already occurring and development on the near horizon. Much of the value of a plan is in follow-through, and there is an opportunity to showcase the results of a successful planning effort sooner by carrying out this recent plan. This action was a top ten priority at the public open house.

**Priority Implementation Action #7:
Establish Arrangements for Information-
Sharing**
Action 8.1.

Greenville will benefit by knowing the latest decisions of its regional partners. The ongoing efforts within this plan will be more effective if they can be in alignment with the decisions of municipal neighbors. This action was not a top ten priority at the public open house, but it is essential for the City given ongoing planning efforts in the county and other municipalities, especially as the Southwest Bypass is developed.

**Priority Implementation Action #8:
Develop an Historic Preservation Plan**
Action 1.8.

Protecting historic structures in Greenville is a valuable strategy for preserving heritage and character. There is a timeliness to action associated with historic preservation. As time goes on there can be increased development pressure on potential preservation sites. This action was a top ten priority at the public open house.

**Priority Implementation Action #9:
Update Development Regulations to
Require Open Space / Park Space as a
Part of New Neighborhoods**
Action 7.3.

As Greenville continues to grow new developments are constructed. Regulations need to be in place so these new developments retain space for parkland as the neighborhood matures. Having the space at the outset of development ensures room for healthy open civic space later on. This action was a top ten priority at the public open house.

**Priority Implementation Action #10:
Support Personal and Community
Gardens**
Action 7.4.

Community and personal gardens can help build healthy diets and a sense of community ownership in the City. There are already successful programs within Greenville. Supporting gardening can beautify the City and provide an ongoing example of public action for the benefit of the community. This action was a top ten priority at the public open house.

**Priority Implementation Action #11:
Develop a Fiscal Impact Analysis Model
for Evaluating Proposed Annexations
and Capital Projects**

Action 3.1.

Producing a fiscal impact analysis model can help Greenville strategically plan for expansion in a way that doesn't overextend service provision. This action was not a top ten priority at the public open house, but can help steward the City budget so that all action items are easier to achieve.

**Priority Implementation Action #12:
Convene Transit Providers to Foster
Coordination
Action 2.4.**

Coordinated transit between GREAT, ECU, Vidant, and Pitt County is one of the greatest opportunities to secure savings and improvements through greater efficiency. Laying the groundwork for collaboration takes time, and so convening the providers should be a priority. This action was a top ten priority at the public open house.

**Priority Implementation Action #13:
Develop a Green Energy Plan
Action 6.2.**

Development of a Green Energy Plan enjoys strong support from the citizens of Greenville. Stewardship of natural resources was a popular theme in public input. Green energy policies can have many interconnected effects so establishing a plan to guide the City is the appropriate course of action. This action was a top ten priority at the public open house.

**Priority Implementation Action #14:
Develop an Iconic Pedestrian Bridge
that Connects the North of the River to
Uptown
Action 7.8.**

An iconic pedestrian bridge is the type of large scale thinking that can change the City of Greenville and become a fixture of the City's identity. This action may take the form of allowing or supporting private efforts to fundraise and develop a plan. This action was a top ten priority at the public open house.

**Priority Implementation Action #15:
Redevelop Properties Along First Street
Action 1.7.**

The Town Common is an important civic resource for Greenville. The properties that front it along first street serve to frame the space, and more attention to these properties can help them develop in a way that preserves the openness of the Common while providing services and amenities that enliven the City's front door to the Tar River. This action was a top ten priority at the public open house.

**Priority Implementation Action #16:
Implement Greenville's Watershed
Master Plans
Action 6.4.**

Minding Greenville's watersheds is essential for ensuring water quality, environmental health, and stormwater management around of the City and the Tar River. Greenville already plans for its watersheds. Implementing the recommendations of these individual master plans supports the responsible development and redevelopment of the City.

**Priority Implementation Action #17:
Develop Strategies to Stabilize and
Revitalize the University Neighborhood
Action 5.8.**

The University Neighborhood is a key interface between Greenville and ECU. Developing strategies to stabilize and revitalize the neighborhood can have a major impact on the character of the City and serve as a healthy example of City-University cooperation and citizen-student coexistence. The need for this action was identified based on feedback from the public open house and guidance

Secondary Implementation Actions

This section collects the actions from the various vision framework chapters. A more thorough description of each action is provided in those chapters. Secondary actions should be considered for promotion to

primary implementation actions as primary actions are completed. They should also be pursued as staff capacity and funding resources permit.

Secondary Implementation Action Table	
Action	Entity Responsible
1. Building Great Places	
1.2. Rezone Parcels in Areas Designated for Future Mixed Use	City Council
1.3. Adopt Unified Development Ordinance	City Council
1.5. Implement Dickinson Avenue Corridor Study	Staff
1.6. Simplify the Entitlement Process	Community Development
2. Enhancing Mobility	
2.1. Implement Regulatory Changes	Public Works
2.2. Implement Demonstration Project	Public Works
2.3. Establish Flexibility in Roadway Level of Service Measures	Public Works
3. Maintaining Fiscal Responsibility	
3.2. Work With the Greenville Utilities Commission (GUC), Police and Fire Departments, and Pitt County Schools to Plan for Future Growth	Community Development, Public Works
3.3. Market Desirable, Taxable Land to Developers, Investors, and Tenants	Economic Development
4. Growing the Economic Hub	
4.1. Initiate Rezoning of Parcels Identified for Economic Development Growth	Community Development & Economic Development Staff
4.3. Implement and Update Greenville's Economic Development Plans	Economic Development
4.4. Convene Key Economic Partners to Foster an Entrepreneurial Ecosystem	Community Development& Economic Development

Secondary Implementation Action Table

Action	Entity Responsible
5. Creating Complete Neighborhoods	
5.1. Adopt New Residential Zoning Districts and Standards for Existing and Future Traditional Neighborhoods.	City Council
5.2. Convene Organizations to Discuss the Challenges and Strategies for Impoverished Households	Community Development, GHA
5.3. Update HUD Consolidated Plan	Community Development, GHA
5.4. Adopt a Voluntary Inclusionary Housing Ordinance	City Council
5.5. Develop Neighborhood Reinvestment Strategy	Community Development, GHA
5.6. Conduct Audit of Neighborhood Area Plans	Community Development
6. Fostering a Resilient City	
6.1. Carry Out Low Impact Development (LID) Demonstration Projects	Community Development & Public Works
6.3. Green Marketing Initiative	Convention & Visitor's Bureau
6.5. Develop a Tree Planting and Preservation Policy	Community Development, Public Works
6.6. Review Hazard Mitigation Plan	Public Works
6.7. Develop Citizen Training Program	Community Development
7. Growing a Healthy City	
7.1 Institute Appropriate Complete Streets Updates as Roads are Widened or Improved	Public Works
7.2 Identify Potential Parkland in Existing Underserved Neighborhoods and Work to Secure it	Recreation & Parks
7.5. Provide Greater Accessibility to Food Options for Food Deserts	
7.6 Continue to Maintain the Parks System	Recreation & Parks
7.7 Continue to Work with Healthcare Institutions to Expand Community Health Services	Community Development, Recreation & Parks, Institutional Partners
8. Growing Together	
8.2. Establish Roundtable Gatherings	Citywide
8.3. Encourage Collaborative Approaches	Citywide
8.4. Adopt Intergovernmental Agreements	Citywide

Citizen Preference

Citizens of Greenville had the opportunity to provide input on their priorities for action from the draft plan at the *Our City, Our Plan Public Open House* on June 20, 2016. Participants were asked to identify their ten preferred priority actions. The actions selected the most were:

- 6.2 Develop Green Energy Plan
- 1.5 Implement Dickinson Avenue Corridor Study
- 1.8 Develop an Historic Preservation Plan
- 1.1 Adopt Mixed Use Zoning Districts
- 7.8 Develop an Iconic Pedestrian Bridge that Connects North of the River to Uptown.
- 2.4 Convene Transit Providers to Foster Coordination
- 1.7 Redevelop Properties Along First Street
- 7.3 Update Development Regulations to Require Open Space / Parks Space as Part of New Neighborhoods
- 7.4 Support Personal and Community Gardens
- 1.4 Adopt Mandatory Design Standards in Uptown

Goals & Policies

There is a focus on actions for implementation in this chapter, but there is also important guidance for City decision-making in the goals and policies at the end of chapters 1-8. Many of the policies provide suggestions that may change the considerations taken by city staff. Citizens of Greenville should feel comfortable bringing goals and policies to staff or to council in service of their petitions. The goals and policies should be consulted when interpreting and implementing the actions as well.

Monitoring and Updating the Plan

Monitoring the Plan

The city will monitor the implementation of this plan over time to measure the progress in achieving goals, policies, and actions. This information will provide crucial feedback to the City's decision-makers regarding the approach to plan implementation on an ongoing basis.

It is recommended that the Community Development Department be tasked with overseeing plan implementation. Staff from the department will prepare a comprehensive annual report to City Council on the status of plan implementation, focusing on the top priority implementation actions included in the plan, and any additional initiatives that may be underway. The annual report shall be prepared early each year and ready for presentation to Council at their annual retreat.

The progress of this plan is linked to other major city actions. When the City is preparing its strategic plan, *Horizons 2026* should be used to identify what the City should be working toward. When the City produces its capital improvement plan, *Horizons 2026* should be used to determine the type of projects that the City needs to undertake to advance the comprehensive plan vision.

Updating the Plan

It is intended that an update of this plan take place at least every five years unless otherwise directed by Greenville City Council to occur sooner. In making a determination of when a plan update should be initiated, a prime consideration is the magnitude of the changes that have occurred in the city since the plan was last updated. For instance, unexpected changes in the economy, the environment, traffic congestion, projected growth, or other issues, may trigger a plan update in less than five years.

When conducting a plan update, the City will thoroughly re-evaluate the vision, goals, policies, and implementation actions of this plan and change or remove those relevant to make the plan effective. A plan update will also include a thorough review of the validity and current quality of all information contained within the plan and should include opportunities for involvement by the public, boards and councils, elected and appointed officials, staff, and other affected interests.

The Future Land Use and Character Map and corresponding designations of the plan serve as the principal policies for evaluating development proposals and proposed changes in City regulations regarding growth, development, and redevelopment. It is another part of the plan that should be consulted during updates, and updated itself as is required or customary in City land use decisions.

Appendices



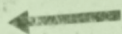
Horizons 2026
GREENVILLE'S COMMUNITY PLAN

CITY COUNCIL PUBLIC HEARING DOCUMENT
AUGUST 23, 2016



PARDON *The* INCONVENIENCE
TO MEET THE NEED OF OUR
GROWING CITY THIS WORK
IS NECESSARY
GREENVILLE UTILITIES COMMISSION

DETOUR



Appendices



CITY COUNCIL PUBLIC HEARING DOCUMENT AUGUST 23, 2016

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Appendix

Special Area Plan: Airport Corridor Area

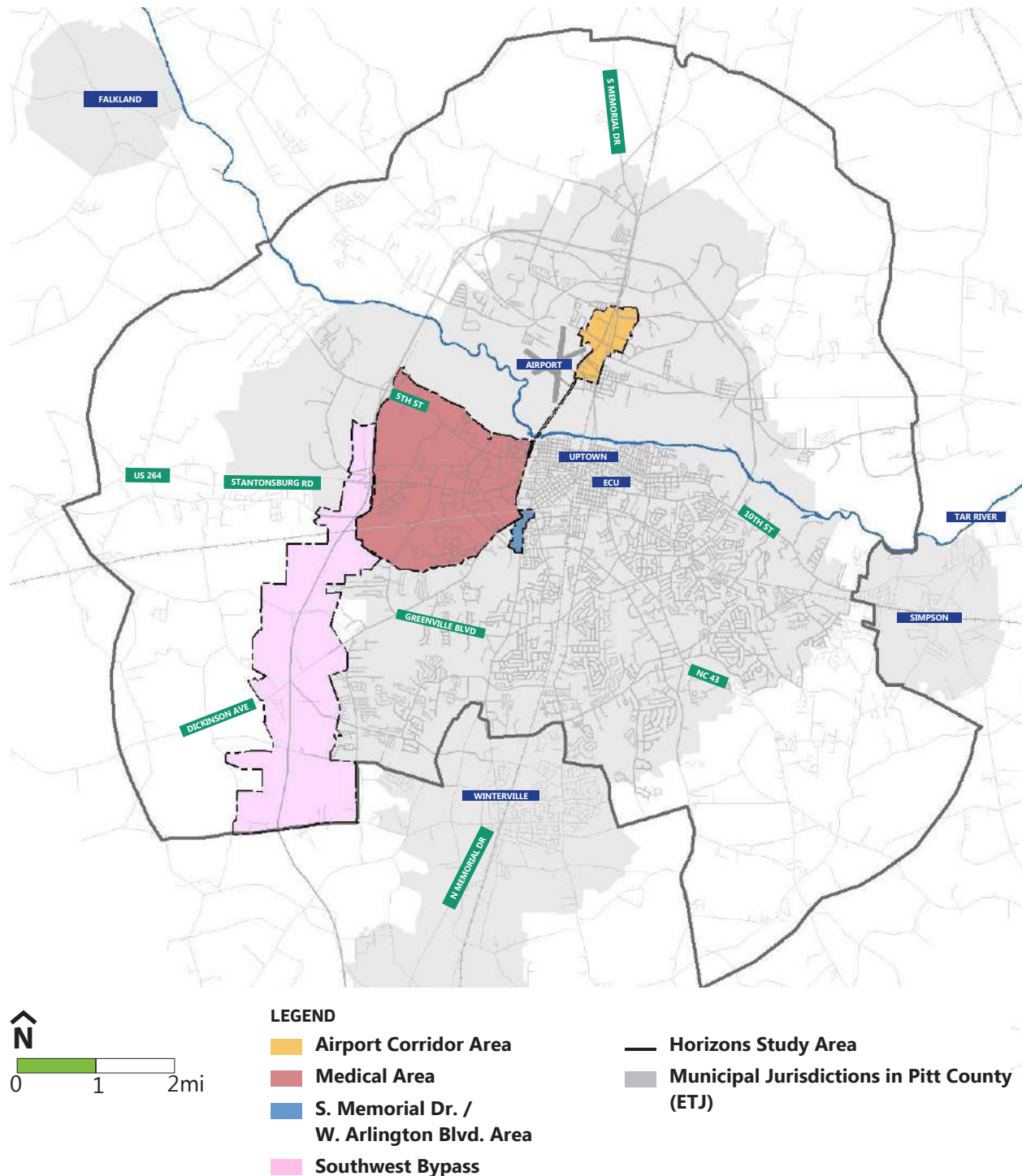
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SPECIAL AREA PLANS

The special area plans take a closer look at four areas of strategic importance to the city and offer recommendations that are consistent with the overall direction of the *Horizons 2026: Greenville's Community Plan*. The focus of the area plans is to provide additional guidance related to the desired land use and character.



SPECIAL AREA PLAN: AIRPORT CORRIDOR AREA

Once on the outskirts of the city, the area surrounding Pitt-Greenville Airport (PGV) is now an important gateway into Greenville from the north. Planning for development here is a balance between the airport, residential neighborhoods, industry and the Tar River floodway. This special area plan emphasizes these relationships, and provides strategies for the development of the area with special consideration for its role as a gateway into Greenville.

THE AREA TODAY: KEY FINDINGS

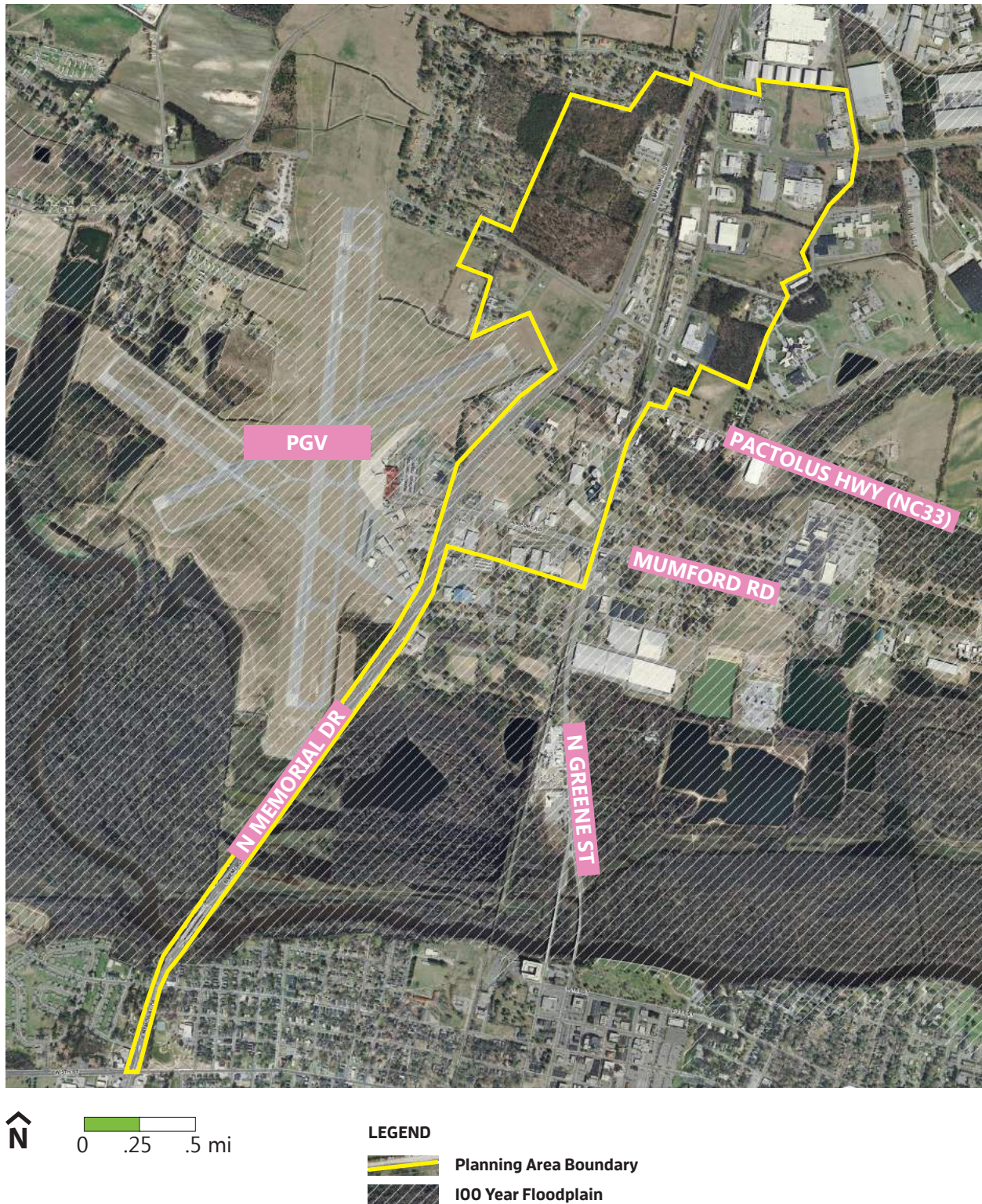
The following points summarize the findings of public and stakeholder input, review of past plans, and technical analysis.

Distinct segments. The Airport Corridor Area includes approximately 635 acres in the northern portion of Greenville following 2.8 miles of North Memorial Drive. It is bounded to the north by the intersection of North Greene Street and North Memorial Drive, to the south by the Tar River, to the west by the residential neighborhood at Hop Tyson Road and to the east by the Pitt County Office Park. South of Airport Road, the planning area narrows to focus exclusively on the North Memorial Drive right-of-way. Approximately 137 acres in the southern portion of the planning area is in the Tar River 100-year floodplain. Although defined by proximity to PGV, this corridor contains distinct segments. It passes through an industrial employment area, a mix of commercial uses along North Memorial Drive near the airport entrance, and an expanse of open space south of the airport entrance to the Tar River.

A gateway to Greenville. Both by air and by way of US-264 and US-13 (North Memorial Drive), this area serves as an important gateway to Greenville. Visitors and residents traveling from the north and from the airport experience this section of North Memorial Drive as their first impression of the city, before crossing the river into the denser characteristics of the Medical Area and the West Greenville neighborhoods. The character of the roadway and adjacent development is important to ensuring that those first impressions are positive.

Economic importance. The area's role as a gateway is part of its economic value. But beyond that, proximity to both PGV the Greenville Industrial Park make the area economic contributor to Greenville and the region. Both the airport and industrially-zoned land adjacent to the Airport Corridor Area are expected to experience growth in the future.

Existing Aerial



Nearby residential areas. While the area is primarily industrial, there are also existing residential neighborhoods immediately to the west of the planning area. Several of the residents voiced concerns about airport expansion and the gradual increase in flights from larger commercial aircraft. In anticipation of these concerns, the airport previously purchased several residential parcels near the runways. Other concerns from residents are the lack of nearby services or convenience retail.

New retail under development north of the area. On the west side of North Memorial Drive, just north of the planning area, the city has recently approved a significant commercial development that will be anchored by a Walmart store.

Floodplain and stream corridors. Flood-prone land is a significant constraint in northern Greenville. The 100-year floodplain of the Tar River extends just to the northern edge of the airport, including nearly one mile of currently developed frontage. Future development in these areas is possible, but is more restricted than in other parts of the city.

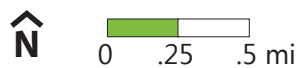
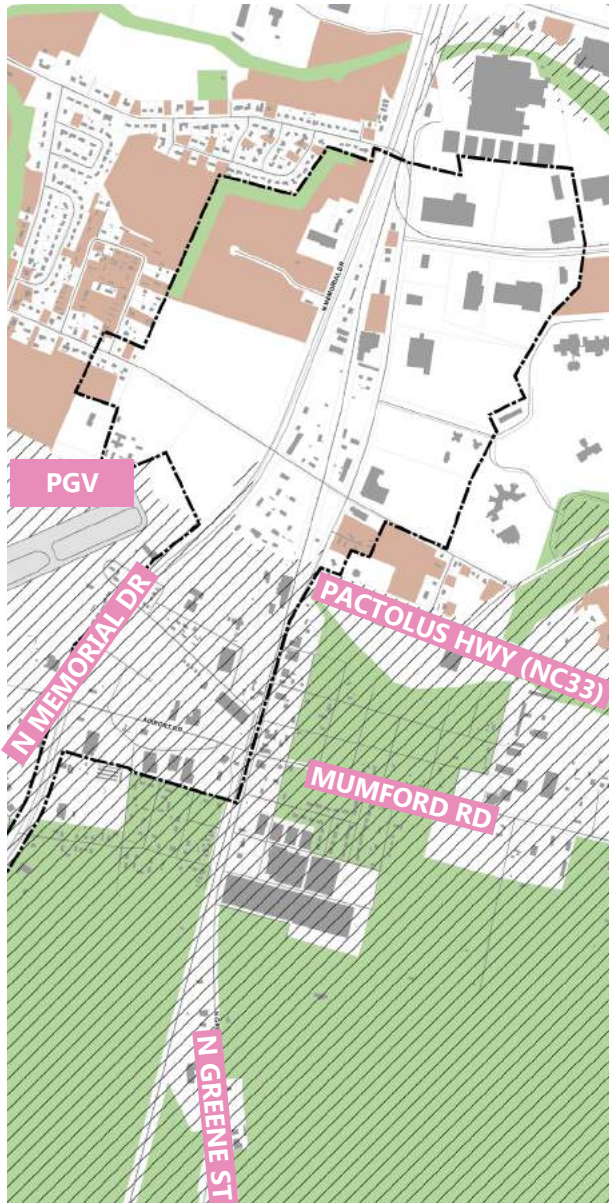
Greenway and trail planning. Greenville's *Greenways Master Plan* (2004) designates an extensive network of existing and future multi-use trails and urban greenways. Several greenway connections are planned or proposed in this area. One would follow the northern edge of the Tar River's 100-year floodplain east-west through the center of the Airport Corridor Area. Another connection north of the area would follow a stream corridor east-west through the Industrial Park.

Limited local connectivity. Reinforcing the patchwork character of the corridor today are the lack of planned development centers with internal circulation. This leads to auto-dependent development styles, e.g. forcing visitors to drive from one use to the next and not allowing uses to share parking lots. Limited internal circulation also increases curb cuts to North Memorial Drive, which decreases its daily vehicle capacity while also increasing conflict points—making the road both less pleasant and less safe to travel along.



The images above represent the existing character and development pattern along North Memorial Drive in the Airport Area. Inconsistent building placement and signage, lack of landscaping and frequent curb cuts are evident. South of the airport entrance has a scenic character as North Memorial Drive crosses over the Tar River floodplain.

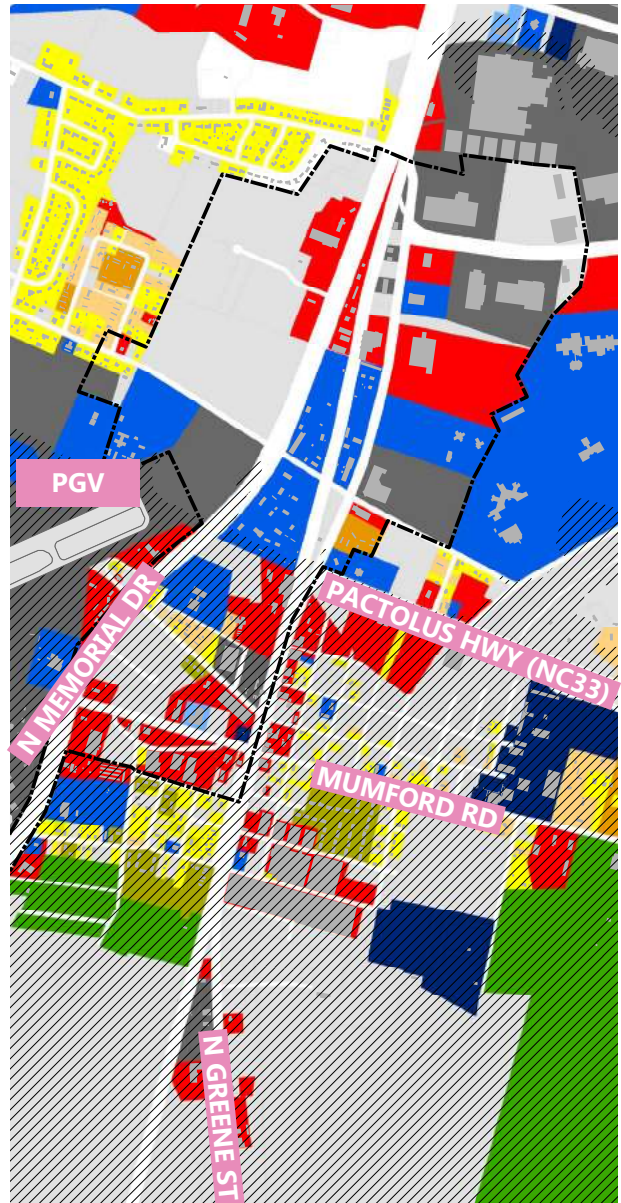
Developable Land



LEGEND

- Developable Land
- Existing Building
- Potential Conservation / Open Space
- 100 Year Floodplain
- Area Boundary

Existing Land Use



LEGEND

- Commercial
- Office
- Institutional
- Industrial
- Multi-Family
- Single Family
- Mobile Home
- Mobile Home Park
- Recreation
- Utility
- 100 Year Floodplain
- Vacant Land
- Area Boundary

THE AREA TOMORROW: OUR INTENT

As a gateway to Uptown Greenville and the Medical Area, the plan for the Airport Area will focus on design improvements to promote positive first impressions of the city and development that supports nearby businesses and residents.

This special area plan is intended to supplement the previously adopted plans for the area with strategic recommendations that are consistent with the overall direction of the Horizons 2026 Comprehensive Plan. The following statements describe the overall direction for the area and are depicted conceptually on the adjacent concept diagram. These statements are detailed on the following pages.

LAND USE AND DESIGN DIRECTION: OVERVIEW

1. Improve the character of development along North Memorial Drive.

The character of development along this corridor and streetscape elements will work together to create a strong gateway into Greenville. Development along the corridor will have consistent setbacks, signage and landscaping treatment along their frontage, with parking placed behind or to the side of structures.

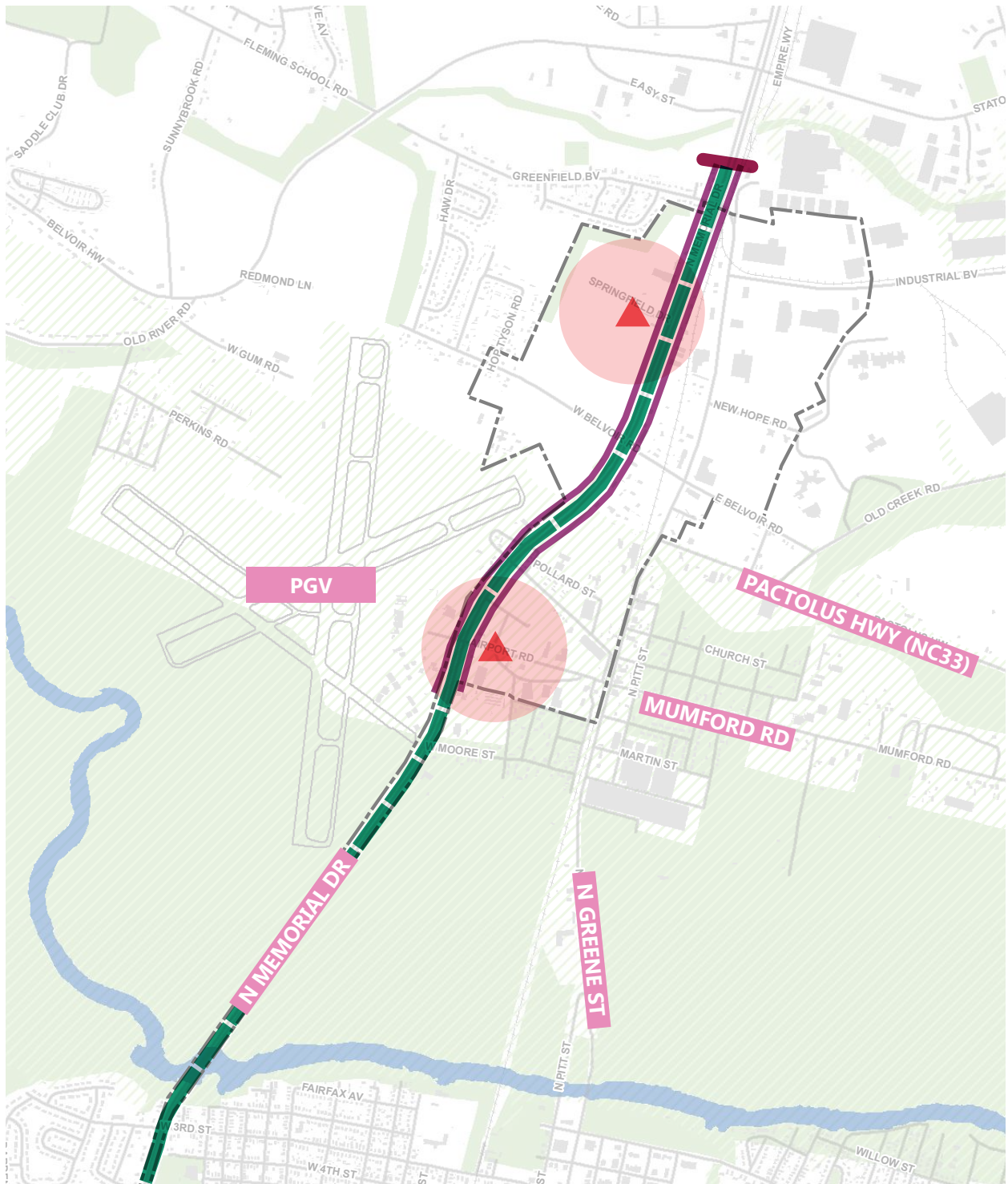
2. Install high-quality infrastructure features and landscaping within the right-of way of North Memorial Drive.

Within the right-of-way, streetscape elements will be added that may include lighting or landscaping improvements. A gateway structure such as a bridge or sign will be considered where the new bicycle path connection will cross North Memorial Drive.

3. Concentrate future commercial development into two compact nodes, strategically located to leverage the area's opportunities and serve its distinct segments.

Future development of resident and airport amenities, including commercial, multifamily residential and office uses, should occur in two compact development node areas. Internal vehicle and pedestrian circulation should be planned for these areas and focused to minimize curb cuts onto North Memorial Drive. The recommended placement of the two development nodes best leverages the disparate interests of the areas stakeholders: maximizing the airport's competitiveness, serving the needs of both long-time and future residents, increasing the economic development potential of the industrial use areas, and protecting the Tar River Floodway.

Concept Diagram



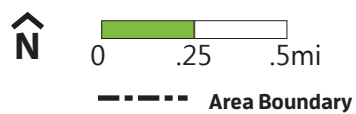
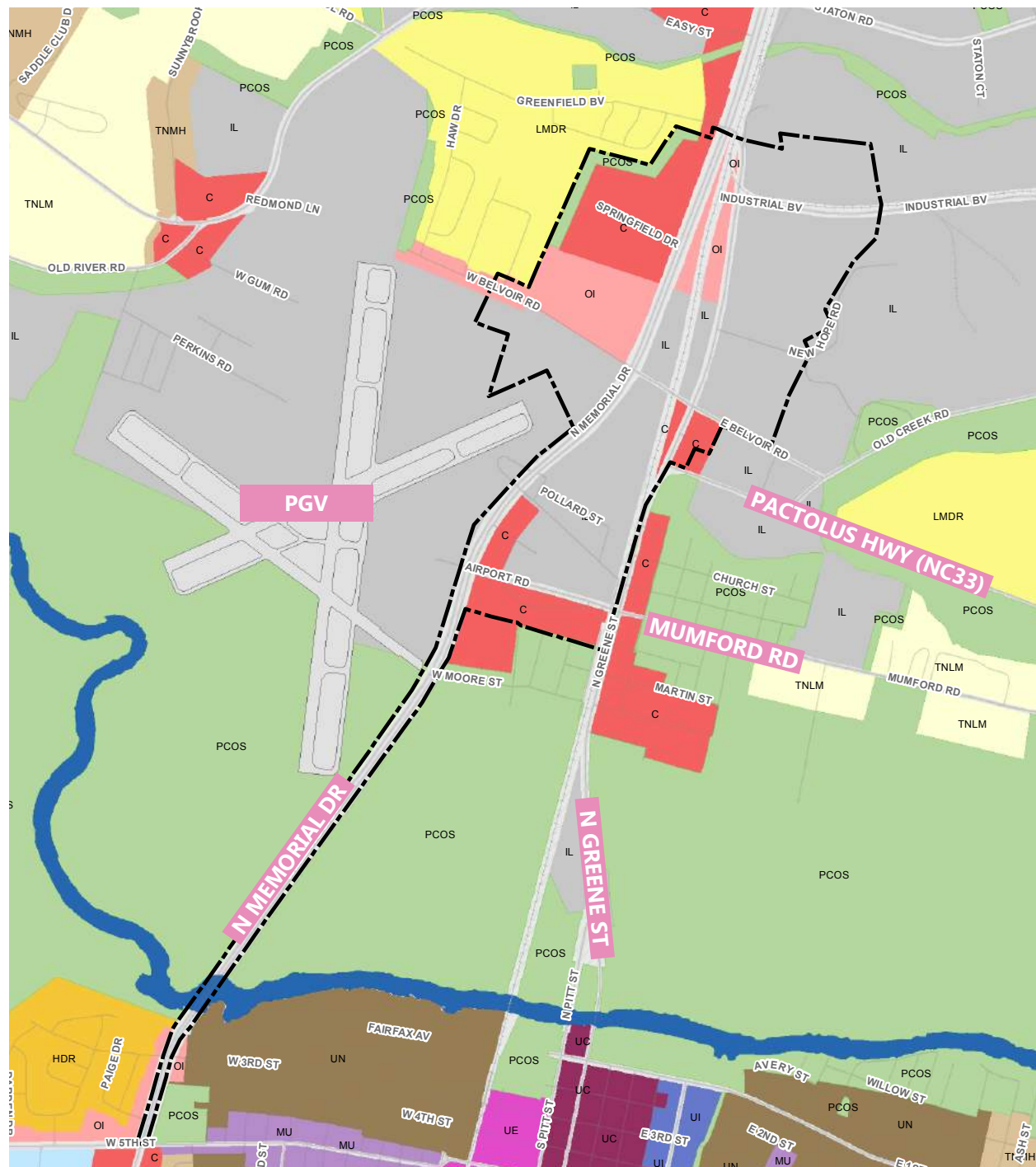
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LEGEND

- Potential gateway element
- Corridor improvements in right-of-way
- Development standards focus area (landscaping, signs, access)

- Development node
- Conservation / Open Space
- 100 Year Floodplain

Proposed Character Types



----- Area Boundary

LEGEND

- Mixed Use, High Intensity
- Mixed Use
- Commercial
- Office / Institutional
- Residential, High Density

- Residential, Low-Medium Density
- Traditional Neighborhood, Medium-High Density
- Potential Conservation / Open Space
- Industrial / Logistics

LAND USE AND DESIGN DIRECTION: DETAIL

1. Improve the character of development along Memorial Drive.

Design Standards. Implement more rigorous design standards that address the quality, height and placement of signs and landscaping requirements. Consistent design standards along the entire corridor to unify its appearance and help to create a gateway experience.

Setbacks. Align future buildings in a consistent pattern along North Memorial Drive. Industrial uses should have larger and consistent setbacks, while the two development nodes with a mixture of commercial and service uses will orient buildings closer to the street. Parking should generally be located behind, or to the side of buildings.

Access Management. Minimize the number and frequency of curb cuts directly onto North Memorial Drive to improve traffic flow, safety, and aesthetics. Access points should serve multiple development sites and buildings.

2. Install high-quality infrastructure features and landscaping within the right-of way of North Memorial Drive.

Gateway Feature. Incorporate a high-quality gateway feature in the form of a bridge or other well-landscaped Greenville sign at the site where a planned bikeway would cross the corridor at the northern end of the study area. Using the bikeway crossing as a gateway marker reinforces Greenville's identity as a place that values active recreation and transportation.

Streetscape Improvements. Undertake streetscape improvements including landscaping, lighting and branding (i.e. banners on light posts), and pole-mounted traffic lights should be implemented along the corridor and through the development conservation area.

Stormwater Management. Utilize stormwater best management practices in public and privately implemented landscaping improvements in the area both for aesthetics and to protect the quality of the Tar River waterway. Study the removal of city code barriers to low impact development.



An example of a high-quality and iconic gateway feature



Functional and visually interesting streetscape elements.



Providing landscaped medians can offer stormwater management as well as an opportunity for aesthetic improvements to a vehicular corridor.



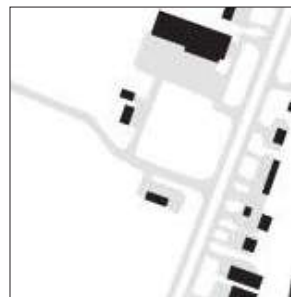
3. Cluster future development into two compact nodes, strategically located to leverage the area's opportunities and serve its distinct segments.

Locally Serving Commercial. Within the northern node (at the intersection of North Memorial Drive and Springfield Drive) emphasize commercial uses near the corridor that would primarily serve nearby workers or visitors. Within the site to the west, emphasize non-commercial uses appropriate for proximity to PGV such as hotels.

Airport Entry Development. Within the southern node at the intersection of North Memorial Drive and Airport Road, establish a gateway intersection across from the airport entrance. Emphasize locally-serving commercial uses at the most visible locations while further to the east, emphasize airport support uses and logistics. Most of this location is within flood prone land which involves hazard mitigation such as special site and building design requirements including ground-floor elevation or flood-proofing.

Guide the form and the mix of uses of new development. Setbacks along North Memorial Drive may be greater than those along other minor streets, but buildings should be oriented near the street with parking positioned to the side or rear of buildings. Landscaping should be emphasized, as well as, consistent sign treatment and lighting within sites. Internal vehicle circulation should be planned and opportunities for shared access points should be encouraged to minimize the number of curb cuts on North Memorial Drive. Sites should be designed to be internally walkable (park-once design) with designated walkways for pedestrians linking buildings and parking areas. Likewise with greenway connections planned in the area, new development should consider the needs of bike users.

North Memorial Drive and Springfield Drive

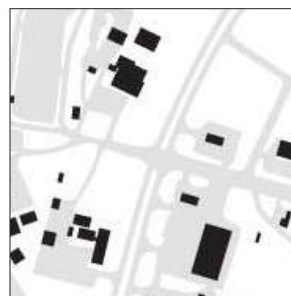


Existing

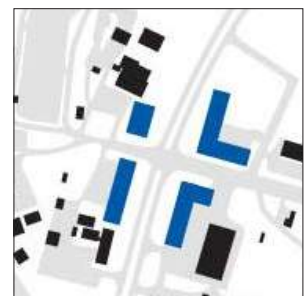


Proposed

North Memorial Drive and Airport Road



Existing



Proposed

PRECEDENT
GAHANNA, OHIO

US-62, the gateway corridor into Gahanna, Ohio, has very similar features to North Memorial Drive in the Airport Area. This corridor transitions over the course of one mile from a six-lane Interstate Highway (I-670), to a major 4-lane thoroughfare that crosses the Big Walnut Creek before entering the city's downtown.

Differing conditions along the corridor are unified by the median treatment, branding signs and lighting.

Development adjacent to US-62, including residential and industrial uses (such as a mulch distributor) are screened from view with landscaping. Commercial development is clustered at nodes and utilizes internal circulation and shared access points rather than direct access to the corridor.



STREETSCAPE RENDERING



10b

Appendix

Special Area Plan: Medical Area

CITY COUNCIL PUBLIC HEARING DOCUMENT
AUGUST 23, 2016



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SPECIAL AREA PLAN: MEDICAL AREA

Anchored by Vidant Medical Center and East Carolina University's Health Sciences Campus, the medical district and surrounding area have long been a focus for planning in Greenville. This special area plan builds on those past plans and offers strategies to guide the area's growth and enhance its economic viability.

THE AREA TODAY: KEY FINDINGS

The following points summarize the findings of public and stakeholder input, review of past plans, and technical analysis.

A regional economic engine: The Medical Area includes approximately 3,700 acres in the western portion of Greenville. It is bounded to the north by the Tar River, to the south by Greens Mill Run, to the west by the US-264 Bypass and to the east by South Memorial Drive. At the center of the area is Vidant Medical Center and ECU's Health Sciences Campus, which are distinct but adjacent campuses. These institutions and the related businesses in the area compose an employment center of unparalleled importance for the region.

A gateway to Greenville: While the area is a destination on its own, it also serves as a gateway to Uptown Greenville from the west along US-264.

A legacy of planning: There have been several land use plans for the Medical Area which have guided this plan. Most significant are the *Medical District and Environs Land Use Plan (1993)*, which provided the vision underlying the city's planning for the area, and the *Medical District Land Use Plan Update (2007)*, which recommended specific changes to the city's future land use map based on conditions at the time.

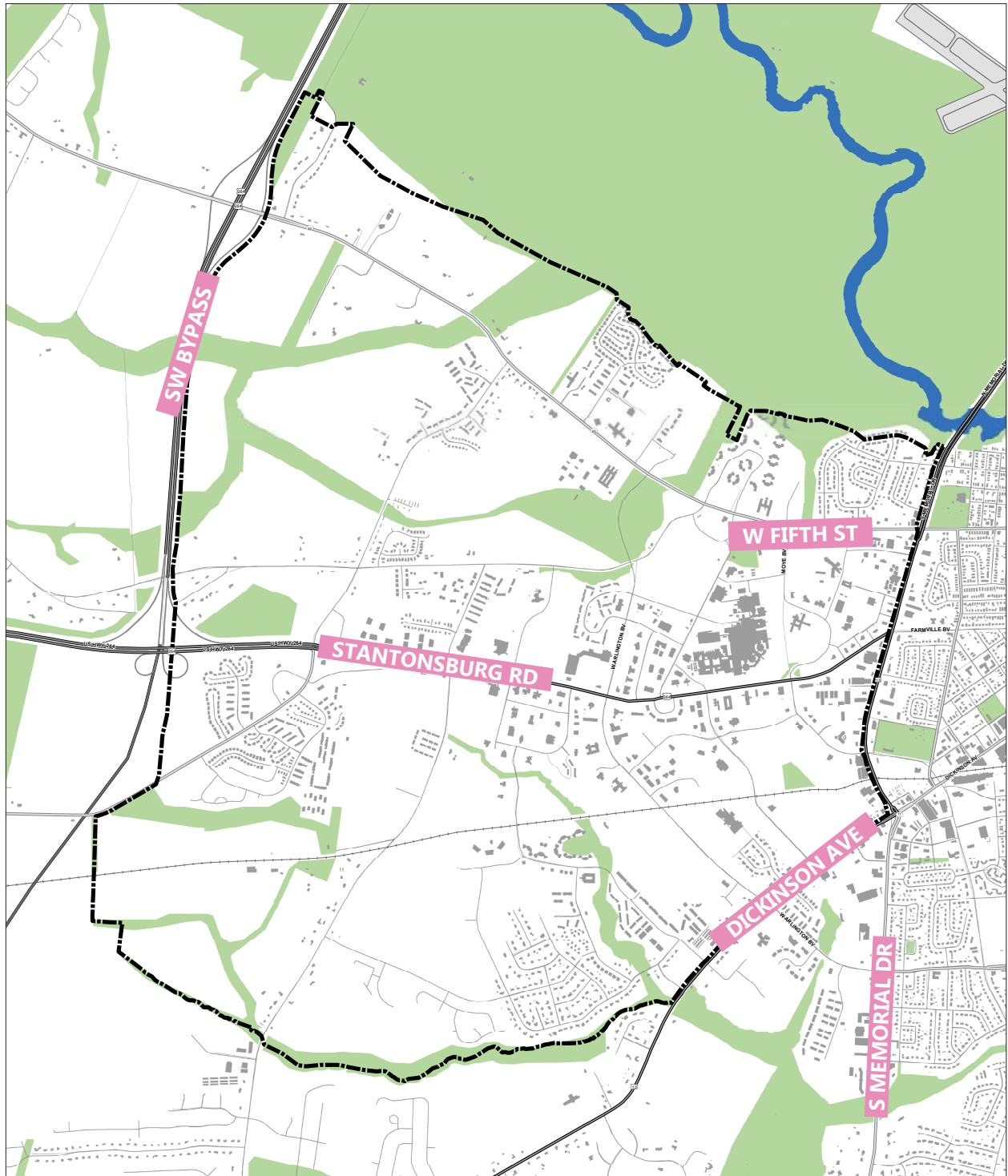
Changing Market Conditions: The Medical Area has long been a successful economic driver for the city and has been well-served by past plans. Those plans have generally tended to focus on promoting the core medical and institutional focus, creating a district that, like many once successful suburban office parks, is primarily single-use and primarily accessible by car, with little emphasis on integrating work, services, and housing. In the last decade, and especially since the 2008-09 recession, a new paradigm has emerged. Increasingly businesses are finding that their work forces, particularly those highly skilled workers, prefer to be in places that integrate work, living, daily services, recreation, and entertainment. In response to this national trend, highly competitive employment districts within North Carolina and across the country are adapting to become more compact, walkable, transit-accessible, and mixed-use.

KEY TERMS IN THIS SECTION

Medical Area. The planning area for this special area plan.

Medical District. The area generally recognized as Vidant Medical Center, ECU's Health Sciences Campus and surrounding medical office development.

Existing Context Map

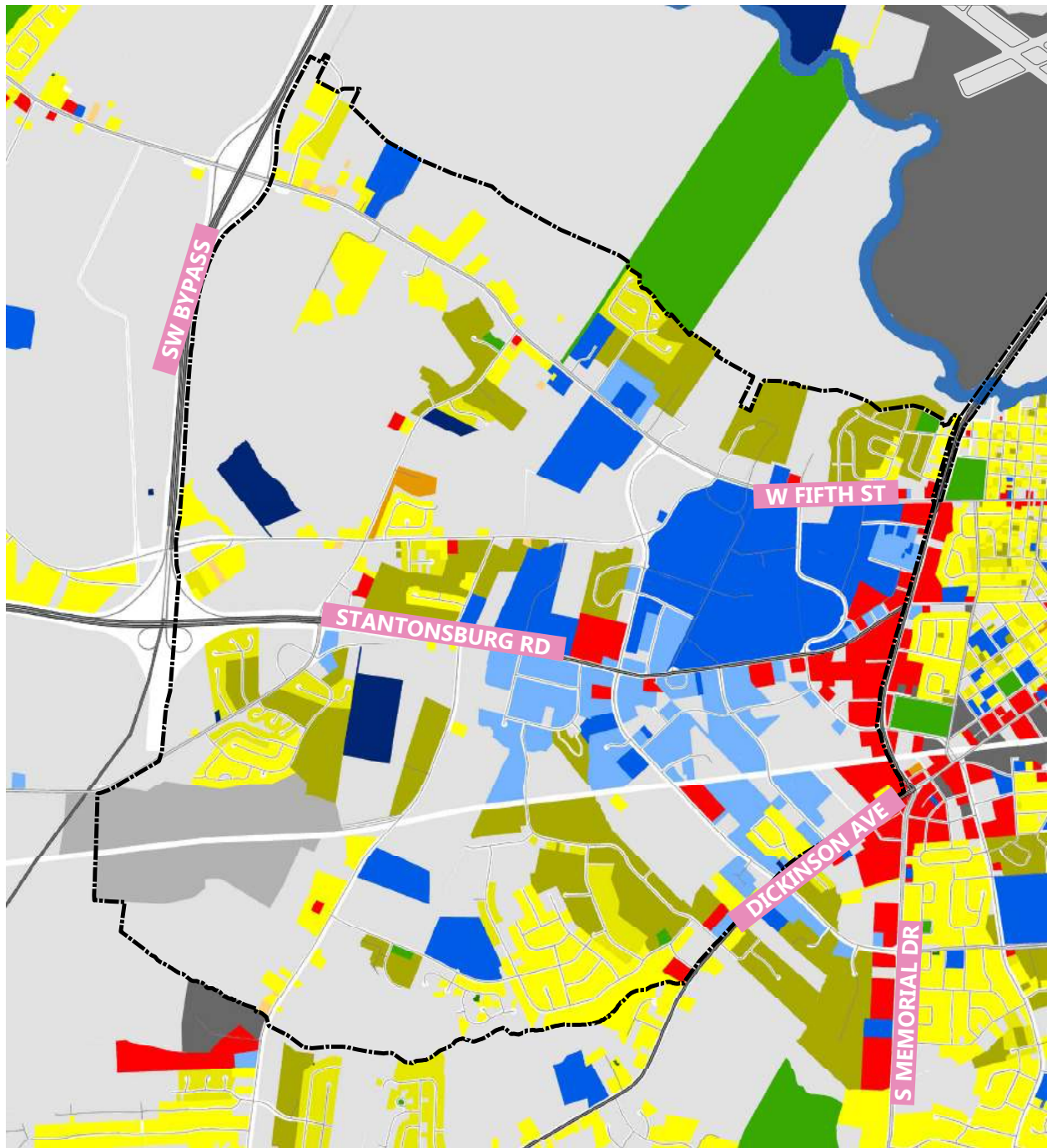


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LEGEND

- Area Boundary
- Existing Building
- Potential Conservation / Open Space

Existing Land Use



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--- Area Boundary

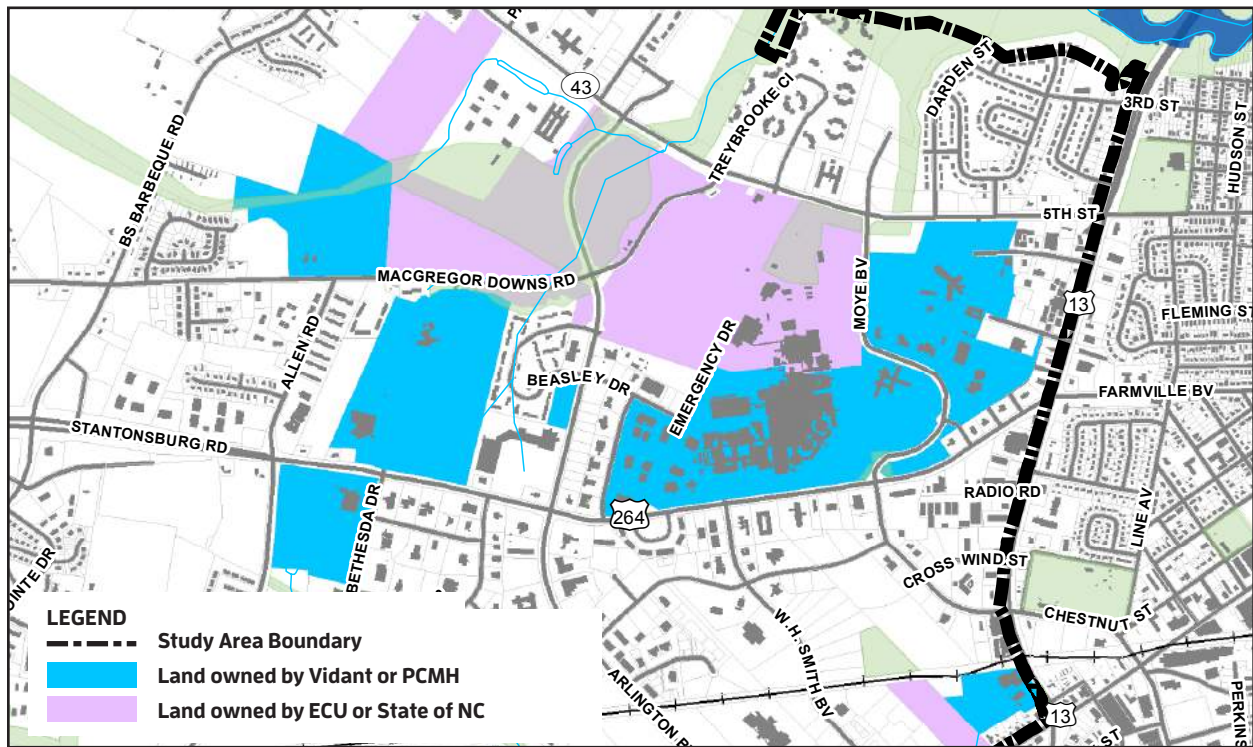
LEGEND

Commercial
Office
Institutional
Industrial

Multi-Family
Mobile Home Park
Single Family
Recreation

Cemetery
Utility
Landfill
Vacant Land

Institutional Land Owners



Institutional influence: The two largest land owners in the area are Pitt County and the State of North Carolina. This land is occupied by the two largest institutions and largest employers in the region. While this land is not subject to property taxation, these institutions have a positive effect on the current value and future potential of the surrounding area.

ECU campus expansion plans: A *Campus Within Context, A Comprehensive Master Plan for East Carolina University (2012)* outlines a framework for future development of the Health Sciences Campus. The area is intended to accommodate growth in academic, medical services, special uses, student life, and offer supportive services (such as dining). The arrangement of these uses maximizes proximity to Vidant Medical Center with new buildings and parking structures replacing many existing surface parking areas. A Millennial Campus is designated west of MacGregor Downs Road to facilitate partnerships between ECU and private companies working on biomedical research.



Illustrative master plan for ECU's Health Sciences Campus shows parking lots replaced by new buildings and parking structures.

Limited amenities proximate to employees:

While this area has the largest concentration of employment in the region, there are relatively few nearby amenities for workers and visitors. Stakeholders expressed a desire for more dining options, small-scale retail services, as well as more hotels to serve the many visitors to the Vidant Medical Center and the ECU campus. These stakeholders stressed that convenient access to these amenities is important – access that would not require a car trip. There is one existing commercial node within the Medical Area today, located at Stantonsburg Road and Arlington Boulevard, and a few hotels and restaurants elsewhere in the area. The perception that the Medical Area is underserved by supporting uses is rooted in the form and pattern of development. The large land area covered by the medical core, the road network of high-capacity thoroughfares and long blocks, and the fact that buildings are set back from the street behind parking lots, all work to discourage walking in the area despite the presence of sidewalks.

Limited accommodation for alternative transportation (walking, biking, transit):

Recent studies have shown a clear preference among today's largest demographics for places that offer the ability to walk, bike, and access transportation modes other than personal vehicles. Like much of Greenville beyond Uptown, the facilities for such transportation alternatives are very limited in the Medical Area. The sidewalk network is incomplete, with many developments (including residential) lacking sidewalks. Where roads do have sidewalks, they are often located very close to traffic lanes, which makes for an uncomfortable pedestrian experience. Roads also lack dedicated bike lanes or designated routes, and most developments do not include facilities for bike parking. In spite of these unfavorable conditions, pedestrians and cyclists can regularly be seen in the area. The area is also served by several bus transit systems including the City's GREAT bus system, ECU's Transit, and Vidant's NextBus. Stakeholders expressed concern that these systems are duplicative and thought they could be better coordinated and easier for people to understand.



Stantonsburg Road at WH Smith Boulevard, looking east



Stantonsburg Road east of Moyer Boulevard, looking east

Treybrook Circle looking north from West Fifth Street



NC 43 (West Fifth Street) looking west



WH Smith Boulevard looking north toward Stantonsburg Road



THE AREA TOMORROW: OUR INTENT

As a vital economic engine for the city, the plan for the Medical Area will reinforce the growth of medical and related institutional uses while strengthening the area's overall competitiveness by adapting to changing market conditions and strengthening the built environment.

This special area plan is intended to supplement the previously adopted plans for the area with strategic recommendations that are consistent with the overall direction of the Horizons 2026 Comprehensive Plan. The following statements describe the overall direction for the area and are depicted conceptually on the adjacent concept diagram map. These statements are detailed on the following pages.

LAND USE AND DESIGN DIRECTION: OVERVIEW

1. Within the medical core: Maintain the primacy of medical uses while encouraging more efficient and intense development.

Growth of medical, institutional and related office uses will be encouraged to occur primarily through infill development and redevelopment on existing sites utilizing multi-story buildings and minimizing surface parking in favor of parking structures or shared off-site shuttle lots. While medical is the primary use, it should not preclude the development of limited commercial services should they enhance the core.

2. Provide additional amenities for visitors and employees such as locally-serving retail, accommodation, restaurants and services.

While the area known as Medical Transition that surrounds the Medical Core will emphasize uses that benefit from proximity to the major institutions (office, research and medical), integrating a greater mix of uses is key to district's long-term health.

3. Encourage the development of mixed-use activity centers at nodes dispersed through the area.

At key nodes, mixed-use centers will integrate places to live, work, and shop in a walkable configuration. Typical of these activity centers is a vertical mixing of uses where multi-story buildings include office or residential above ground-floor commercial space.

4. Encourage development patterns that better balance the needs of pedestrians, bicycles, and vehicular traffic.

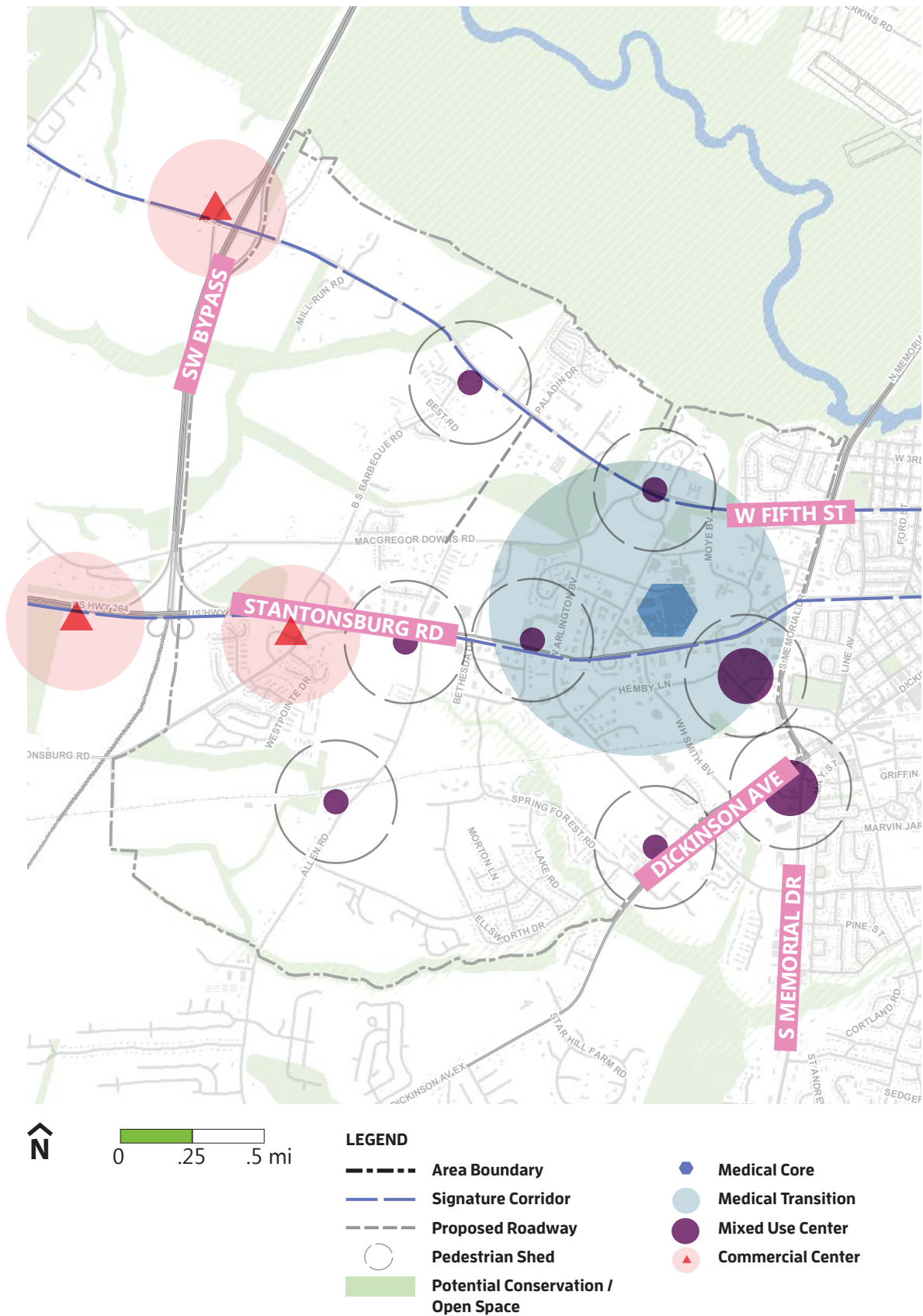
Future development throughout the area will take a more compact form, with multi-story buildings placed nearer to the street and clustered with shared parking located between or behind buildings. Neighborhoods should be connected to each other and to activity centers through multiple street connections with sidewalks.

OTHER RECOMMENDATIONS

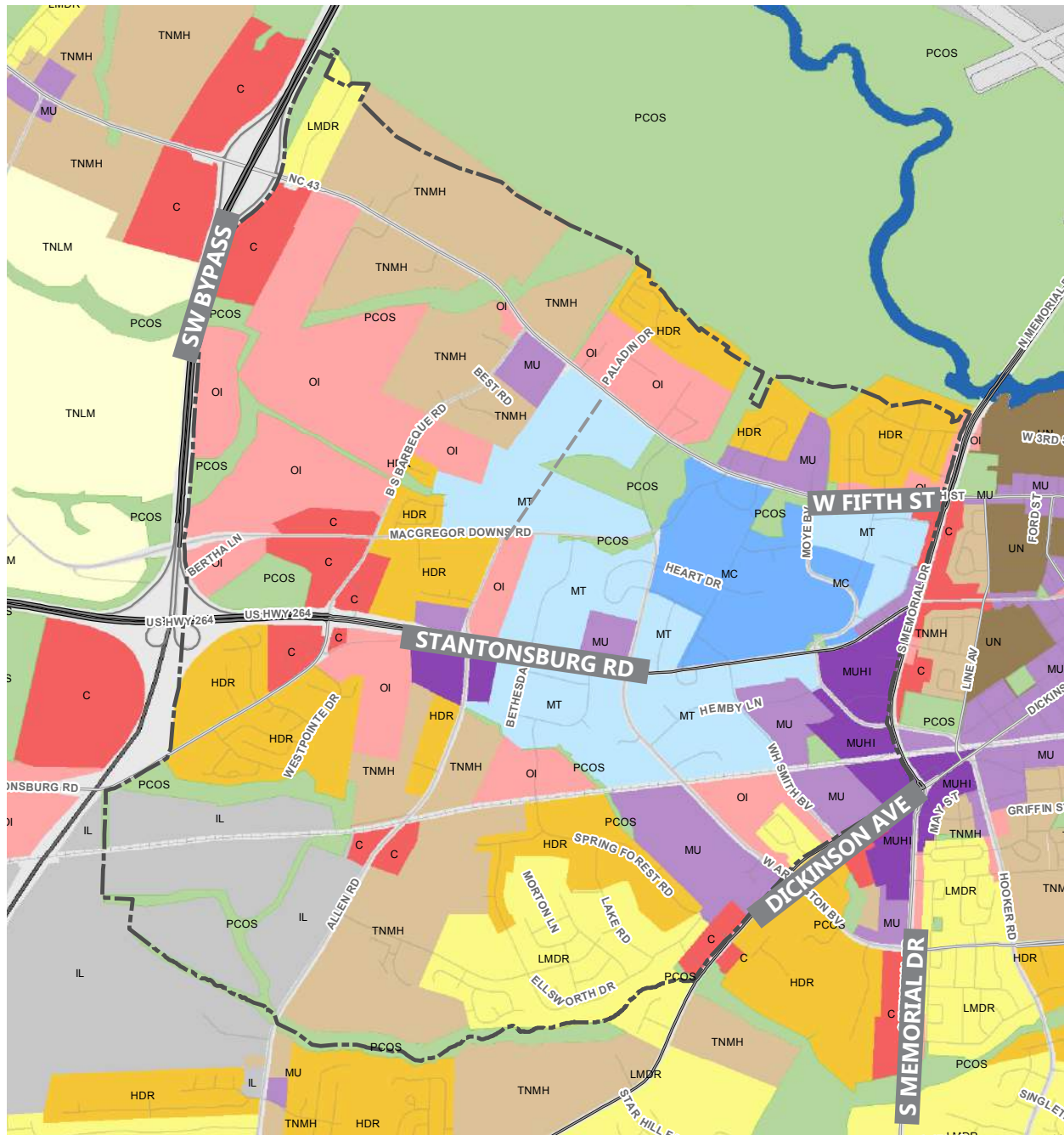
5. Improve transit service frequency, accessibility, and connectivity with other centers within Greenville.

6. Leverage the collaborative efforts between Vidant Medical Center, ECU, and PCC to develop a medical research park or innovation district within the area.

Concept Diagram



Proposed Character Types



LEGEND

- Mixed Use Center, High Intensity
- Mixed Use Center
- Commercial Corridor
- Office / Institutional Corridor
- Residential, High Density
- Area Boundary
- Proposed Roadway

- Residential, Low-Medium Density
- Traditional Neighborhood, Medium High Density
- Uptown Neighborhood
- Medical Core
- Medical Transition
- Potential Conservation / Open Space
- Industrial / Logistics

LAND USE AND DESIGN RECOMMENDATIONS: DETAILS

1. Within the medical core, maintain the primacy of medical uses while encouraging more efficient and intense development.

Increased Density: Encourage greater utilization of land within the medical core by supporting a combination of an increase in building height, reduced building and parking setbacks, and flexible parking requirements.

Structured Parking. Encourage surface parking to be located primarily at the outer edges of the Medical Area while accommodating parking within the core primarily through structures. Encourage parking needs to be met through off-site shuttle lots.

Pedestrian Connections: Encourage pedestrian connections and bike facilities within the Core. ECU and Vidant Medical Center should coordinate development to ensure that pedestrian infrastructure within their campuses is well connected.

2. Provide additional amenities for visitors and employees such as locally-serving retail, accommodation, restaurants and services.

Support Uses: Encourage more support uses proximate to the medical core including the “medical transition” character area. Such uses should be secondary to the medical office and institutional emphasis of the area.

3. Encourage the development of mixed-use activity centers of various scales at key nodes dispersed throughout the area.

Integrated Places: Create mixed-use centers as indicated on the Future Land Use and Character map each could contain places to live, work, and shop integrated in a walkable pattern. These centers may include an integrated mix of building types and uses (residential, office, and retail etc.) and could include vertically mixed buildings that generally include commercial on the ground floor and office space or residential on upper floors.

Proximate Pedestrian Infrastructure: Prioritize areas within one-quarter to one-half mile from each mixed use center for initial improvements to pedestrian infrastructure (sidewalks, lighting, crossings) to encourage walking.

PRECEDENT:
MIXED-USE DEVELOPMENT ADJACENT TO A MEDICAL CAMPUS

Erwin Road, a major corridor around Duke University Medical Center has been undergoing redevelopment in recent years in response to changing market conditions. The new development offers a range of mixed-use buildings. The new development illustrates the potential for new types of uses and development patterns near Greenville's Medical Core.

Erwin Terrace offers office space above ground-floor commercial. There is a generous setback (40 feet) from Erwin Road, which is used for a prominent landscape feature and outdoor dining. Parking is accommodated in a surface lot behind the buildings.



Trinity Commons offers residential apartments above ground-floor retail space. Parking is accommodated in a centrally located garage which is screened by retail liner buildings.



4. Improve connectivity and safety for pedestrian, bicycle and vehicular traffic.

Street Pattern. Improve connectivity by developing a more connected grid-like street pattern throughout the area, ensuring that adjacent development sites are connected through shared vehicular and pedestrian access, and designing streets to balance the needs of various users.

Connections. Make multi-use connections to the previously proposed greenways. This will provide a recreational amenity for area residents, as well as, offering an alternative mode of commuter transportation.

Complete Streets. Design new roadways as complete streets with street parking and pedestrian crosswalks. These measures and others will lend towards a slower traffic pattern, promoting walkability especially in the medical campus core.

Road Diet. Implement a “road diet” on portions of Stantonsburg Road between Arlington Boulevard and South Memorial Drive that could include narrowing traffic lanes, wider sidewalks, crosswalks, pedestrian refuge islands, landscaping, or dedicated bike lanes. Numerous studies have indicated that streetscape improvements that balance the needs of all users strongly correlate to decreases in accidents and fatalities. See Chapter 2: Enhancing Mobility for further information on this topic.

Sidewalks. Add sidewalks in the medical transition areas that connect to the medical campus and allow for safer routes.

An example of an arterial roadway after a “road diet” and streetscape improvements such as wide sidewalks, crosswalks, pedestrian islands, and access management.



Central Ohio Greenways offer trails intended for recreation and commuting covering over 125 miles throughout the region.



Midtown Greenway in Minneapolis, Minnesota utilizes an existing rail bed to connect population and employment centers.



The Indianapolis Cultural Trail seamlessly connects neighborhoods, cultural districts and entertainment amenities while serving as the downtown hub for central Indiana’s vast greenway system.



5. Improve transit service frequency, accessibility, and connectivity with other centers within Greenville.

Transit Service. Expand and coordinate existing transit service to connect activity centers within the Medical Area with other destinations throughout Greenville. With three existing bus systems serving the area, there is likely opportunity to better coordinate the services or provide potential users with information that will make using the systems easier. These systems currently utilize GPS technology to provide on-demand schedule updates and bus locations for riders. Addressing perceptions about the existing transit system may involve marketing.

6. Leverage the collaborative efforts between Vidant Medical Center, ECU, and PCC to develop a medical research park or innovation district within the area.

Medical Research Park. The idea for a medical research park has been recommended in past plans, most recently in the city's 2013 *Economic Development Strategy*. Such a development would give the Greenville much needed product for pharmaceutical and medical products manufacturing, and related research in and near a research and healthcare environment.

Partners. The City should engage private and public partners to assess the feasibility and location of a research park or more broadly defined innovation district within the Medical Area.

STREETSCAPE RENDERING



10c

Appendix

Special Area Plan: S. Memorial Drive / W. Arlington Blvd. Area

CITY COUNCIL PUBLIC HEARING DOCUMENT
AUGUST 23, 2016



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SPECIAL AREA PLAN: SOUTH MEMORIAL DRIVE / WEST ARLINGTON BOULEVARD AREA

South Memorial Drive, between West Arlington Boulevard and the railroad tracks, contains a wide range of uses from industrial to small lot single-family residential. This special area plan aims to expand upon the diversity of uses to provide more opportunities along the corridor. Strategies will be presented to connect with surrounding communities and provide a sense of place to South Memorial Drive.

THE AREA TODAY: CONTEXT

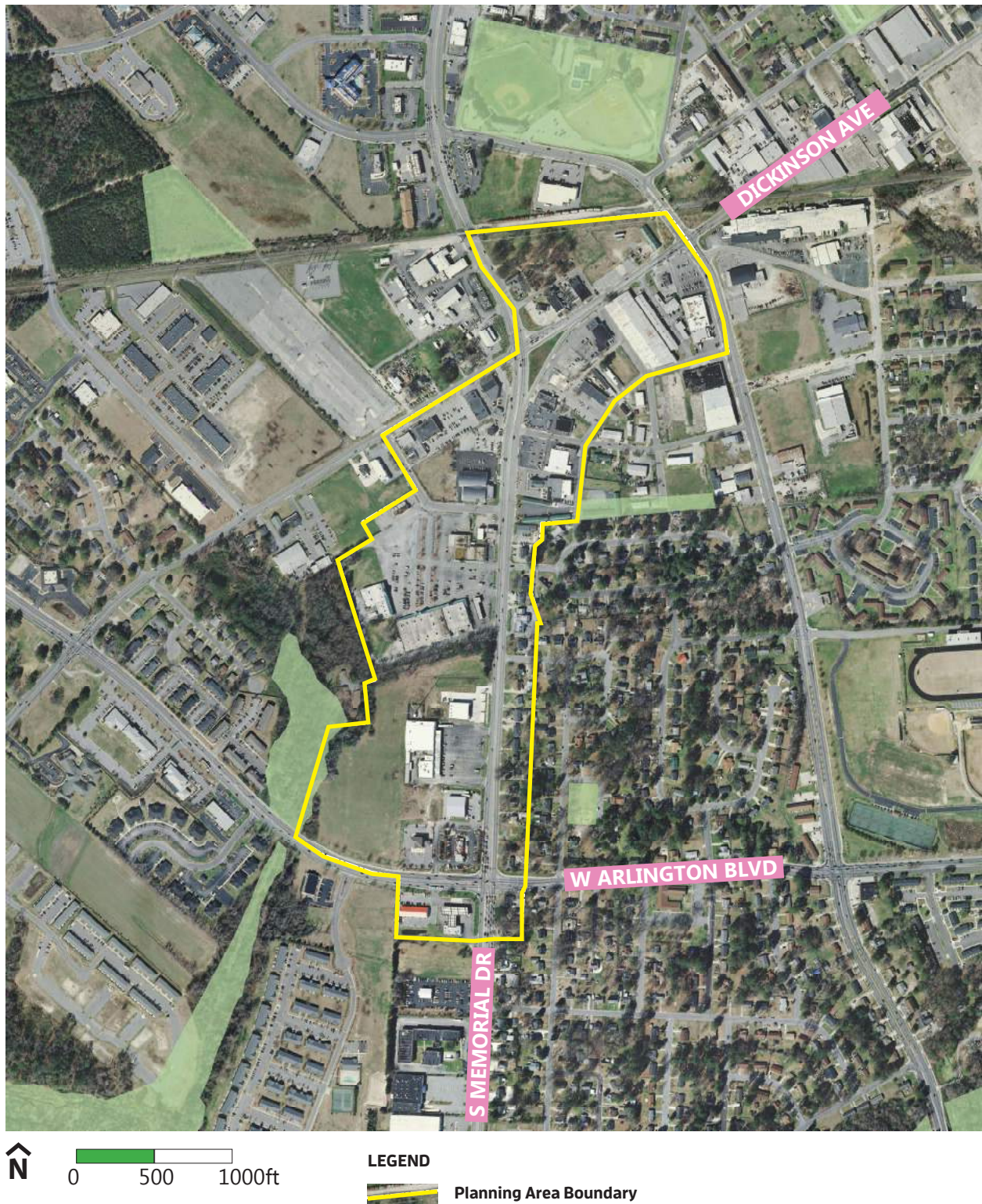
A well-traveled corridor. The planning area (South Memorial Drive and West Arlington Boulevard Area) includes roughly 82 acres and is located just over a mile southwest of Greenville's Uptown core. There are several major arterial roads converging in this portion of town including; Arlington Boulevard, Hooker Road, and Dickinson Avenue. Arlington Boulevard being the most traveled with an average of 30,000 vehicles per day using one of the few east-west connections in the city. Being strategic about what happens along this well-traveled portion of town will be important for the growth of Greenville and offer an opportunity to connect with the several residential neighborhoods located on these roadways.

Underutilized land use pattern. Most of the land in the area has existing development, but many of the parcels are underutilized or underperforming, with several buildings that appear to be vacant.

Abrupt transition in land use and pattern. South Memorial Drive currently draws a clear division between the neighborhoods of Carolina Heights, Greenbrier, Hillsdale and Tucker Circle to the east and the commercial establishments on the west side of the road. Residential lots on the east side of South Memorial Drive present a development challenge due to their relatively shallow depth of 140 feet.



Existing Aerial



Limited street network. Driving is required to travel from one parcel to the next as north-south connectivity is directed on to South Memorial Drive. A majority of the commercial facilities feature large surface parking lots fronting the roadway with structures set back. This auto-centric layout is a mismatch to the single-family residential homes with individual curb cuts on the opposite side of the street. In a similar fashion, as the neighborhoods end to the north, the setbacks again increase with the commercial and industrial developments having a vast amount of impervious surface per parcel.

Absence of pedestrian infrastructure.

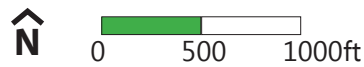
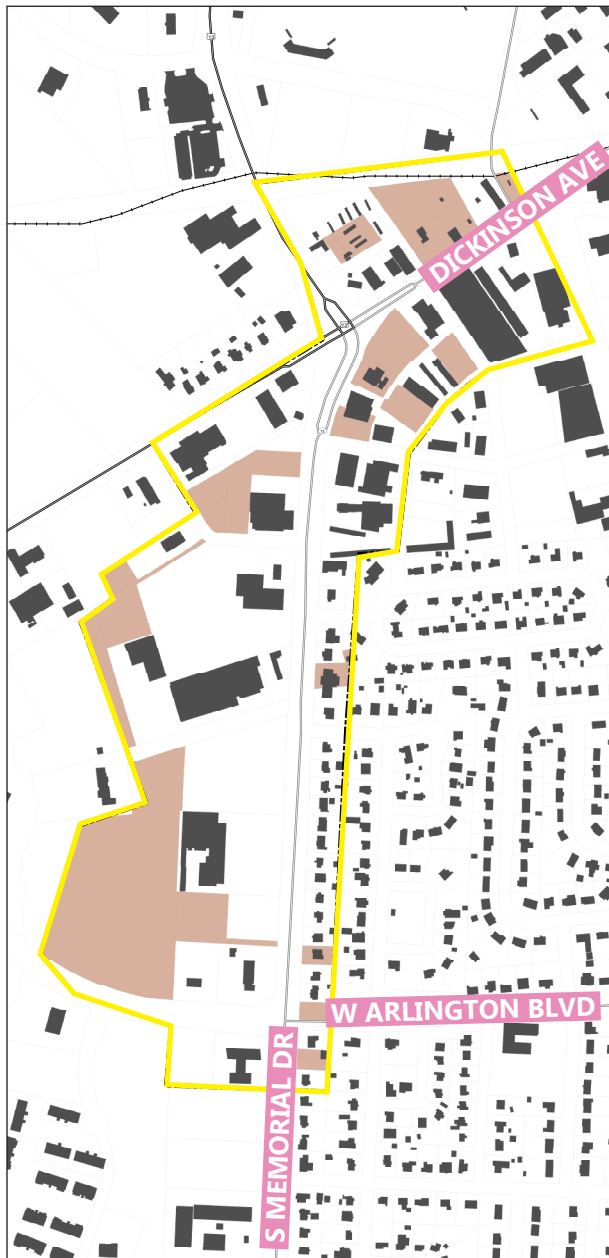
Only one of the roughly 100 parcels has a sidewalk. The lone parcel's pedestrian pathway does not connect to anything. Providing sidewalks and connections to the previously proposed city greenways will increase pedestrian interaction for both the area neighborhoods and local businesses. The wide existing thoroughfares are perceived unsafe for crossing and discourage walking.

Large lot sizes. Many of the parcels outside of residential land use feature lot sizes over one acre. With the largest being nearly nine acres. The large lots include a large percentage of surface parking with buildings typically sitting away from South Memorial Drive.

Road safety. Current roadway conditions in the area are prone to accidents of both vehicular and pedestrian nature. Wide roadways with high speed design standards have inherently increased traffic. The excessive amount of curb cuts along the corridor create more entry points to South Memorial Drive, as well.



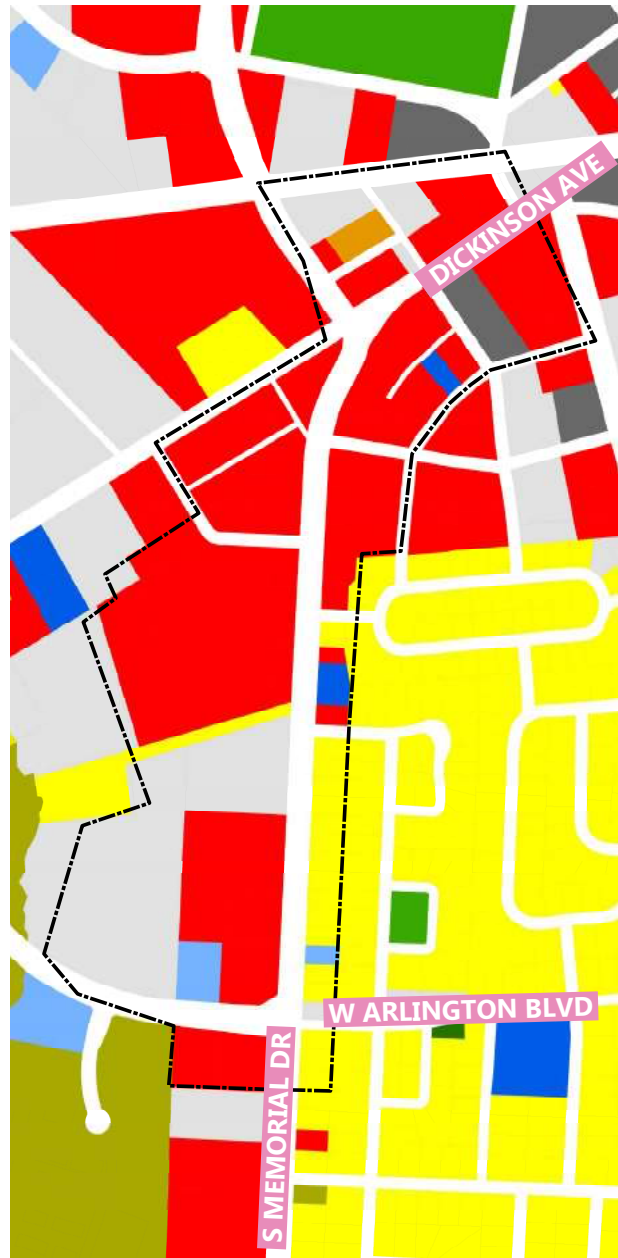
Developable Land



LEGEND

- Developable Land
- Existing Building
- Area Boundary

Existing Land Use



LEGEND

- Commercial
- Office
- Institutional
- Industrial
- Multi-Family
- Single Family
- Recreation
- Cemetery
- Vacant Land
- Area Boundary

THE AREA TOMORROW: OUR INTENT

As a major crossroads linking the Medical Area with Uptown Greenville, the South Memorial Drive / West Arlington Boulevard area plan envisions more intense redevelopment with a mix of uses in a more walkable environment and serves as a demonstration of the potential for other similar areas within the city.

The following statements describe the overall direction for the area and are depicted conceptually on the adjacent concept diagram. These statements are detailed on the following pages.

LAND USE AND DESIGN RECOMMENDATIONS: OVERVIEW

1. Encourage mixed-use development at increased intensities.

Future development within the planning area should aim towards a higher density with a vertical mixing of uses. Proposed buildings should relate to the street with parking shared between facilities. Focus will be placed on the establishment of street corners and placing parking interior or behind structures. This will afford pedestrians the right-of-way and promote interaction within the community.

2. Improve pedestrian and vehicular safety.

Proposed buildings should relate to the street with parking shared between facilities. Adding medians along South Memorial Drive will allow pedestrians to more safely cross streets, connecting future development with the residential communities to the east. Sidewalks and non-automotive corridors throughout proposed development will allow for safe travel not currently afforded.

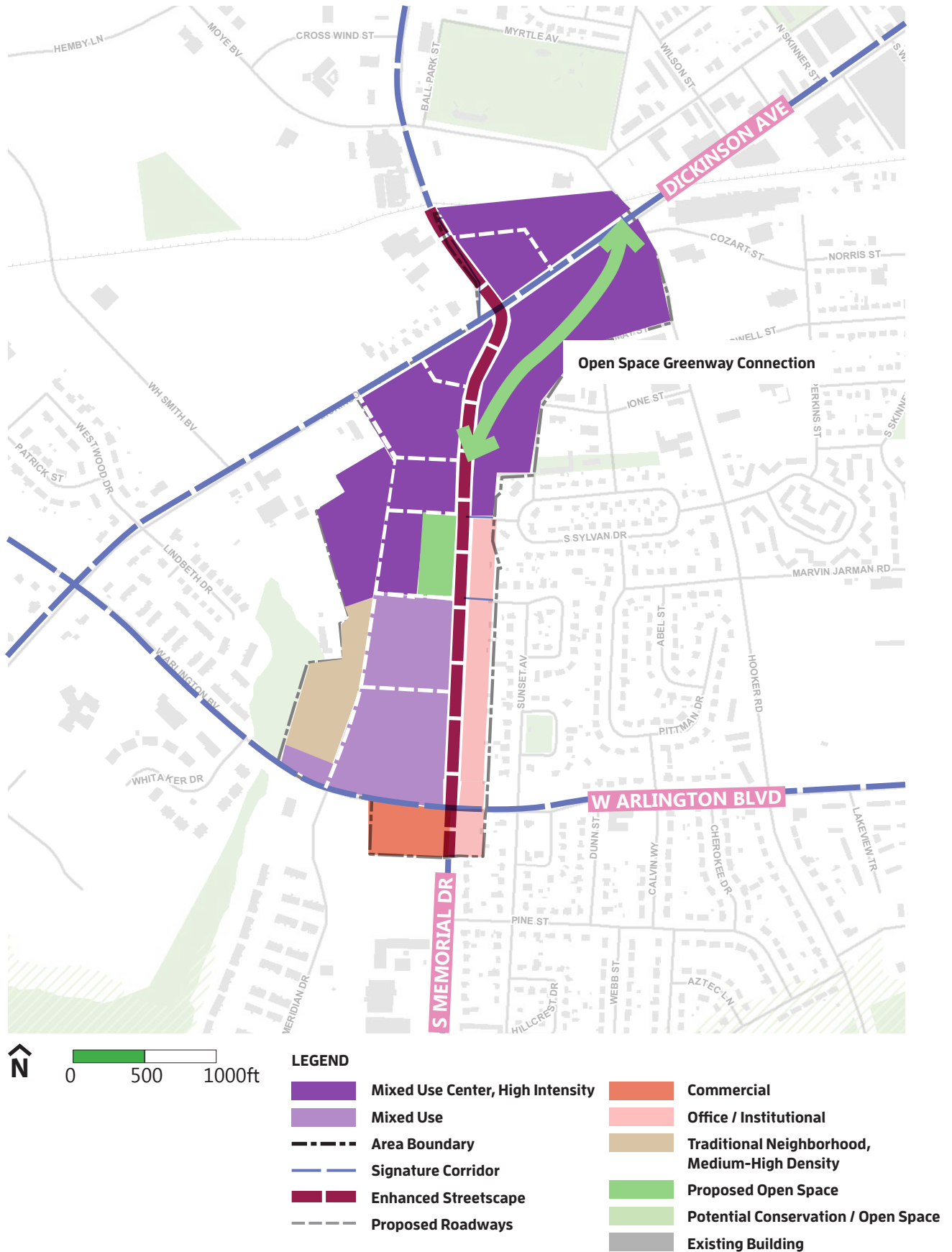
3. Increase connectivity for pedestrian, bicycle and vehicular traffic.

Developing a more grid-like street pattern throughout the area will ensure that adjacent development sites are connected through shared vehicular and pedestrian access, and designing streets to balance the needs of various users. These measures will slow traffic by providing a more enclosed space and will reduce the amount of curb cuts which currently exist. Connections should be made to the previously proposed Hooker Road greenway, as well as, connecting to the future Green Mill Run greenway via the north-south stream adjacent to the planning area.

4. Define a streetscape experience (buildings, lighting, landscaping, signage).

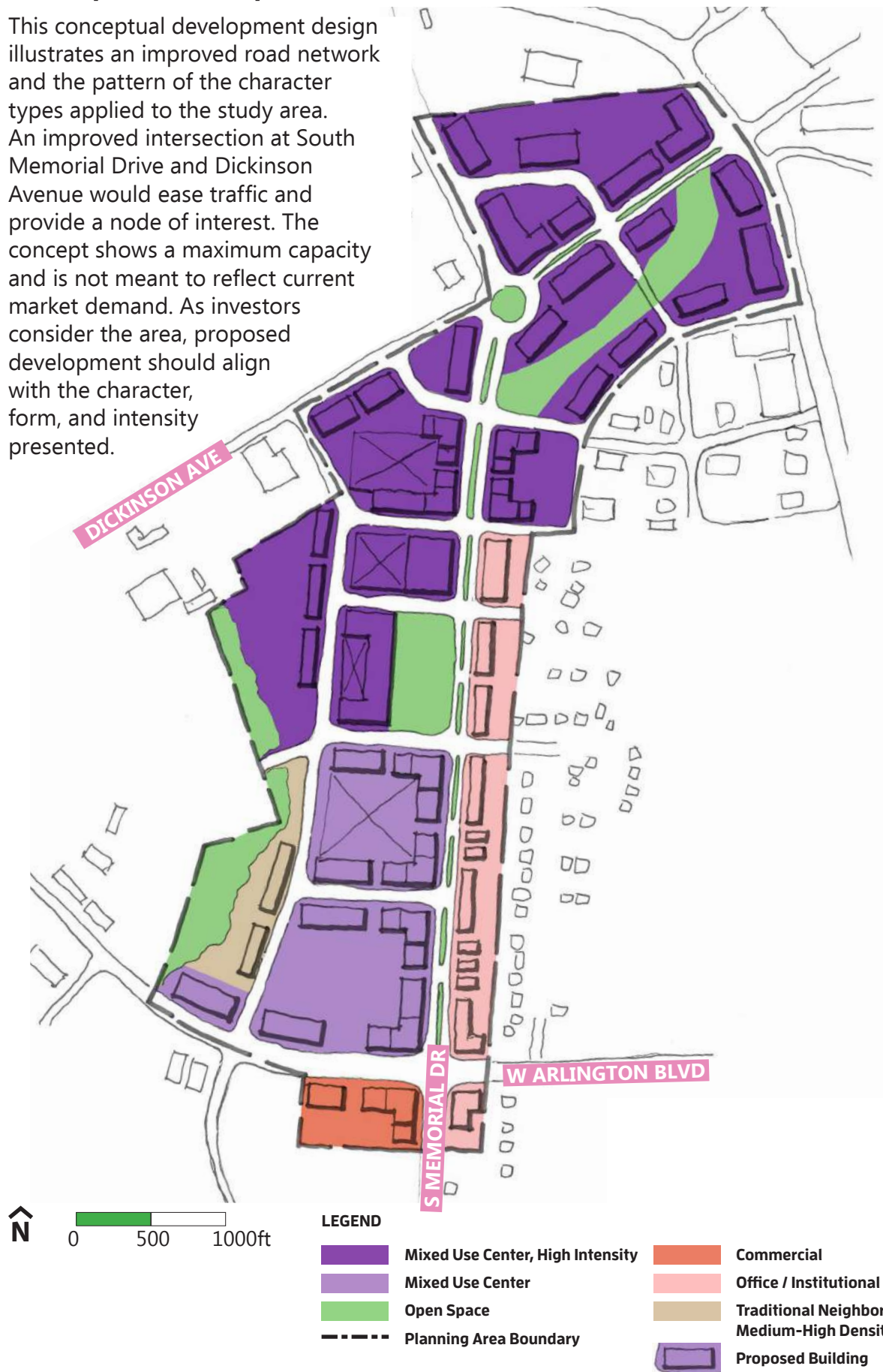
Creating a specific design standard for future development will provide a consistency in building and streetscape aesthetics throughout the area. This will add character and provide a transition to the architecture of surrounding areas. Consistency with streetscape design and open spaces will unite the proposed developments into a neighborhood.

Concept Diagram



Development Concept

This conceptual development design illustrates an improved road network and the pattern of the character types applied to the study area. An improved intersection at South Memorial Drive and Dickinson Avenue would ease traffic and provide a node of interest. The concept shows a maximum capacity and is not meant to reflect current market demand. As investors consider the area, proposed development should align with the character, form, and intensity presented.



LAND USE AND DESIGN RECOMMENDATIONS: DETAILS

1. Encourage mixed-use development at increased intensities.

Vertically integrate uses within future development. In addition to a mixing of uses horizontally, stacking residential on commercial office space for example activates the area throughout a single day. As described in the character type definitions, the area shown as Mixed Use Center, High Intensity (MUHI) should have the most intense development with average building height of 3-4 stories transitioning to 2-3 stories within the Mixed Use and Traditional Neighborhood, Medium-High Density (TNMH) types.

Public Realm Interaction. Align buildings with street corners and minimize setbacks to engage with the street. Allow businesses to interact with the streetscape through sidewalk patios for example to capture a walking audience.

Central Open Space. Provide a central gathering area and recreational connection to offer a civic space in the area and connect the existing greenway network to Guy Smith Park. The central gathering space could be used for formal functions such as concerts or holiday celebrations.

Diversity of housing options. A variety of higher density residential types are recommended for the far west of the study area in the Traditional Neighborhood, Medium-High Density (TNMH) character areas. These housing types may include townhomes (individual dwellings attached on one or two sides) or multi-unit buildings that will vary in size and price-point.

Small mix of uses east of Memorial.

The shallow lots fronting on the east side of South Memorial Drive could support a variety of smaller format uses. Those sites would be most viable if improvements were made to the design of South Memorial Drive (see following recommendations). Small format office, institutional and small mixed-use structures could be built with parking behind the structures. These sites could also support compact residential types such as townhomes.



Images represent the mixing of uses both vertically and horizontally and providing public open space throughout development.

As well as a variety of housing options at different densities and typologies.

2. Improve pedestrian and vehicular safety.

Shared Parking. Allow for sharing of parking between users and between different peaks of use throughout each day/week. Structured parking and street parking will be important in this strategy. When there is surface parking it will be masked by structures and placed at the rear, promoting walkability.

South Memorial Drive Medians. Install medians along South Memorial Drive to allow pedestrians to more safely cross the roadway. The medians provide traffic calming for the vehicles traveling the corridor each day and allow a physical connection to be made with the residential communities to the east of South Memorial Drive.

Minimize Curb Cuts. Minimize the use of curb cuts for individual sites, thereby reducing the frequency of potential pedestrian-vehicle conflicts. Instead provide shared access points that serve multiple buildings.

Increase Sidewalks. Sidewalks should be designed to buffer pedestrians from vehicular traffic by landscape treatments and/or by utilizing on-street parking (east-west streets).

3. Increase connectivity for pedestrian, bicycle, and vehicular traffic.

Street Pattern. Create more street connections to allow for easier access for both pedestrians and vehicles. This street pattern should be reinforced by buildings fronting the street and creating visual corridors. Future streets will be designed to balance the needs of pedestrians, cyclists, and drivers alike.

Neighborhood Connections. Connect to surrounding neighborhoods through a modified grid-like street pattern. With an additional north-south roadway, pressure on South Memorial Drive will be on relieved for trips within the area.

Greenway Connections. Provide connections to the previously planned Hooker Road greenway, as well as, to Greens Mill Run. Greens Mill Run could be accessed via the north-south stream adjacent to the planning area. The recreational connection to both greenways and the surrounding public parks will be an important asset to the residential community which will be added through development.



Above image represents retail wrapping a parking garage structure with mixed-use buildings facing the street.

The image at right is an example of a formal open space that is designed as a pedestrian and bicycle connection through the development.



4. Refine streetscape experience (buildings, lighting, landscaping, signage).

Design Standards. Develop a clear set of design standards for future development. These standards will provide guidelines for building materials, sidewalk widths, building setbacks, parking strategies, tree planting requirements and more. Establishing these standards early in the process will enhance the unity of the neighborhood.

Street Design. Design streets to include on-street parking and curb bump outs to accept pedestrian crosswalks, modeling after a complete streets approach.

Street Trees. Street trees will be added and provide several uses within the public street realm. They soften the surrounding streetscape materials and offer shade for traveling pedestrians. Trees also give pedestrians a physical barrier to vehicular traffic and provide solar insulation to adjacent structures.

Green Space. The addition of open space and street trees will provide a transition to the surrounding residential areas and stream corridors. Current conditions offer limited foliage with surface parking as the street's main facade.

Open Space Stormwater Management. Provide public green space to serve both an aesthetic and practical purpose. Green space is an effective method of storm water management in urban areas. Increasing the amount of permeable surface for groundwater penetration will reduce the need for retention basins.

Sign Standards. Building upon the city's graphic regulations, the area should use consistent signage as a component of the area's branding. Such signage will include street signs, store location maps, parking, etc.



Consistent lighting with daytime interest adds function and aesthetic appeal to a vehicular corridor.

Image at left displays traffic calming, street vegetation, site furnishings, and buildings interacting with the street.

STREETSCAPE RENDERING



10d

Appendix

Special Area Plan: Southwest Bypass Area

CITY COUNCIL PUBLIC HEARING DOCUMENT
AUGUST 23, 2016



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SPECIAL AREA PLAN: SOUTHWEST BYPASS

Spurred by the NCDOT's Southwest Bypass project, this area is full of potential. Now is the time to lay the foundation for what the area could become. If planned prudently, the area offers the opportunity for significant economic development within the region, while also acknowledging other community objectives.

THE AREA TODAY: KEY FINDINGS

The following points summarize the findings of public and stakeholder input, review of past plans, and technical analysis of the current condition.

Transportation investment for region.

NCDOT is undertaking a major project called the Southwest Bypass linking US 264 southward toward NC 11. The purpose of the Southwest Bypass is to relieve traffic congestion on NC 11 and US 264 and improve regional travel on the western side of Greenville. It will also improve access to the Greenville area from points west (Raleigh) and north (Norfolk/Hampton Roads). This investment in the area will substantially change the opportunities for development on surrounding land.

Area planning involves several

jurisdictions. The Southwest Bypass will have an impact on lands within the planning areas of several jurisdictions: Pitt County, Greenville, Winterville, and Ayden. The Southwest Bypass planning area for the Greenville Horizons 2026 Plan includes the northern half of the bypass and surrounding areas. The planning area borders the western developed edge of Greenville from north of US 264 south to Pocosin Road and the border with Winterville. The planning area includes land within the City of Greenville, the city's ETJ, and the 3-mile boundary where annexation into Greenville could occur. (See map on page 7.)

Southwest Bypass Area is either farmland or forestland. In some cases, third or fourth generation farmers own land that has been in their family for a century. Landowners that participated at a public open house in May 2016 identified a range of choices for how they are planning for the future of their properties. Some may continue to work the land and pass their holdings onto their children. Others will build or sell to take advantage of the new regional access.

Significant regional opportunity area.

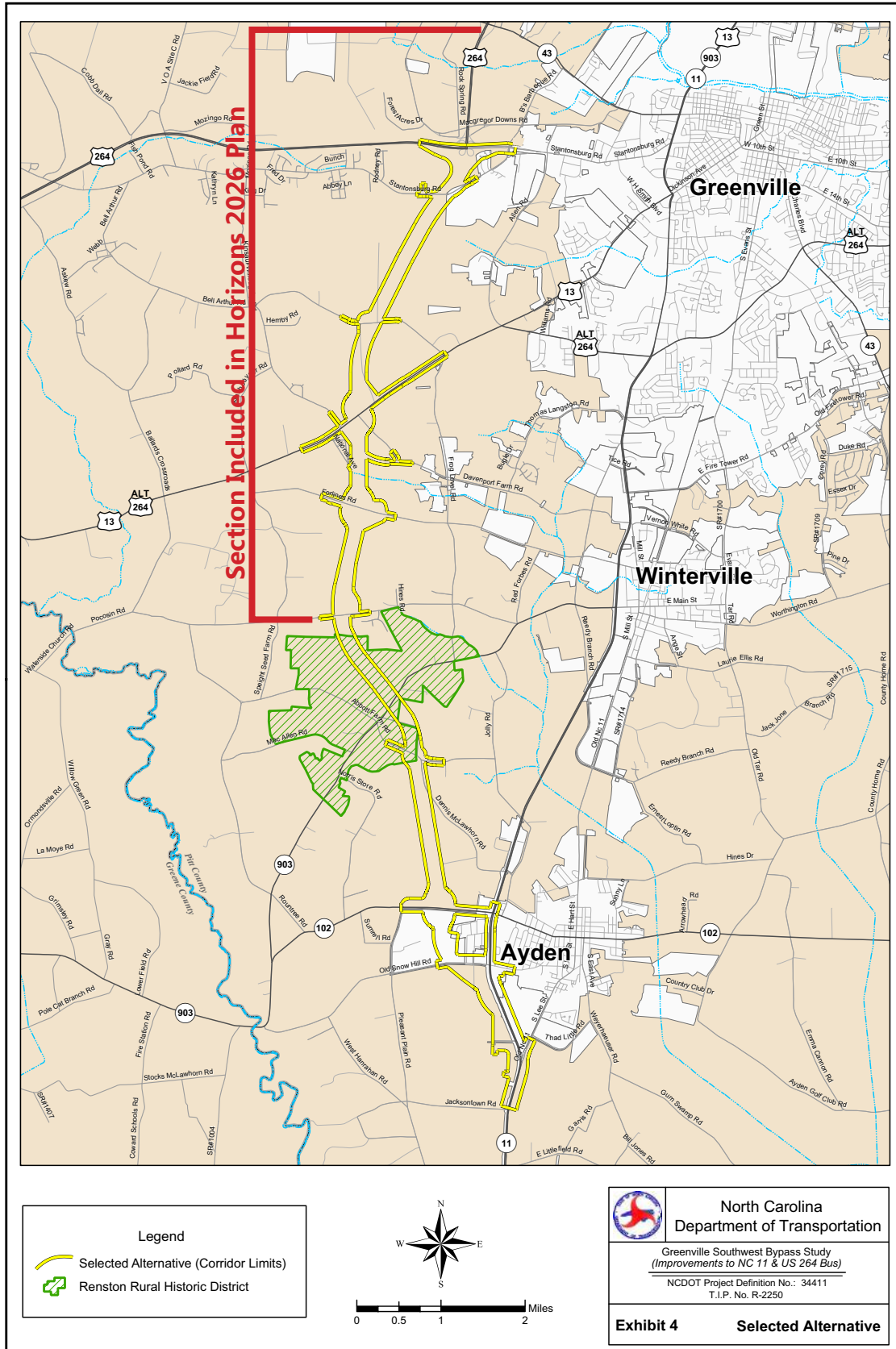
Limited development exists in Greenville's Southwest Bypass planning area, providing a large array of opportunities for this area. The new regional bypass and adjacent open lands make this area a prime opportunity for future investment.

The City of Greenville is particularly interested in identifying additional sites for economic development investment, including industrial and business park development and supporting commercial and residential uses. The Southwest Bypass planning area is a prime opportunity for focused economic investment.

Critical to realizing the potential of this area is ensuring collaboration and coordination between the different jurisdictions: Pitt County, Greenville, Winterville, Ayden, Greenville Utilities Commission, and Bell Arthur Water Corporation.

Interests of landowners. Much of the

NCDOT Greenville Southwest Bypass Project Map



Greenville's Southwest Bypass Planning Area Boundary



0 .5 1 mi

LEGEND

----- Southwest Bypass Planning Area Boundary

SURVEY OF CONDITIONS

Road network. The Greenville Southwest Bypass project is being led by the NCDOT. It will connect US 264 just west of Greenville southward toward NC 11, connecting south of the Town of Ayden, NC. The planning area includes areas to the east and west of the Southwest Bypass corridor.

Two major roads cut through the area running east/west: US 264 leading into Stantonsburg Road and US 13 leading into Dickinson Avenue. East of the planned bypass, Allen Road connects these two roads.

Existing land use pattern. The land inside the Southwest Bypass planning area is mostly open land: a combination of land in its natural state, farmland, forestland, and vacant lots. To the east of the area, toward the center of Greenville, there is a Pitt County landfill and several car sale lots. There are also a few residential neighborhoods and mobile home parks in the eastern and southern portions of the planning area.

Environmental features. There is minimal 100-year floodplain in or around the Southwest Bypass area, which alleviates a major concern given the history of flooding in Greenville. There are a number of non-riverine wetlands in the Southwest Bypass planning area. Many of these wetlands are identified as "Potential Conservation/Open Space" on the Future Land Use and Character Map for Greenville. Site level planning will need to address any environmental features identified on properties.

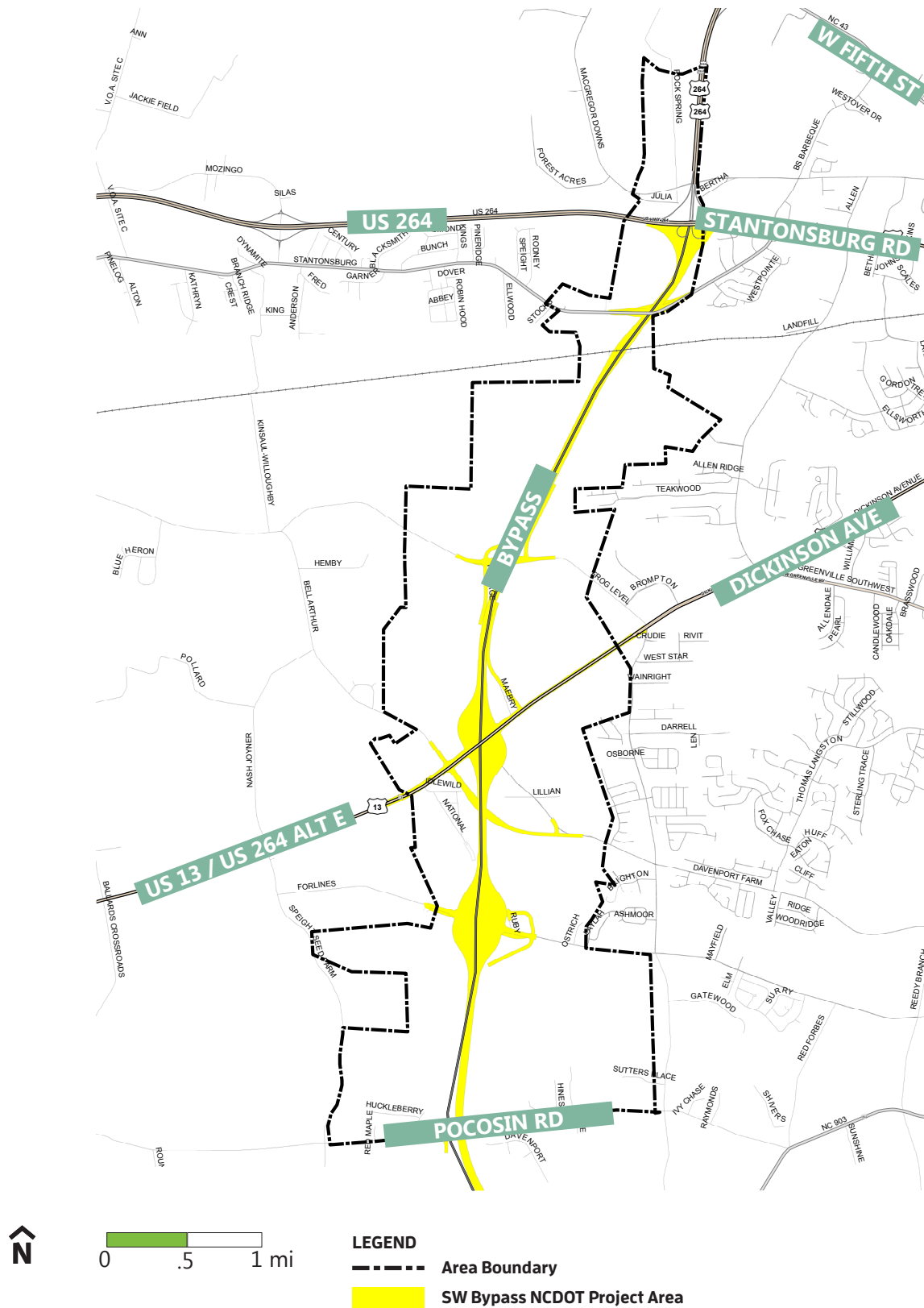
Schools. The Southwest Bypass Area intersects with the school districts for two high schools, two middle schools, and four elementary school districts. US 13 serves as a rough divider between Farmville Central High and Farmville Middle to the north, and South Central High and A.G. Cox Middle to the south. The north subdivides into Falkland Elementary

and the H.B. Sugg (K-2) / Sam D. Bundy (3-5) district. The south subdivides into Ridgewood Elementary and Creekside elementary. Two additional Greenville elementary districts and the Ayden schools are also nearby.

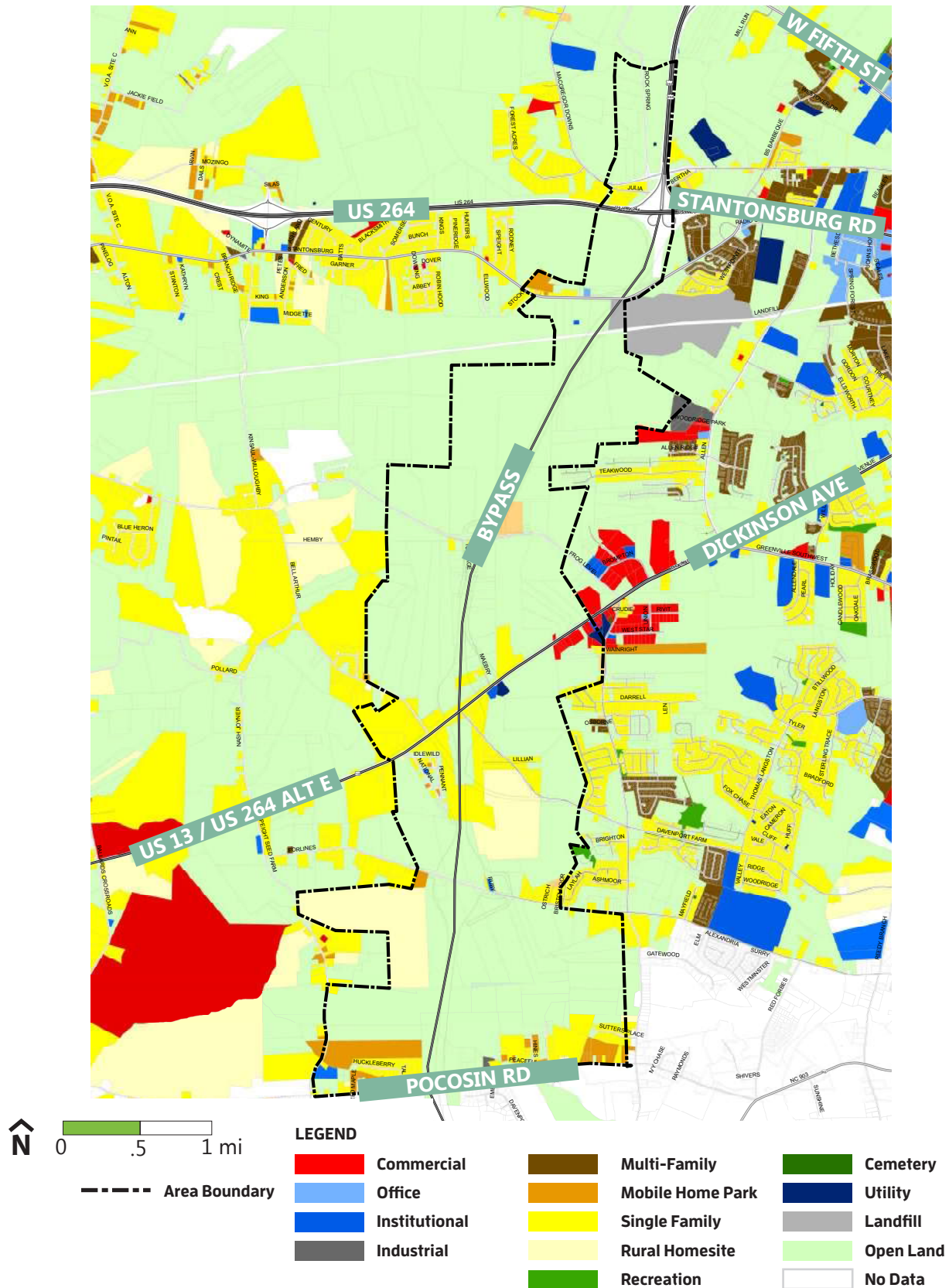
Jurisdictional boundaries. The majority of the land in the planning area is within the planning and zoning jurisdiction of Pitt County. The northern boundary of the Southwest Bypass planning area lies within Greenville's extraterritorial jurisdiction (ETJ). The southern edge of the special planning area is delineated by an intergovernmental annexation agreement boundary with the Town of Winterville. The two municipalities set a border for identifying the jurisdictional boundaries for extending public water and sewer infrastructure and for potential municipal annexations to better coordinate land planning and capital investments. There are also a few parcels in the planning area that are formally in the City of Greenville's corporate limits.

Public services. GUC provides water, sanitary sewer, gas and electricity services in the Greenville area, including the Southwest Bypass planning area. GUC and Bell Arthur Water Corporation have a formal agreement in place that designates the potable water service area boundary for the two utility providers. Bell Arthur Water will be the primary water provider in the Southwest Bypass planning area, with GUC service areas limited to the northern and easternmost areas. GUC has studied the capability of expanding the existing gravity sewer system into the planning area. Currently, additional gravity-fed lines can only serve some of the eastern lands in the planning area. However, it is possible that future infrastructure investments could serve other parts of the planning area.

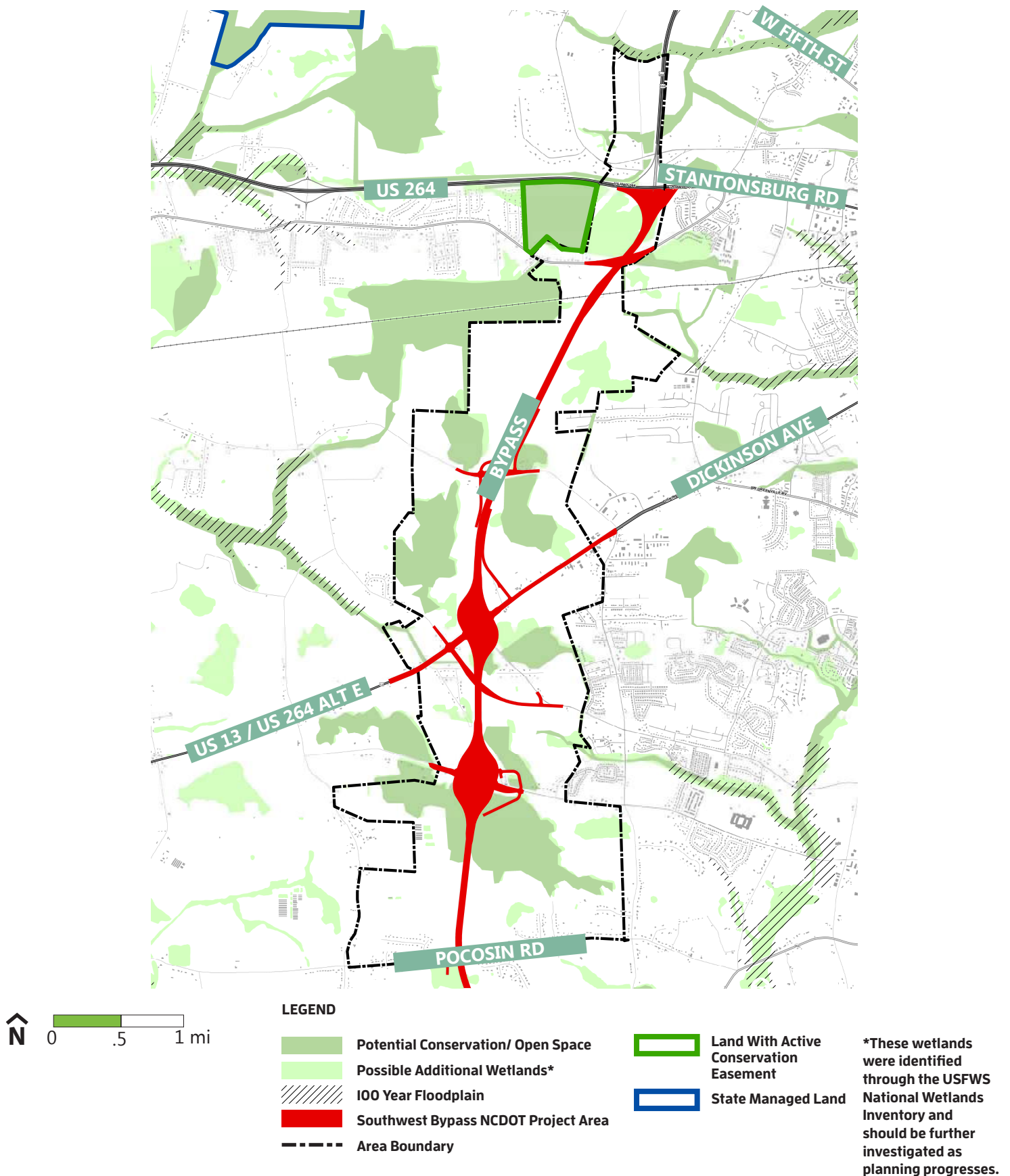
Road Network



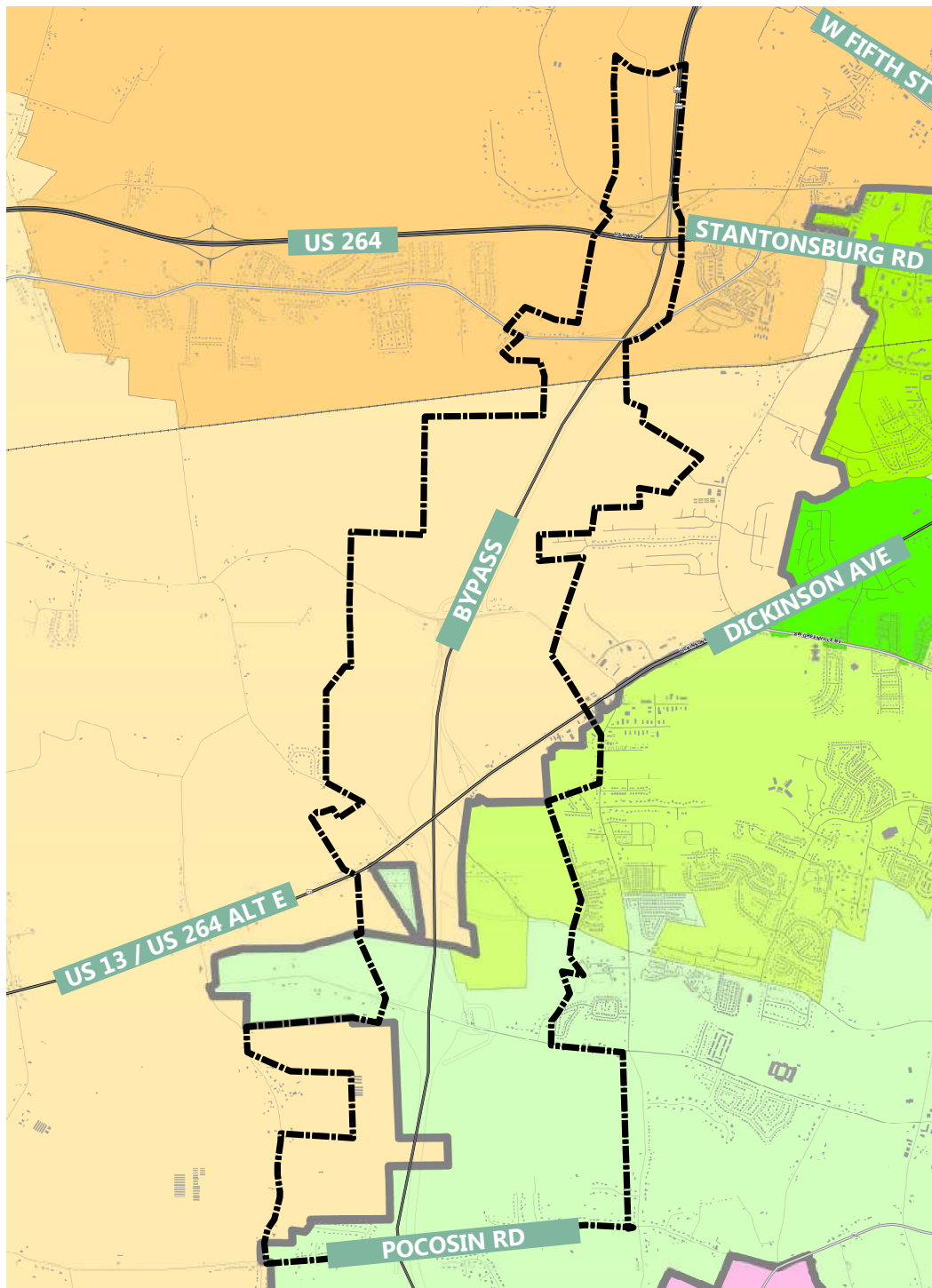
Existing Land Use



Environmental Features



Current School Districts



LEGEND

**FARMVILLE CENTRAL HIGH /
FARMVILLE MIDDLE**

FALKLAND ELEMENTARY
**H B SUGG / SAM D BUNDY
ELEMENTARY**

**SOUTH CENTRAL HIGH /
A G COX MIDDLE**

WINTERGREEN PRIMARY / INTERMEDIATE
W H ROBINSON ELEMENTARY
RIDGEWOOD ELEMENTARY
CREEKSIDE ELEMENTARY

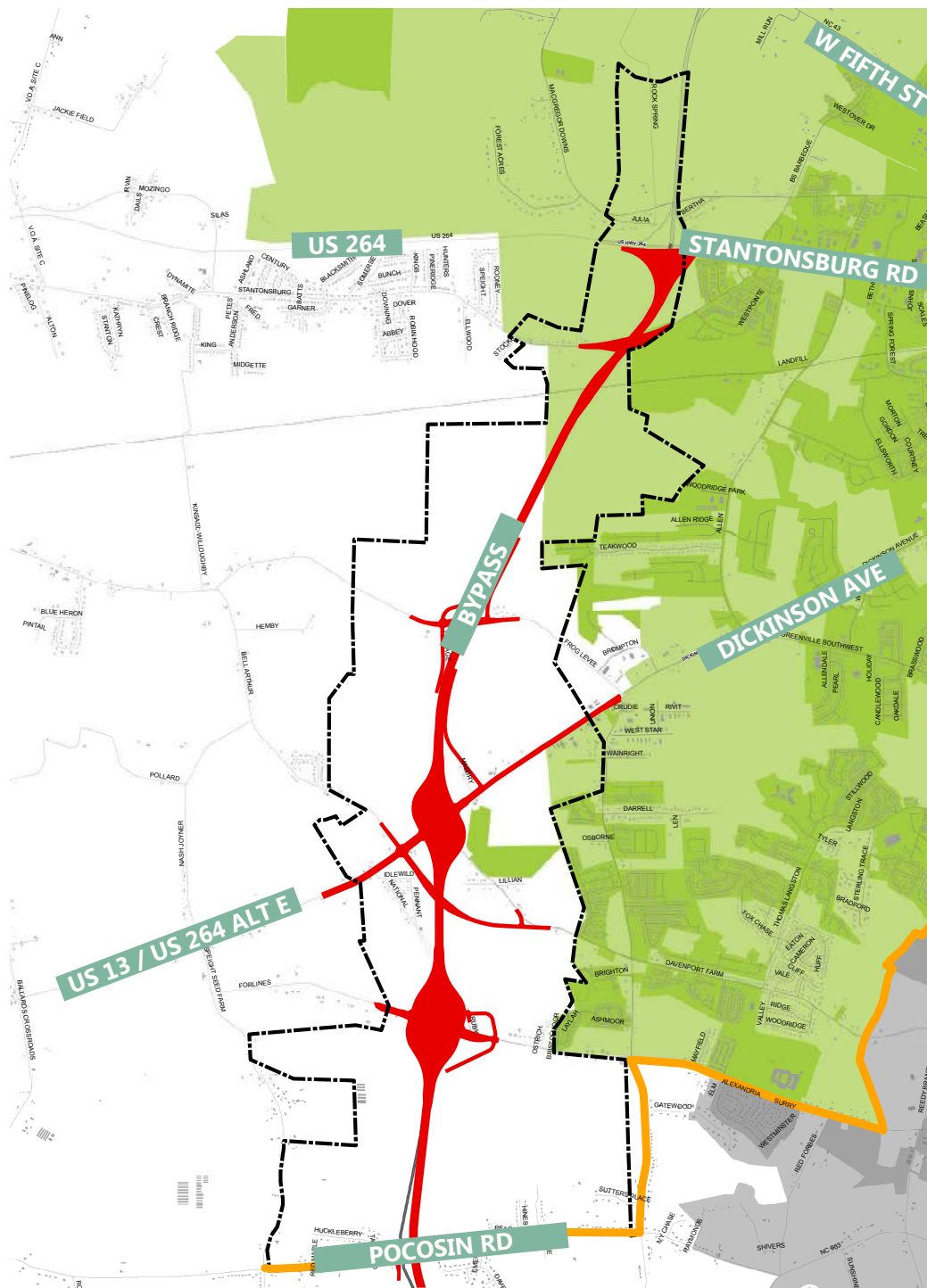
**AYDEN-GRIFTON HIGH /
AYDEN MIDDLE**

AYDEN ELEMENTARY






--- Area Boundary

0 .5 1 mi

Jurisdictions



LEGEND

-  **Pitt County**
 **Greenville City**
 **Greenville ETJ**
 **Winterville Town**
 **Winterville ETJ**

-  Southwest Bypass
 Greenville-Winterville Utility Services
 and Annexation Agreement Boundary
 Area Boundary

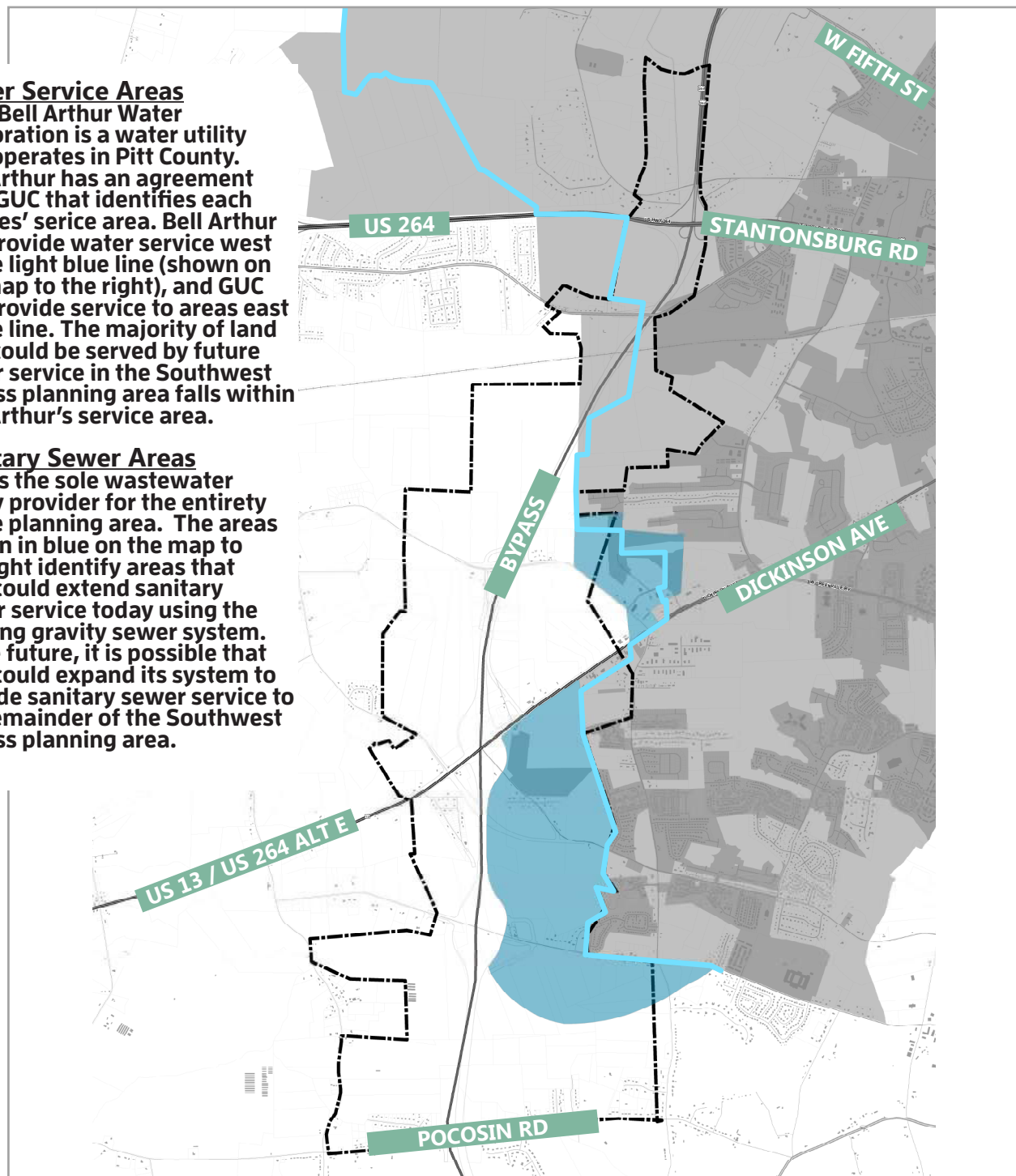
Water/Sewer Service Areas

Water Service Areas

*The Bell Arthur Water Corporation is a water utility that operates in Pitt County. Bell Arthur has an agreement with GUC that identifies each utilities' service area. Bell Arthur can provide water service west of the light blue line (shown on the map to the right), and GUC can provide service to areas east of the line. The majority of land that could be served by future water service in the Southwest Bypass planning area falls within Bell Arthur's service area.

Sanitary Sewer Areas

GUC is the sole wastewater utility provider for the entirety of the planning area. The areas shown in blue on the map to the right identify areas that GUC could extend sanitary sewer service today using the existing gravity sewer system. In the future, it is possible that GUC could expand its system to provide sanitary sewer service to the remainder of the Southwest Bypass planning area.



LEGEND

- Areas to Evaluate Future Expansion of Public Sanitary Sewer
- Extention Capability of Existing Gravity Sewer System Beyond ETJ
- Greenville ETJ
- Greenville City
- GUC / Bell Arthur Water Agreement Line*
- Area Boundary

PLANNING OPPORTUNITIES

Economic development potential.

New industrial and business development in the Southwest Bypass corridor could be a major economic driver for the region. Industries that produce goods for consumption outside of Greenville (such as chemical manufacturing and aerospace industries) place a value on access to major transportation networks. The Southwest Bypass can be a major boon to the region by providing access to large areas of land available for future development, and for providing connections to regional transportation networks that shorten travel distances to the Research Triangle and Hampton Roads regions.

The new highway quality regional transportation infrastructure provided by the bypass and access to large assemblages of undeveloped lands with minimal environmental constraints make this area one of the most critical economic opportunities for the region and for Greenville.

Multi-jurisdictional planning.

Pitt County created a future land use plan for the year 2030 that assigned future land use types to all land in the county outside other municipalities' jurisdictions. (See *Pitt County's Land Use Map* shown on the right). The County's plan, adopted in 2011, calls for commercial development along US 13/ Dickinson Avenue, and suburban residential for the remainder of the Southwest Bypass planning area.

Pitt County is considering plans for the entirety of the Southwest Bypass corridor: from Greenville to south of Ayden. Greenville has an opportunity to coordinate with Pitt County on any future planning efforts, as well as with neighboring jurisdictions Winterville and Ayden. Joint planning efforts should focus on making sure that land use plans are aligned

along the edges of jurisdictions, and to jointly plan for transportation and infrastructure projects that will serve the area.

Multi-jurisdictional long-range planning for the Southwest Bypass planning area is necessary to realize optimal economic success. And many of the landowners within the planning area acknowledge and support the need to plan for this area.

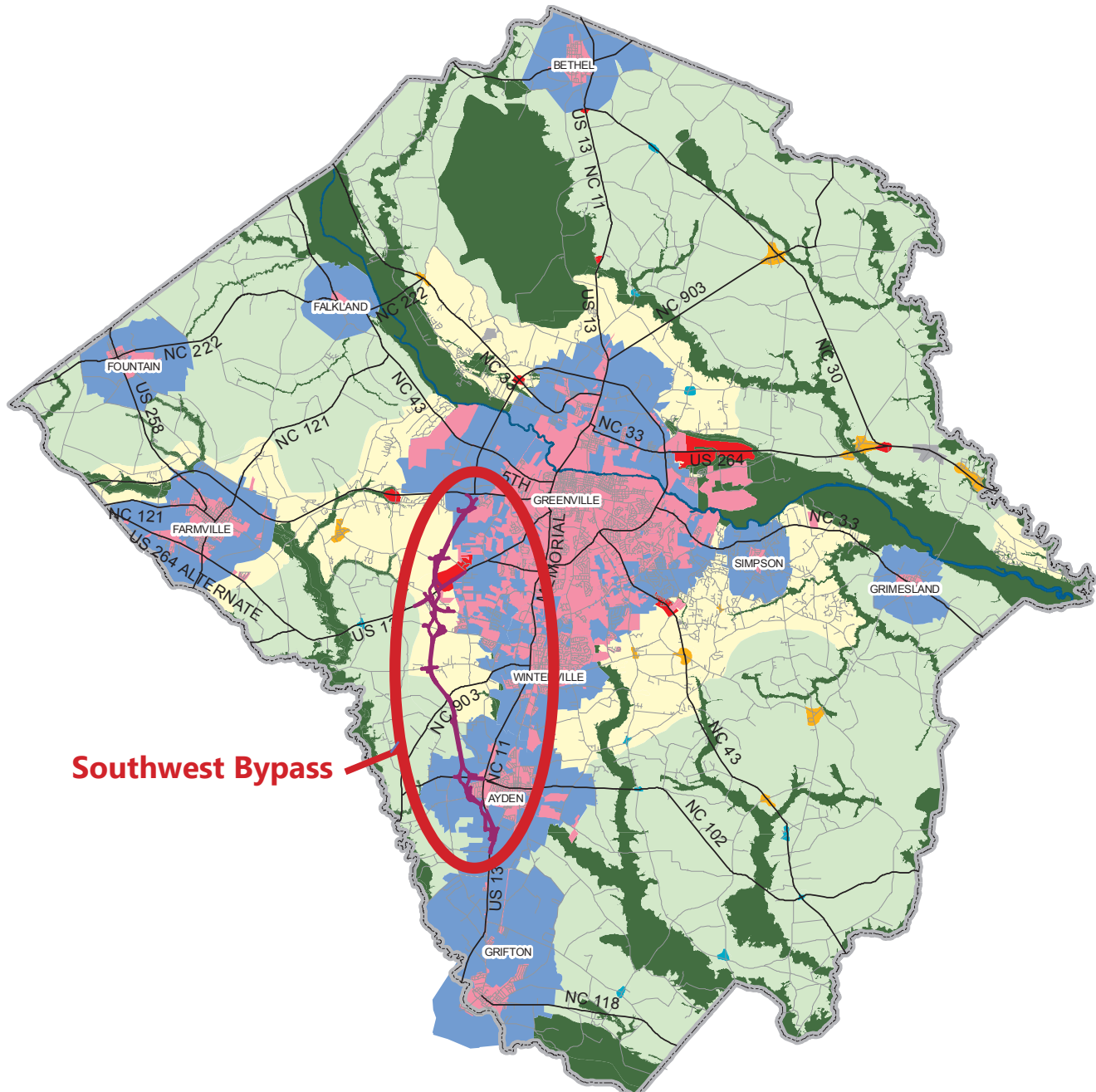
Policies for extending public services.

The Southwest Bypass opens up major development opportunities. Future developments within the planning area will likely have need for public water and sanitary sewer service. The City of Greenville and GUC have joint policies that require (1) anyone requesting connection to GUC's sanitary sewer system must request voluntary annexation into Greenville, and (2) any sanitary sewer extension outside of the city's ETJ must be approved by the Greenville City Council. As a result, development opportunities often hinge on annexation into the city.

Given the possible changes to the Southwest Bypass Area and that many landowners are interested in developing their properties, it is likely that Greenville's corporate limits will expand into this area. By setting out this area plan, and through future additions to the planning process, the city is providing a roadmap to the type of development it would like to see in order to ultimately approve annexation and open the door to sanitary sewer service on any particular parcel. The decision to pursue annexation on a parcel level is ultimately the decision of the landowner.

Pitt County 2030 Comprehensive Land Use Map

Adopted December 5, 2011



Southwest Bypass



Map Scale :
1 Inch Represents 3.5 Miles



Map Produced By:
Pitt County Planning Department

T:\GIS\Special_Projects\CLUP2010\documents\maps\flu_11x17.mxd

- Agricultural/Open/Natural Resource
- Rural Residential /Agricultural
- Suburban Residential
- Rural Commercial
- Commercial Crossroads
- Commercial
- Heavy Commercial / Industrial

- City Limits
- Extraterritorial Jurisdiction
- Southwest Bypass (Proposed)
- Major Roads
- Secondary Roads
- Tar River
- County Boundary

FUTURE LAND USE AND CHARACTER VISION

Proposed land use and character.

The City of Greenville has developed a Future Land Use and Character Map as part of the Horizons 2026 comprehensive plan update. This map expresses the city's intent for how Greenville's planning area should grow in the future. The map on the following page shows the future land use and character vision for the Southwest Bypass planning area. The descriptions of the character types (i.e., colors on the map) can be found in the Horizons 2026 Plan.

The plan for development in the Southwest Bypass Area focuses on providing new employment development opportunities for a large portion of the planning area focused between US 264 and US 13. This development is supported by new commercial and residential opportunities south of US 13, and adjacent to the bypass interchanges. These plans may be revisited as part of future planning efforts with neighboring jurisdictions.

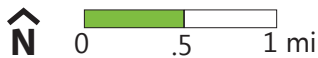
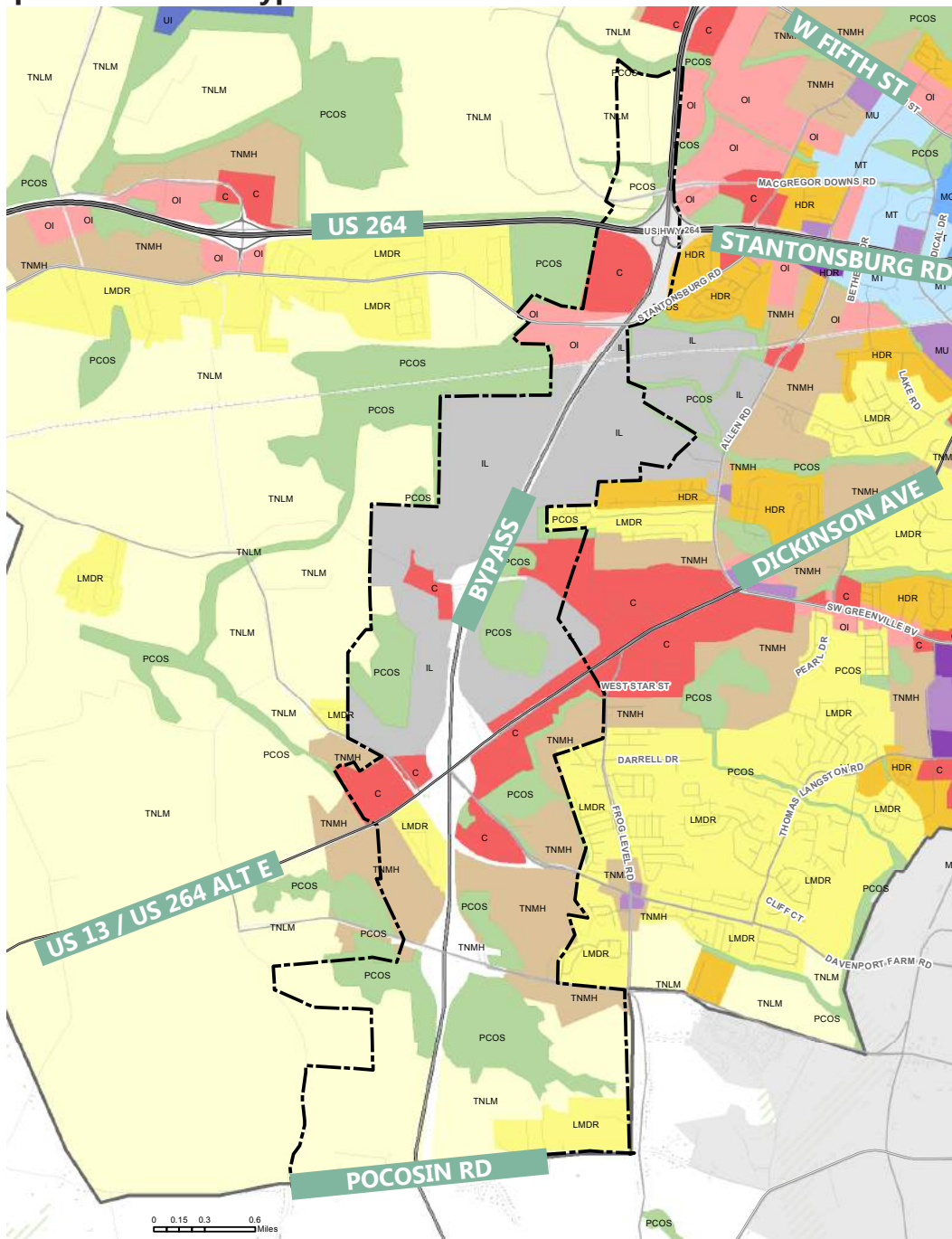
Connections to existing development.

Any major developments within the Southwest Bypass planning area should include connections to Greenville's existing road network to maximize mobility and accessibility within the city's transportation system.

East-west connections from the bypass into the city should be considered as potential gateways into Greenville, and should be designed to provide an attractive entry into the city and provide appropriate access to neighboring developments.

Depending on the expected land use and character within the Southwest Bypass Area, buffers and separation between existing residential neighborhoods and developments in the Southwest Bypass planning area on the western edge of the city may be necessary.

Proposed Character Types



LEGEND

- Mixed Use High Intensity
- Mixed Use
- Commercial Corridor
- Office / Institutional Corridor
- Residential, High Density
- Area Boundary
- Proposed Roadway

- Traditional Neighborhood, Low-Medium Density
- Residential, Low-Medium Density
- Traditional Neighborhood, Medium-High Density
- Uptown Neighborhood
- Medical Core
- Medical Transition
- Conservation / Open Space
- Industrial / Logistics

STRATEGY FOR CONTINUED PLANNING

The success of this Southwest Bypass Area Plan is dependent on continued planning efforts and the input from interested stakeholders and adjacent jurisdictions.

A strong employment center for the region. The Southwest Bypass represents a major potential employment center that can contribute to the prosperity of the city and the region. This area should be a focus for future employment development within the City of Greenville. Along with business sites, the area is envisioned to also contain supportive commercial and residential uses. Future planning efforts should embrace these objectives.

Maintain a presence in the region's other planning efforts. The future of the Southwest Bypass Area will not only be written in the Horizons 2026 plan. An additional, broader planning effort is necessary and should include Pitt County, Winterville, and Ayden. It should also include the utility service providers and area stakeholders and landowners.

Greenville must stay involved and monitor the plans of the county, other municipalities, and NCDOT to ensure compatible planning objectives and decisions are being made at every level. By making one of the first land use plans for the area since the development of NCDOT's Southwest Bypass project, the city has made the broad strokes of its vision known. To preserve that vision and resolve its connection to other efforts, the city must stay engaged with regional partners.

Share information about future projects. Communication with GUC and other utility providers is always an important task for managing city growth, and the importance is heightened when considering land beyond the ETJ. Within the ETJ, the city has had a measure of influence on what has been built. The city should coordinate with GUC to discuss future

development proposals within the planning area to ensure compatibility with the larger vision for the area.

This is also true for coordination with Pitt County. All land within the planning area currently has zoning that allows for by-right development, primarily for residential neighborhoods. Development of residential neighborhoods within areas set out for employment uses could have a detrimental effect on the region's ability to attract businesses to the bypass area. It will be important for the city and county to work together to protect lands in the area from incompatible development that could reduce economic development potential.

Tiered Growth Map. The Primary Growth Area of the city, set out by the Tiered Growth Map in the Horizons 2026 Plan, was developed using GUC's existing sewer service areas and other planning factors. As the city works with neighboring jurisdictions and utility providers to plan for the Southwest Bypass planning area, the Tiered Growth Map should be updated to better reflect priority areas for development and capital investment.

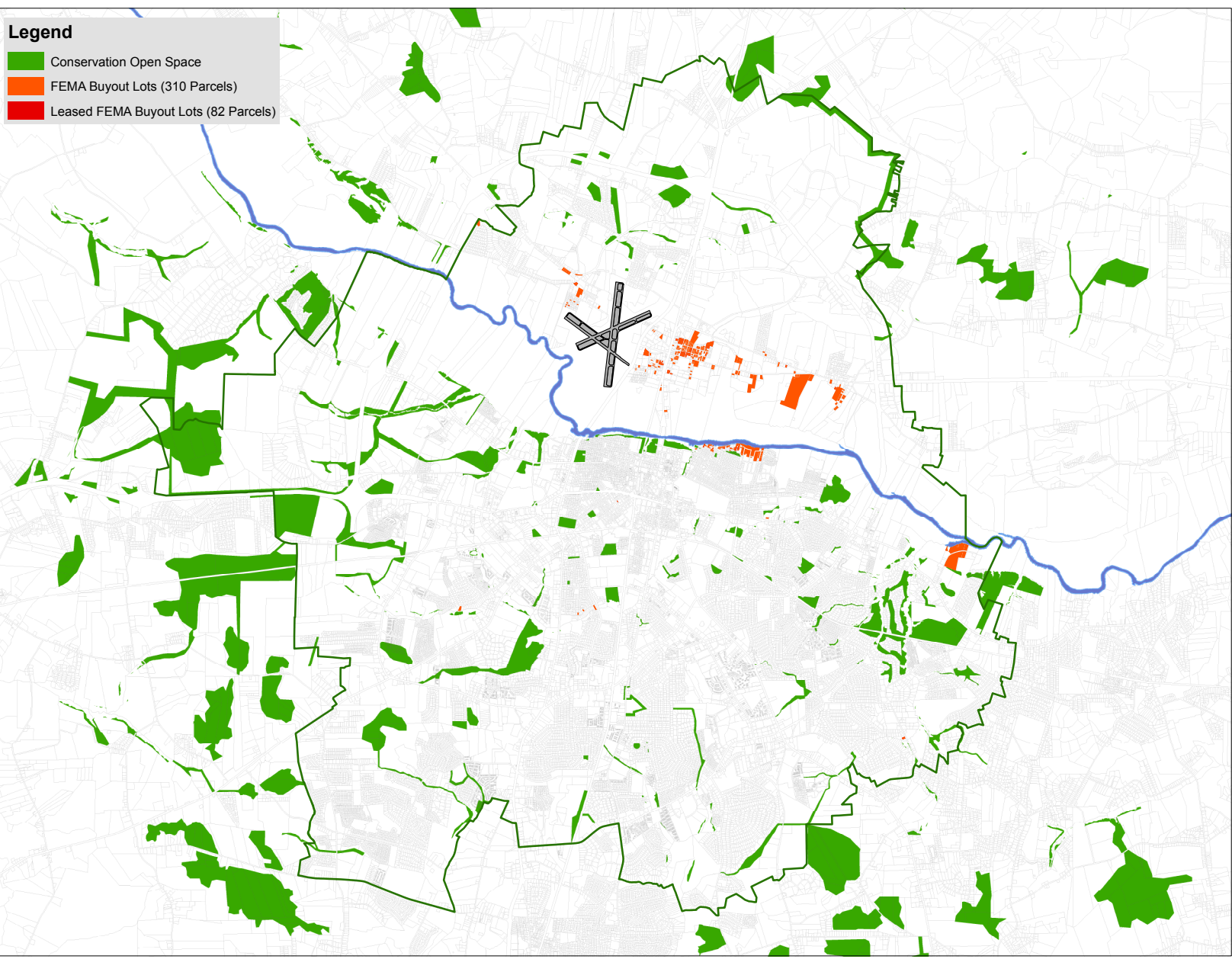
Appendix

FEMA Buyout Map

CITY COUNCIL PUBLIC HEARING DOCUMENT
AUGUST 23, 2016

Legend

- Conservation Open Space
- FEMA Buyout Lots (310 Parcels)
- Leased FEMA Buyout Lots (82 Parcels)



Appendix

Floodplain Map

CITY COUNCIL PUBLIC HEARING DOCUMENT
AUGUST 23, 2016



