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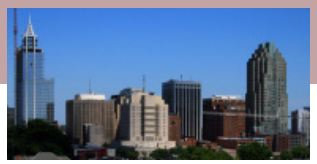
Designing a 21st Century City:

The 2030 Comprehensive Plan for the City of Raleigh

Volume I: Comprehensive Plan

November 1, 2009



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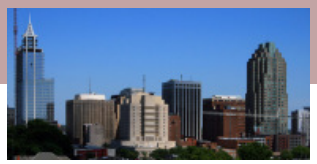

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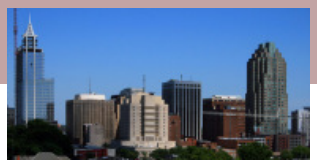

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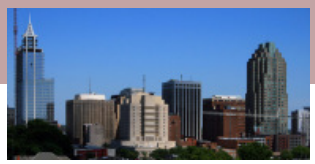

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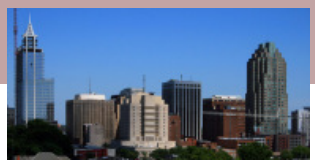

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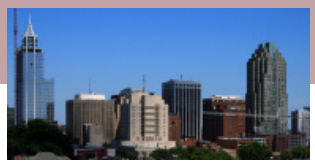


I Introduction

Raleigh, the capital of North Carolina, is a fast-growing city located in the fastest-growing region of the State, the Research Triangle. Home to nearly 390,000 people, the City is expected to grow to almost 600,000 by the year 2030. Since the last Comprehensive Plan was written in 1989, Raleigh's population has increased by 72 percent. Growth of this magnitude is not incidental. Raleigh's innumerable assets, including a strong and diversified economy, a highly-educated populace and a great education system, plentiful parks, and its resurgent Downtown are major factors in attracting new residents and businesses from around the country and the world. The transformation has made Raleigh one of the 50 largest cities in the United States.

Raleigh's growth and relative prosperity make planning for the City's future critically important. In fact, the need for good city planning has never been greater as Raleigh addresses its growth and development challenges. How do we accomplish growth while maintaining Raleigh's outstanding quality of life and retaining the assets that make Raleigh special? How do we add to the community while preserving its past? How do we manage growth and make our land use more supportive of transit and walkable neighborhoods? How do we sustain our environment for the present and renew it for the future? How do we provide decent and affordable housing options? How do we position Raleigh to remain nationally competitive with a strong economy?

The Comprehensive Plan is the key policy document that helps make the city workable, livable, and prosperous. This 2030 Comprehensive Plan provides the Vision and strategies for Raleigh to prosper and grow as a modern, 21st century city. The Plan provides an integrated approach to all aspects of Raleigh's physical development and related economic and social issues, with an emphasis on environmental, economic, and social sustainability; enhancing land use and transportation coordination; and developing attractive and prosperous neighborhoods for all. The Comprehensive Plan seeks to:

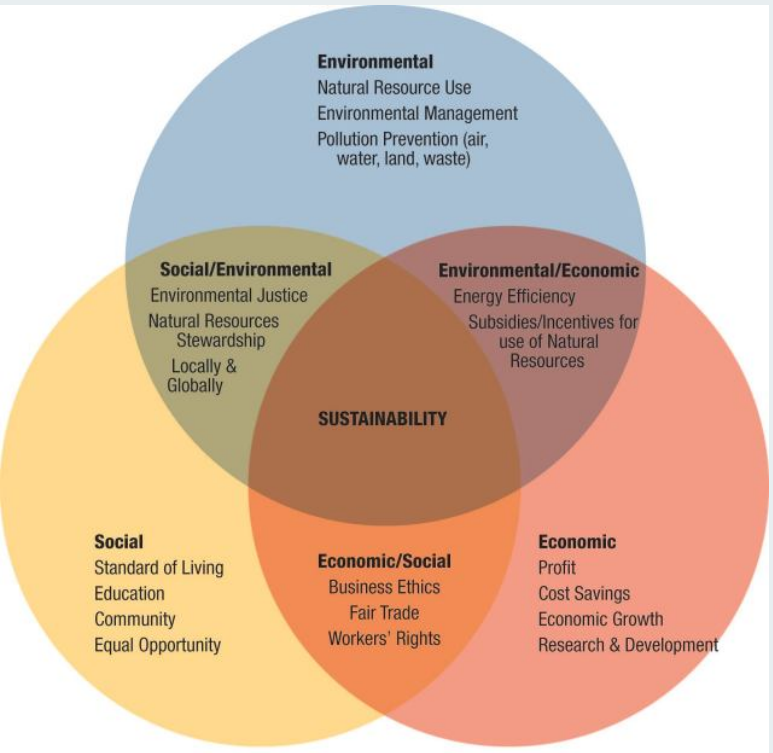
- Inspire with bold ideas to help shape development today and tomorrow;
- Provide the basis for orderly, consistent, and predictable land use decision-making;
- Facilitate quality development throughout Raleigh;
- Provide a "greenprint" for more sustainable growth patterns; and
- Build on the ideas and guidance from the many participants in the Planning Raleigh 2030 process.

Raleigh's Commitment to Sustainability

Raleigh's commitment to sustainability is a cornerstone of its vision for the future. That vision is broad and comprehensive and focuses on the interdependent relationships of environmental stewardship, economic strength, and social integrity. These three elements, referred to as the "triple bottom line" of sustainability, define the vision and will serve to guide the choices and decisions Raleigh will need to make as a 21st Century City of Innovation.

Consistent with this vision, the City has created a citizens Environmental Advisory Board, established full time Sustainability Initiatives Manager and Energy Manager positions, adopted a fossil fuel reduction goal, enacted an energy efficient buildings standard of LEED Silver for City buildings, and has endorsed the U.S. Mayors Climate Protection Agreement to develop a greenhouse gas emissions reduction strategy for the City.

There are many other sustainability initiatives on-going in the City including LED lighting, greening the City's vehicle fleet, supporting the creation of green jobs, a teleworking program, renewable energy projects, rainwater harvesting, water reuse, tiered water rates, sustainable purchasing policies, employee health and wellness programs, innovative financing strategies, and public-private collaboration, among others. Many of these are described in greater detail in the Plan elements.



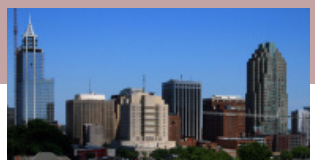
1.1 Purpose of the Comprehensive Plan

Legal Basis, Role, and Content

Although the State's zoning enabling statute establishes that "zoning regulations shall be made in accordance with a comprehensive plan," North Carolina's cities are not required by state law to prepare a comprehensive land use plan, and the nature of such a plan is not defined by statute. However, Raleigh has a long history of using a comprehensive planning document to establish policies that respond to the requirements and aspirations of the City's residents, and accordingly influence social, economic, and physical development. Past comprehensive plans have been used to promote economic growth and jobs and guide private and public investment. To achieve its vision for the future, Raleigh needs a revised and updated Plan that will promote sustainability, while maintaining and enhancing the natural and architectural assets of the City, and promoting the social and economic welfare of its residents.

History of Planning in Raleigh

Raleigh has a tradition of developing comprehensive plans dating back to 1913. The City's last plan, adopted in 1989 and subsequently amended, is 20 years old. Much has changed in that time, with the most significant change being the rate at which the City's land area has grown, exceeding the rate of



population growth. Since 1980, the City's population has more than doubled from approximately 150,000 to nearly 390,000, and the City's land area has almost tripled in size from approximately 55 to 140 square miles. This 2030 Comprehensive Plan strives to ensure that green and sustainable principles such as improved transit and transportation, the coordination of land use and infrastructure, the conservation of existing neighborhoods and thoughtful development of new communities, and the renaissance and growth of downtown, are incorporated into the City's plans and actions for the next twenty years.

Relationship to the 1989 Comprehensive Plan

The 1989 Comprehensive Plan introduced new tools to manage and shape growth, including Urban Form elements, various guidelines, and Small Area Plans. However, the 1989 Plan grew cumbersome over time, as numerous amendments and additions added length and complexity. The Plan's framework, focused heavily on the specific issues of suburban commercial corridors, did not adequately address new growth challenges. Area-specific plans grew to account for two-thirds of the plan's length, containing very detailed guidance for specific areas while the citywide policies remained far more general. Given its age and these considerations, the City decided the 1989 Plan no longer met the present and future challenges facing the City. In addition, the 1989 Plan did not articulate a set of priorities or specific actions that were to be undertaken to implement its recommendations.

As part of this comprehensive planning process, a "policy audit" of Raleigh's long-range plans, including the 1989 Comprehensive Plan and related Area Plans, District Plans, Corridor Plans, and System Plans was conducted. More than 100 documents were reviewed and over five thousand policy statements were cataloged, organized by topic, and analyzed for their relevancy. The audit provides a baseline for the development of the 2030 Comprehensive Plan's policies and actions, providing a means of identifying which existing planning policies should be carried forward, deleted, updated, merged, or redirected to other documents. Policies remaining relevant to today's context were then included in updated form in this Plan.

This 2030 Comprehensive Plan is based on the long heritage of city planning in Raleigh and brings the Plan into the modern era of plan-making. It provides guidance for policy implementation and outlines a process for tracking progress through an Implementation Element—the absence of such an element was a notable deficiency in the 1989 Comprehensive Plan.

Relationship to the Capital Improvement Program

The Comprehensive Plan provides guidance on the need to manage growth and development and to continue investment in the City's physical infrastructure and buildings. The Plan recommends enhancing the capital improvement planning and budgeting process by implementing more explicit ties between the Comprehensive Plan and the development of the Capital Improvement Program (CIP) as well as the establishment of priorities among various potential capital investments. In addition, for each recommended action in this 2030 Raleigh Comprehensive Plan, the Implementation Element identifies whether capital dollars are required to implement that action. There are about 70 such actions in the Plan where the need for capital funds is indicated.

The Capital Improvement Program

The Capital Improvement Program (CIP) is a ten year, two phase plan adopted by City Council that serves as a statement of city policy regarding the timing, location, and funding of major public facilities in the City of Raleigh. The CIP is developed by analyzing public facility needs, projecting fiscal resources, establishing priorities, and developing schedules for their implementation. Six programmatic categories are included: Transportation, Public Utilities, Parks, Stormwater Utility and Neuse Basin Environmental, Housing, and General Public Improvements. The Phase I program,

encompassing the first five years of the CIP, includes schedules and budget estimates for projects approved by Council in previous editions of the CIP, as well as additional projects recommended as the result of planning processes. The first two years of the CIP serve as the basis for the capital portion of the annual operating budget and biannual budget projection. The Phase II program, spanning the second five year period, provides a more general review of projects and capital maintenance needs necessary for the continuation of services to the citizens of the City.

1.2 How the Comprehensive Plan is to be Used

This document has been designed for use by elected and appointed officials, City government administration and staff, residents, businesses and developers, and others with an interest in the future of Raleigh.

This Comprehensive Plan will be used to:

- Establish the vision for what Raleigh can achieve and aspires to achieve by 2030;
- Consolidate and coordinate in one comprehensive document the policies that relate to the City's physical and economic growth and development for all City departments;
- Guide decision-making and evaluation of zoning map and text amendments and discretionary development approvals;
- Coordinate capital investment by linking the Capital Improvement Program to the Comprehensive Plan; and
- Identify short to long-term strategic actions for the City to undertake. These actions will be monitored annually to ensure implementation and accountability.

The intent of this Plan is to make it easy to read and accessible to all. Key issues are described with data to make the purpose of policies more apparent. Graphics, maps, photos, and charts have been used to illustrate major points and improve the legibility of the text. Text boxes are used to present background information or highlight issues.

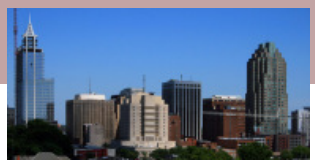
As the City's primary policy and planning document addressing the physical development of the City, the Comprehensive Plan is of particular interest to elected officials who must adopt it and fund its implementation, appointed officials who will use it as a guide to discretionary decisions, as well as City agency heads who are charged with its implementation and the update of other plans to conform with it.

The Comprehensive Plan is also an important source of information and guidance to private sector actors involved in development. The Land Use Element and Future Land Use Map provide clear guidance on preferred zoning classifications for particular properties, which will assist in the preparation of rezoning petitions. Many policies describe desired development outcomes, and consistency with these policies will be a factor in the review of many discretionary development applications such as conditional use rezoning petitions and preliminary site plans and subdivisions [(1)]. The Plan will help the private sector anticipate future public investment priorities. It will also bring more predictability to the zoning and development review and approval process for developers, property owners, and concerned citizens alike.

Finally, the Comprehensive Plan is also a resource for those who seek general information on how the City may change over the next 20 years, as well as those who want or need to understand how the City plans to respond to particular issues and problems.

The Comprehensive Plan's Future Land Use Map is incorporated as part of the document and provides the foundation for decisions regarding land use and zoning. This map appears as a poster-sized foldout. It is supplemented by the Growth Framework Map,

1 The City has available a stand-alone guide highlighting those policies most relevant to conditional-use zoning petitions and preliminary development applications.



which provides a vision for the City's future growth, and by numerous smaller maps that appear throughout the text of the Plan.

Vision, Policy, Action

At the heart of the Comprehensive Plan are six **Vision Themes**, described in greater detail in the Framework chapter, which were identified through the Civic Engagement process. These six themes constitute the goals of the plan and are referenced in all Plan Elements and every policy statement.

Advancing the six themes are the Plan's **Policies**. All policies respond to and fulfill one or more of the vision themes. Policies provide general guidance for decision-makers and help direct the City towards achieving the guiding themes. Policies are generally open ended as to time frame, as they provide ongoing direction. The policies in this document are organized by topics that indicate the subject being addressed.

Actions are specific measures that the City will undertake to implement the policies. All actions link back to one or more policies in the same section in which they appear, although not every policy has a corresponding action. While some actions are ongoing, most have an identifiable end state after which the action is considered complete. All actions are prioritized and assigned to different City agencies in the Action Plan and Matrix.

The policies and actions contained within the Comprehensive Plan have implications for the capital and operating budgets of the various departments of City government, and therefore are subject to the same budgetary constraints as any other long range plan. The number and type of actions implemented in any given year will be determined by budget considerations in addition to the priorities set forth in the Implementation Element.

Interpretation of Policies

Policies provide direction for decision-makers regarding particular courses of action to pursue. They are also intended to guide decisions regarding the review and approval of development proposals, and the consistency of petitions to amend the City's official zoning map.

Based on the specifics on a particular policy, it may apply exclusively to City actions, or it may set forth an expectation regarding private sector activities. The former policies are typically worded as an ongoing aspiration or intent, using active words such as "encourage", "promote", and "provide". The latter such policies are typically worded as a statement expressing a desired state or outcome, utilizing the word "should" to distinguish the policy statements in the Plan from the legal requirements found in the City's codes, where the word "shall" is the norm. In any specific case where the application of a Comprehensive Plan policy conflicts with a use, height, or density standard in the zoning and development code, the code standard will control.

Rezoning petitions, as well as certain development applications, are subject to review for consistency with the Comprehensive Plan. Consistency is relative and not absolute. It is not anticipated that every proposal and project will implement every Plan policy. Projects and proposals that implement one or more Plan policies and are not in conflict with the overall goals of the Plan and key policies as highlighted above will be judged to be consistent. Projects and proposals that are in conflict with the overall goals of the plan and contradict key policies will be judged to be inconsistent. More guidance on consistency determinations can be found in A.1 'Future Land Uses'.

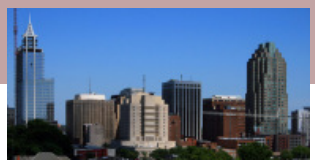
The Plan has been written to be free of internal conflicts, meaning that as a general rule, implementing one policy should not preclude the implementation of another. However, situations that are site- and/or project-specific may arise, where specific policies present competing objectives. Judgment will be required to balance the relative benefits and detriments of emphasizing one policy over another. When weighing competing objectives, greater weight should be given to achieving overall policy objectives on an area- and city-wide scale rather than a site-specific scale, and decision-makers should consider the cumulative impacts of making a number of similar decisions over time.

1.3 Organization of the Plan

Planning Raleigh 2030 is organized into citywide elements that follow this introductory chapter. The Plan begins with the Framework chapter that sets the stage for the Plan by summarizing the key citywide issues driving the need to update the Plan. It provides an overview of growth forecasts, defines the Vision and themes that serve as the overarching goals for this Plan, and describes the role of the Growth Framework and the Future Land Use Map, (the two poster-sized maps that provide the basis for the Comprehensive Plan's written recommendations).

The subsequent elements each contain a summary overview to provide context and key issues, followed by citywide policies and actions to address these issues. Tables, images, text boxes, and maps supplement the narrative content. Following the Framework, the Plan's topical citywide elements are:

- **Land Use:** The Land Use Element provides a framework for all development-related decisions. It is the critical foundation upon which all other elements are based, and includes the Future Land Use Map and related policies and actions to guide growth in a more compact and efficient pattern over the next 20 years.
- **Transportation:** The Transportation Element guides future development of the City's roads and highways, public transit systems, and bike and pedestrian networks to support the City's desired land uses and urban form; slows the growth of vehicle miles traveled; diversifies away from the use of single occupancy vehicles; and reduces air pollution and greenhouse gas emissions. The aim is to achieve a balanced and efficient transportation system for Raleigh's expanding populations and their corresponding needs.
- **Environmental Protection:** The Environmental Protection Element contains the policies and actions required for the City of Raleigh to preserve its natural resources and address challenges related to global climate change and the need to become more sustainable.
- **Economic Development:** The Economic Development Element includes recommendations to enhance Raleigh's competitive advantages and build on its culture of innovation. It addresses ways to revitalize aging neighborhood and commercial corridors, assist local entrepreneurs, provide job training and education, and harness the benefits of tourism, visitation, and the creative industries.
- **Housing:** The Housing Element includes recommendations on housing needs and encouraging homeownership, preserving existing affordable housing, creating new affordable housing, aging in place and universal access, and encouraging mixed-use development that includes affordable and workforce housing.
- **Parks, Recreation, and Open Space:** This Element addresses park planning and acquisition, greenway and trail planning and connectivity, open space conservation, capital improvement planning, and the preservation of special landscapes, among other issues.
- **Public Utilities:** The Public Utilities Element includes recommendations to ensure the long-term adequacy and safety of the drinking water supply, distribution system, and the wastewater system. It also addresses stormwater, energy, telecommunications, and utility extension policies.
- **Community Services and Facilities:** The Community Services and Facilities Element provides direction for government buildings, solid waste services, emergency services, schools, and libraries. A key focus for this element is managing limited resources, encouraging co-location, and supporting infill development.
- **Urban Design:** The Urban Design Element provides recommendations to address place-making and reinforcement of the design of Raleigh's neighborhoods, business districts, and commercial corridors; preserve important views; and provide the framework to guide the design of future development.
- **Historic Preservation:** The Historic Preservation Element includes guidance to preserve and promote the historic identity of Raleigh and sustain great historic communities



in which to live and work. The element includes recommendations to enhance regulatory tools and incentives, promote preservation, and improve coordination among role players with a stake in, and impact upon, preservation.

- **Arts and Culture:** The Arts and Culture Element provides a consolidated framework to support the arts in Raleigh, and makes recommendations to address funding to support public art, arts districts and other incentives to encourage artists, and cultural facilities expansion to serve the City's growing needs.
- **Regional and Inter-Jurisdictional Coordination:** This Element provides guidance for intergovernmental cooperation in planning and providing essential public services that impact the region as a whole, including transportation, land use and growth management, economic development, education, protection of natural resources, and public services.
- **Downtown Raleigh:** This elements contains policies and actions that are specific to the urban core of the City, addressing growth and development in Raleigh's traditional downtown and its growth as a mixed-use center.

The Plan also includes 22 **Area Plans** brought forward in revised form from the 1989 Plan. These plans were created through focused, community-based planning efforts. They include policies too detailed and area-specific to be included in a citywide Plan element. The decision of which plans, and which plan policies, to bring forward was based on an exhaustive policy audit of every adopted geographically-focused plan. All the Area Plans have been streamlined and rewritten to conform to the conventions used throughout the remainder of this Plan. Land Use recommendations from adopted Area Plans are reflected on the citywide Future Land Use Map.

The Plan's **Implementation Element** organizes the priorities, responsible agencies, and necessary partnerships to implement the Plan's policies and actions. It highlights the Capital Improvement Plan and other priorities required to implement the Plan's recommendations. Most significantly, this element includes a guide for keeping the Plan current and reporting progress toward reaching the Plan's Vision for 2030.

The Plan is supplemented by the detailed background studies in the City of Raleigh **Community Inventory Report**. The reader seeking more background information and data analysis is encouraged to refer to this valuable resource material, which is included under separate cover as Volume II.

1.4 Civic Engagement Process

Civic Engagement is a central component of the comprehensive planning process. The Department of City Planning has been the lead agency for the update of Raleigh's Comprehensive Plan, providing a wide variety of civic engagement opportunities and forums throughout the city. These have included public workshops, smaller scale community meetings, stakeholder roundtables, and online consultation. The centerpiece of the public outreach effort has been a series of nine citywide public workshops held in three rounds of three.

The first round of workshops was held in November 2007 to allow public participation in developing the vision and themes to guide the overall planning effort. These workshops were publicized widely in the local news media, including print, radio, and television, as well as the City's website. Close to 400 members of the community participated in the workshops, responding and reacting to an overview

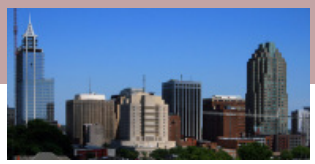
of existing conditions and an assessment of the "State of the City" in small group sessions. More than 150 people participated online in this round.

The second round of workshops was held in March 2008, as the effort moved from analysis to policy development. Approximately 250 people attended and participated in these workshops, responding to questionnaires regarding their values related to economic development and equity, growth management, housing, land use, transportation, neighborhood and community development, and sustainability. Another 30 completed the surveys online.

The final round of workshops was held in January 2009 to present a Public Review Draft of the Plan to the community. These workshops were conducted in an "open house" format, with opportunities to interact with City staff at booths addressing clusters of specific Plan Elements and topics. Approximately 230 members of the public attended these workshops. The entire Plan was made available for review and comment at the City's interactive website from December 1, 2008 through January 31, 2009. As part of this process, over 1,200 comments were received on the Public Review Draft of this document, with hundreds of substantive changes to the Plan being made in response. A substantial majority of comments were constructive and indicated support for the Plan.

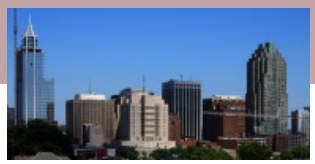
These city-wide forums have been supplemented by a number of other civic engagement opportunities:

- **Big Ideas Week** was held in April 2008 in venues ranging from a tavern at Moore Square to Marbles Kid's Museum. Approximately 125 people were involved, and came up with creative and transformative ideas at brainstorming sessions about topics such as a World-Class Welcome, City Places for People, Transit for All, Capital Boulevard Redesigned for Living, and Downtown 24/7.
- **Kids City** was held in May 2008. Approximately 600 people (children 10 and under with supervising adults) participated in constructing a city. The children used recycled boxes, construction paper, string, tape, crayons, markers, and other creative tools to construct their ideal city on a grid that spread out over the museum's first floor. The grid included streets and other transit corridors, greenways, downtown, suburbs, small town, and farm land. Over the course of the day, Raleigh grew from a small 18th century 'planned' capital city to a 21st century metro area.
- Two **public workshops** were held at the Urban Design Center in June 2008 to discuss Raleigh's downtown. They attracted more than 100 participants: discussing issues and concerns at the first workshop; and potential policies, programs, and projects at the second workshop.
- In addition, **roundtable discussions** for topic- and issue-focused stakeholders were also held throughout the process to address specific issues and opportunities facing the City. Fourteen such forums were conducted, addressing the Arts Commission, Appearance Commission, Environmental Advisory Board, Affordable Housing, Environmental Sustainability, Developers, Homebuilders, the Greater Raleigh Chamber of Commerce, Cooperating Raleigh Colleges, Raleigh Historic Districts Commission, the Hillsborough Street Partnership, and Complete Streets advocates, among others.
- The City held **community meetings** and input sessions with Citizens Advisory Councils at their invitation. A total of six such sessions were held, the largest being a joint meeting involving the partnership of the five CACs comprising the Southeast quadrant of Raleigh, which drew about 150 participants.
- Following the release of the Public Review Draft of the Comprehensive Plan, a total of 14 **public briefings**, consisting of a presentation followed by questions and answers, were held to present the Draft. Three of these were evening sessions, while the remainder also served as briefings to appointed boards and commissions. All were open to the general public.
- In addition, the City developed an **interactive website** for the plan update including a comment functionality allowing participants to enter comments on draft documents online and view others' comments. Among the



documents that were opened for online review and comment were the summary reports for the November and March workshops, the City of Raleigh Community Inventory Report, and the Public Review Draft of the Comprehensive Plan.

Many residents, governmental agencies, businesses, institutions, and leaders have helped shape this Plan. Their continued commitment will be needed to carry the Plan forward in the coming years to provide a more prosperous and sustainable city for subsequent generations.



2 Framework

The Framework chapter provides the context for the rest of the Comprehensive Plan by describing the key trends and issues that undergird the Plan's recommendations. These issues include: addressing the City's expansive growth; the need to better coordinate land use and transportation decision-making; expanding housing choices and the affordable housing supply; ensuring sufficient water resources to support a growing city and region; expanding economic opportunity for all of Raleigh; investing in transit; and preserving and improving the City's natural resources.

The Framework chapter also includes a description of Raleigh's growth forecasts. The forecasts are expressed in terms of projected jobs and households for the City to the year 2030. It also provides the City's Vision Statement and six vision themes that provide the frame for the Comprehensive Plan and serve as its overarching goals. Finally, the Framework chapter describes the Growth Framework Map and the Future Land Use Map.

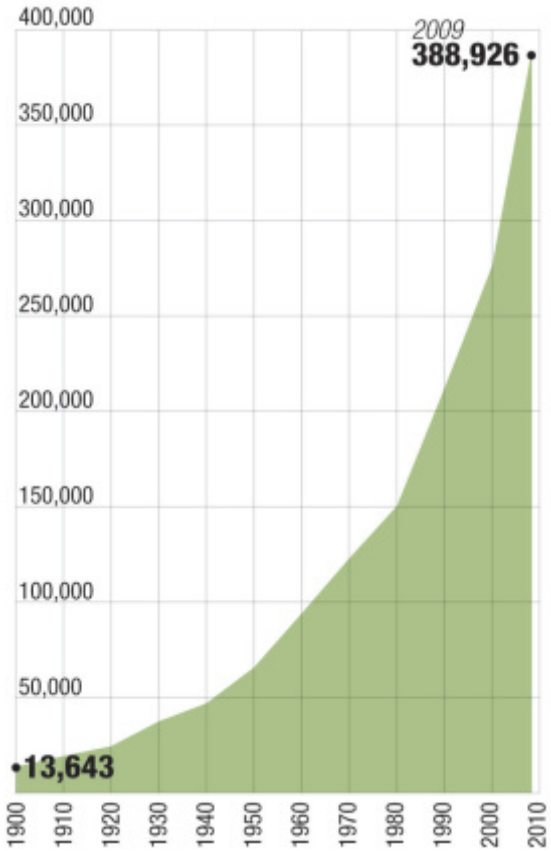
2.1 Planning Context and Key Issues

A critical part of the Comprehensive Plan Update process has been an analysis of the current and future state of the City. To accomplish this, a **Community Inventory Report** was compiled at the start of the planning process to provide the factual and analytical foundation for the Comprehensive Plan Update. The Community Inventory Report focuses on the issues facing the City today and through the year 2030. Each topical chapter presents an analysis of existing conditions and trends, identifies key issues and challenges, and highlights potential strategies to address the issues. To make the Plan as reader-friendly as possible, detailed findings from the 400-page Community Inventory Report have not been included in the text and narrative of the Comprehensive Plan's recommendations in this volume. The reader seeking more background information and data analysis is encouraged to refer to this valuable resource material, which is included under separate cover as Volume II. Key findings on issues and trends from the Community Inventory Report are summarized below.

Demographic and Household Trends

From its founding as the State Capital in 1792, the City of Raleigh has been on a growth path for more than 200 years. From 1900 to 2000, the City of Raleigh grew from a small town of fewer than 14,000 people to a city of more than 270,000. The City added population in every census year, with an annualized growth rate ranging from 2.0 to 4.3 percent. The annualized growth rate was 3.5 percent in the 1980s, 2.7 percent in the 1990s, and according to the City's estimates, recent growth has been close to the top of this range, at an average of 4.2 percent per annum. As of summer 2009, the City's population was about 389,000, up 112,000 from just 2000.

Population Growth 1900-2009



Although population has increased, population density decreased from about 8,000 persons per square mile in 1900 to about 2,800 persons per square mile by 1960, remaining at that general level ever since. This is largely due to post-war suburbanization, annexation, and expanding city limits.

The most prevalent type of housing within Raleigh is single-family detached housing accounting for 48 percent of the total housing stock. Less than 6 percent of the City's housing stock was built prior to 1950, and about one-fifth of the units in existence in 2008 were developed since the turn of the 21st century. A key part of the overall image of the City is defined by the neighborhoods where the pre-1950s era housing is located, and maintaining the viability of this older stock is important to maintaining the City's character.

Homeownership growth in the City has mirrored national trends, having risen from 47 percent in 1990 to nearly 54 percent as of 2006. However, this is below the national average of 67 percent, likely due to the large amount of multifamily rental housing in the City, and its large student and younger population. Raleigh's population is projected by the Capital Area Metropolitan Planning Organization (CAMPO) to grow from a 2005 total of 370,000 to about 580,000 in 2030, and nearly 600,000 by 2035, an increase of about 60 percent. Greater growth is possible: an analysis of the land capacity within the City's current jurisdiction, and under current zoning, found the potential for a population of 670,000 within the jurisdictional boundary.

Land Use and Zoning

The land use pattern established inside the Beltline before the 1960s is largely single-family in character with small neighborhood commercial centers outside of downtown. Interconnected curvilinear grids are a common street pattern in many of these areas. Duplex and small multi-family dwellings are often found mixed into otherwise single-family neighborhoods. Cameron Village, which opened in 1949 as one of the first shopping centers in the nation outside of a downtown central business district (CBD), remains the largest of the inside the Beltline retail centers. Medium to high density residential and office land uses concentrate around this retail center.

The land use pattern outside the Beltline is characterized by residential neighborhoods on loosely connected and cul-de-sac streets. Land uses tend to be separated by buffer yards rather than by using design to transition in scale and use. Multi-family developments are plentiful but tend to be organized as self-contained pods with internal, private circulation systems intermingled with parking areas.

Both the single-family and multi-family areas lack the street connectivity that helps facilitate walking, which in turn funnels all car trips to major thoroughfares even for local trips such as grocery shopping, and presents challenges to first responders in emergencies.

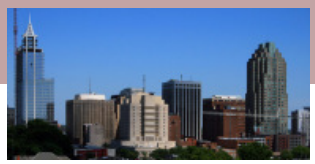
With rising levels of congestion and worsening air quality, these development patterns will need to adapt if the City is to be able to continue to provide for a high quality lifestyle and sustainable development.

Economic Development and Employment Trends

The economic development analysis provides valuable insight into the City's employment base and economic strengths and weaknesses. It notes that within the region as a whole, Raleigh's economy has shifted to one that is more technology-based and less reliant on government and manufacturing. The agricultural and mining industries are two other sectors that have registered losses in Raleigh. The region as a whole, however, is recognized as an economic powerhouse for biotech innovations, medical breakthroughs, technological advancements, state-of-the-art educational institutions, and advanced research—all pivotal factors in its economic performance, with Raleigh partaking significantly in these successes.

Housing and Neighborhoods

There is a need for Raleigh to increase housing opportunities for existing and future residents and to create diverse neighborhoods of choice that attract



new investment without excluding residents due to housing costs or discriminatory practices. The coordination and funding of housing and neighborhood planning activities and programs across several City departments will be a significant challenge for Raleigh during the next 20 years.

Transportation

The City faces a number of challenges related to planning for and investing in a multi-modal transportation system. Expanding transit will be key to the future viability, sustainability, and livability of the City and region. Additional investments in the greenway system specifically, and pedestrian and bicycle infrastructure generally, are also important. Roadway capacity and connectivity, providing mobility for automobiles and direct routes for pedestrians, is also important as growth continues and traffic demands increase.

Water

The City's public utilities are regional in nature. Merged utilities service all the municipalities in eastern Wake County. Further, the Towns of Fuquay-Varina and Holly Springs periodically rely on the City for potable water supply. The City also has or is planning water interconnects with the Town of Cary, the City of Durham, and Johnston County. From a wastewater standpoint, during extreme low flow events, the City's Neuse River Wastewater Treatment Plant (WWTP) discharge can be up to 40 percent of the river flow at the downstream water supply intake for Johnston County. It is obvious that planning the infrastructure of the water system must be done with the perspective of the entire region in mind. There is a need to avail all of the opportunities to make additional water system connections with neighboring systems for assistance during drought and other emergency situations. Currently, State inter-basin transfer regulations constrain the ability to pursue new water supplies outside the immediate area, and reuse regulations also make it difficult to access reuse water as a resource to the fullest extent, as reuse water is regulated as wastewater (although the regulatory environment is evolving).

Environmental Resources

The City needs to move ahead in promoting methods of development and conservation that improve the long-term health of human and ecological systems. This should include sustainability efforts such as water conservation, energy conservation, recycling and solid waste management, and environmentally sensitive building and development practices, e.g., green building, low-impact development, and increased protection of natural resources. With air and water quality already impaired, both existing developed areas and new developments must find ways to lessen their impact if growth is to be accommodated without significant increases in environmental degradation.

Parks, Recreation, and Greenways

The City of Raleigh has an extensive parks, recreation, and greenway system that encompasses approximately 8,800 acres of land (by contrast, there are approximately 90,000 acres in Raleigh's municipal boundaries). As the City grows, this inventory of open spaces and active living facilities will also need to grow to maintain desired levels of service. Acquisition priorities and programming will have to strike a balance between recreation and leisure needs and efforts to promote the preservation of non-programmed open space and green infrastructure essential to addressing the environmental impacts of growth and development. Ideally, both goals can work in concert.

Community Facilities

A community facility is established primarily for the benefit and service of the population of the community in which it is located. Uses include but are not limited to schools, community centers, aquatic facilities, libraries, police stations, fire stations, and government buildings. The demand for new schools, based on the rapid growth in school-aged population, is outpacing the County's ability to plan for and build schools. Other community facilities also must be addressed to keep pace with development.

Historic Resources

In its built environment, Raleigh provides a continuous experience of its evolving character that visually documents architectural resources from virtually every era of its development. Its growth and history can be traced through Joel Lane's 1767 residence, the 1792 William Christmas plan, its early infrastructure-building period between 1875 and 1900, its growth from a town to a city between 1900 and 1920, its boom years in the 1920s, the depression years that followed and the post WW-II recovery years until 1965. Raleigh was a small town for much of its history; its tremendous growth occurred during the last 50 years, and predominantly during the last 25. As a result, Raleigh's historic fabric is a scarce resource requiring special effort to ensure its preservation.

2.2 Growth Forecasts

Past Growth Trends

The 20th century saw the City of Raleigh grow from a small town of fewer than 14,000 people to a city of more than 380,000. The City added population in every census year, with an annualized growth rate ranging from 2.0 to 4.3 percent. Growth is nothing new to Raleigh; however, the long-term exponential growth trend of the City means that the magnitude of growth in terms of total new population added has gotten larger each decade. Historical growth trends are shown in **Table F-1**.

While nearly every part of Raleigh has experienced some growth, much of the City's recent residential growth has been concentrated in three areas with the greatest concentrations of vacant land. These include the northwestern and northeastern fringe areas, which include large-scale developments such as Brier Creek and Wakefield; and to a lesser extent southeast Raleigh. These trends are illustrated on **Map F-1**.

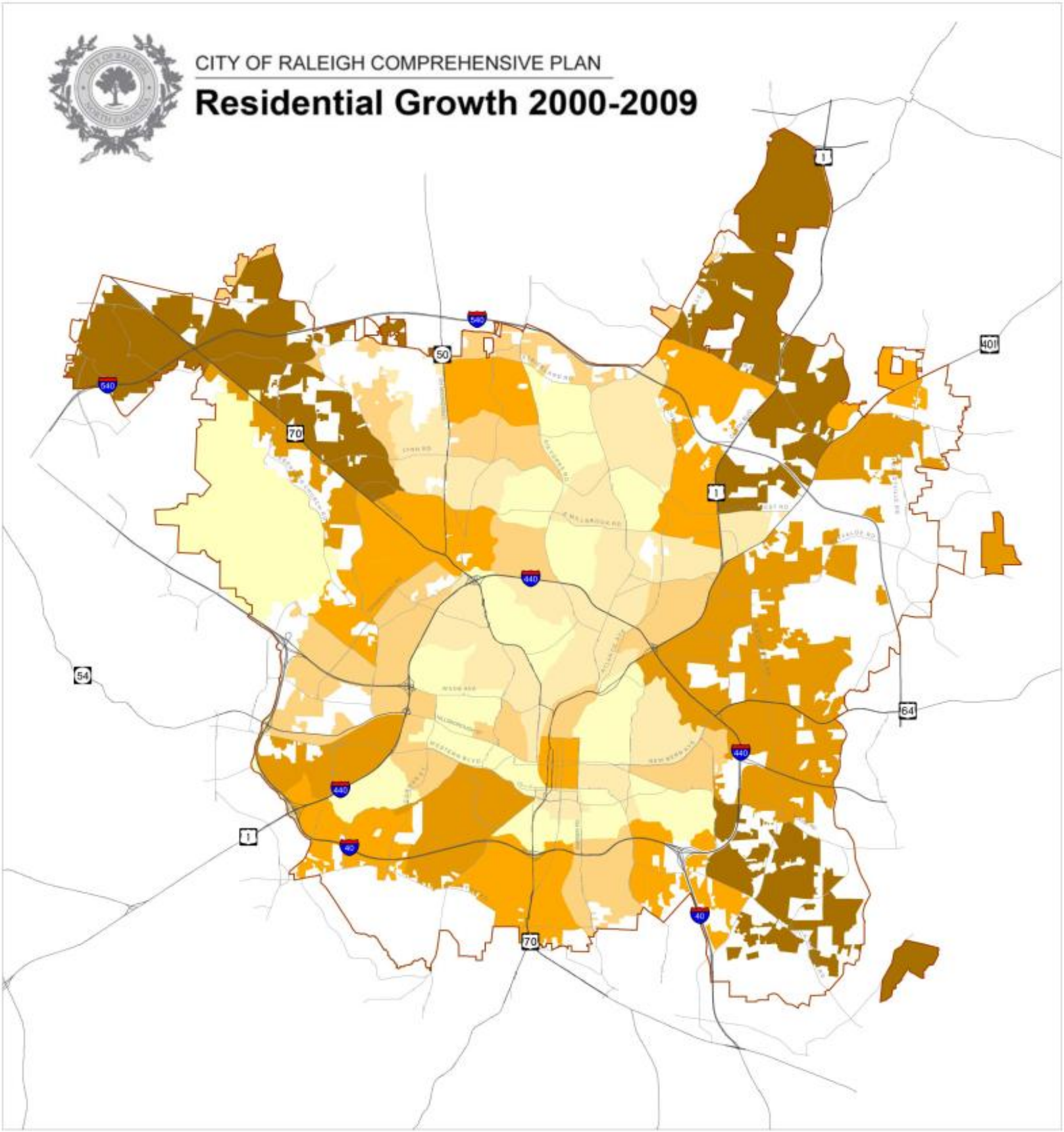
Table F-1 Population Growth, Land Area, and Density, City of Raleigh, 1900 - 2007

Year	Population	APGR*	Land Area	Population Density
1900	13,643	--	1.76	7,765
1910	19,218	3.5%	4.03	4,773
1920	24,418	2.4%	6.96	3,508
1930	37,379	4.3%	7.25	5,153
1940	46,879	2.3%	7.25	6,463
1950	65,679	3.4%	10.88	6,035
1960	93,931	3.6%	33.67	2,790
1970	122,830	2.7%	44.93	2,734
1980	150,255	2.0%	55.17	2,724
1990	212,092	3.5%	91.40	2,321
2000	276,093	2.7%	118.71	2,326
2007	367,995	4.2%	139.92	2,630

Source: U.S. Census Bureau, Raleigh Department of City Planning
(*Annualized Percent Growth Rate)

CITY OF RALEIGH COMPREHENSIVE PLAN

Residential Growth 2000-2009



MAP F-1

Units added between 2000 & 2009

- Less than 50
- 50 - 200
- 201 - 500
- 501 - 1000
- 1001 - 3000
- 3001 - 6750

ETJ

Highway

Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division

Future Growth

Population and Households

Raleigh's population is projected by the Capital Area Metropolitan Planning Organization (CAMPO) to grow from a 2005 total of 370,000 to about 580,000 in 2030, and nearly 600,000 by 2035, an increase of about 60 percent. The entire county is expected to more than double in population over the same time period. These growth projects are illustrated in **Figure F-1**.

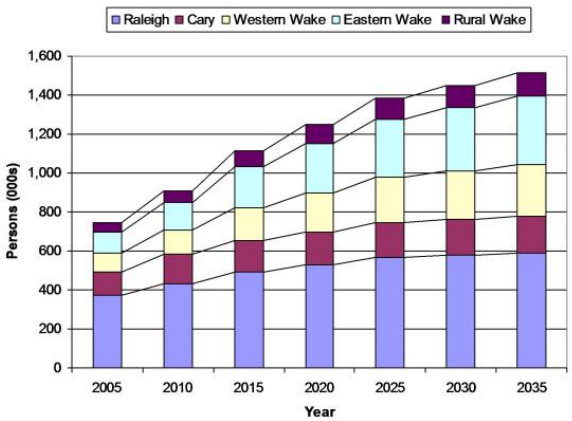
The household projections for Raleigh and Wake County mirror the population projections. Raleigh's total number of households is projected to grow from a 2005 total of 150,000 to about 240,000 by 2035, an increase of about 60 percent.

These growth forecasts, if realized, would correspond to a significant *decrease* in the rate of the City's growth, although the absolute growth of about 100,000 per decade is comparable to the past two decades. Analysis of the City's land capacity has found no physical impediment to reaching a population of 670,000 by 2030 within the City's current jurisdiction, based on current zoning and assuming development takes place mostly on vacant land (note that the CAMPO forecast includes land outside of the City's jurisdiction in the future annexation areas, or Urban Services Areas). Further, if Raleigh were to continue to grow at its historic 100-year average of 3.2 percent per year, its population would reach 800,000 by 2030. For these reasons, the CAMPO forecasts are considered by the City to be conservative.

Jobs

The Capital Area Metropolitan Planning Organization (CAMPO) has issued employment projections through 2035 for the broader Triangle Region. Employment in Raleigh is expected to increase from about 260,000 jobs in 2005 to 430,000 by 2035, an increase of 65 percent (or an average of 2.2 percent annually). Over the same time period, Wake County employment is projected to grow from 433,000 to 850,000 jobs, nearly doubling. These figures are consistent with population and household growth for the same time period. Raleigh provides the majority of the Raleigh/Cary metropolitan area's employment, though growth will continue to spread into Cary, smaller towns, and unincorporated areas of Wake County as well as neighboring counties.

Figure F-1 Population Projections, Wake County and Municipal Areas, 2005 – 2035

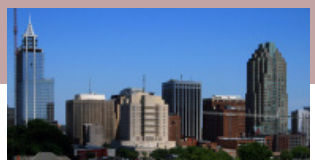


Source: Capital Area Metropolitan Planning Organization

Future Growth and Development Capacity

According to State law, Raleigh can exercise "extra-territorial jurisdiction" over development and zoning decisions for land areas up to three miles beyond its current boundaries, subject to County approval. As of 2008, within the City's current limits and its extra-territorial jurisdiction (ETJ), approximately 18,700 acres are available as developable land—defined as vacant parcels and residentially-zoned parcels greater than three acres, outside of a mapped floodplain. Approximately 68 percent (about 12,800 acres) of this developable land lies outside of the City's current limits but within its ETJ.

Based on recent development trends and assumptions that future densities will replicate maximum zoning allowances, Raleigh's developable land area could potentially yield 120,000 dwelling units and 87 million square feet of non-residential development. Based on a straight line projection of recent absorption rates, it may take about 20 years for this amount of development capacity to be absorbed. However, this 20-year development



capacity within the City's ETJ does not take into account potential infill and redevelopment within older portions of Raleigh or zoning changes that could increase densities.

For more information on population, household, and employment growth and development capacity, please refer to the City of Raleigh Community Inventory Report.

2.3 Vision and Themes

The issues identified above and public feedback from workshops helped develop a vision for Raleigh's future that provides the framework for the development of the Comprehensive Plan. The Vision Statement is supplemented by six themes that serve as the Plan's goals.

Raleigh's Vision Statement for 2030

Raleigh will be a city that values and fosters development that provides economic prosperity, housing opportunity, and equity for all Raleigh residents. Raleigh will embody environmental conservation, energy efficiency, and sustainable development. Raleigh will be a great place to live with distinctive and attractive neighborhoods, plentiful parks and green spaces, quality schools and educational opportunities, and a vibrant downtown.

Vision Themes

Six key themes reinforce Raleigh's Vision for 2030 and serve as Planning Raleigh 2030's overall goals: *Economic Prosperity and Equity; Expanding Housing Choices; Managing Our Growth; Coordinating Land Use and Transportation; Greenprint Raleigh—Sustainable Development;* and *Growing Successful Neighborhoods and Communities*. They express and reinforce the major concerns the Plan seeks to address and the issues raised by the public.

Economic Prosperity and Equity

Raleigh will embrace and value diversity, innovation, and equity so that there is a high level of opportunity and quality of life for all residents. All areas of the City and its residents will prosper from the City's economic expansion. Raleigh will be nationally known for its cluster of high-tech, clean-tech, and green-tech research and development firms based on cooperative relationships among local universities, government, and private firms. Raleigh's skilled labor force will attract businesses that take advantage of the highly educated and technically oriented residents, which in turn will continue to fuel the development of quality residential and employment opportunities. Expanded educational and training programs will provide the opportunity for all of Raleigh's population to participate in the expanding economy. We will also embrace creative economic sectors, and our city will be enlivened with nationally-regarded arts groups, performance spaces, and residents employed in creative occupations that will enhance our economy, community, and the quality of our lives.

Expanding Housing Choices

Raleigh will have an expanded supply of affordable and workforce housing options that provide housing opportunities for all segments of our population. This expanded supply of decent affordable housing will provide stability for families, improve opportunities for education and career advancement, and reduce homelessness for low and moderate income households.

Managing Our Growth

Raleigh will foster quality growth through more integrated land uses, alternative transportation modes, green building technologies and development practices, open space acquisition, and resource conservation. We will manage growth and provide desirable spaces and places to live, work, and play while also cooperating with other jurisdictions in the region. Adequate infrastructure will be planned and in place as development comes on line.

Coordinating Land Use and Transportation

Raleigh will coordinate its transportation investments with desired land use patterns to plan more effectively for housing, employment and retail uses, and for public services. Higher density residential and mixed-use development will provide the land use

pattern needed to support successful new local and regional public transit services. We will also have additional bicycle and pedestrian facilities and roadways that better serve us all.

Greenprint Raleigh—Sustainable Development

Raleigh will be nationally recognized as a model green city. Environmental sustainability and stewardship—the protection and wise use of resources for existing residents and future generations—will be institutionalized. Individuals, institutions, businesses, and government will work together and enhance the natural environment through policies, decisions, and investments. The City will significantly improve its environmental policy framework and land management practices; protect sensitive lands; and preserve water, air, and land resources.

Growing Successful Neighborhoods and Communities

Growth and new development will be accommodated within Raleigh through creative solutions that conserve our unique neighborhoods while allowing for growth and expanding our local businesses. The City will have healthy and safe older neighborhoods that are conserved and enhanced through careful infill development that complements existing character and responds to natural features. Places of historic and architectural significance will be protected. Newly developed areas will be diverse, walkable neighborhoods providing convenient access to open space, community services, retail, and employment.

2.4 Framing Maps

Taken together, the context and key issues, growth forecasts, and vision and themes provide a foundation for planning the future of Raleigh. The Plan Elements following the Framework chapter examine these conditions in much more detail and provide the roadmap to addressing Raleigh's growth and development. The text of these elements is supplemented by two maps providing essential land use and development guidance. The Growth Framework Map shows where the City will encourage infill and mixed-use development, and defines priority corridors based on transportation function and relationship to adjacent land uses. This map is fully described in this section. It sets forth a vision for how the City should grow and also has implications for the management of transportation corridors and their relationship to adjacent land uses. The Future Land Use Map is new to the 2030 Comprehensive Plan and shows the general character and distribution of recommended and planned uses across the City. This map carries the same legal weight as the text of the Comprehensive Plan. It is introduced in this Framework chapter and its use and application are described in Element A: 'Land Use'.

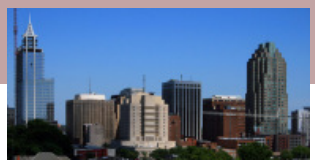
Growth Framework Map

The Growth Framework Map represents a vision for accommodating the next 120,000 households and 170,000 jobs anticipated for Raleigh by 2030. Under current zoning and assuming largely greenfield development, this amount of growth could be entirely accommodated within the City's jurisdiction, but would result in a centerless and undifferentiated pattern of sprawling development. The Growth Framework Map seeks to redirect a full 60 percent of this future growth into downtown and a series of seven city growth centers, 12 transit-oriented centers, and over 40 mixed-use community centers, connected via a network of parkways, multimodal corridors, and urban streets.

Growth Framework Elements: Centers

The new Growth Framework proposes a simplified hierarchy of four types of centers:

1. *Downtown Regional Center*: Encompassing the existing and future limits of the City's urban core, stretching south towards I-40 and north along Capital Boulevard, the Downtown Regional Center is where the most intense growth and highest levels of transit, bicycle, and pedestrian access are contemplated. Consistent with the eastward shift of regional growth patterns, the Downtown Regional Center emerges as a true hub for a rapidly growing region, served by highways, rail transit, high-speed intercity rail, and local and express bus.



2. *City Growth Centers:* Located throughout the City and along major urban and transit corridors, these centers provide significant opportunities for new residential and economic development and redevelopment. City Growth Centers are generally in locations with combined highway and targeted transit access, such as key interchanges along the Beltline and Outer Loop. These centers include Crabtree Valley; an expanded "Midtown" linking North Hills with the Highwoods office park and stretching south of the Beltline to embrace significant redevelopment opportunities at the terminus of Six Forks Road; Triangle Town Center; and Brier Creek. The Cameron Village area is also designated as a City Growth Center.
3. *Transit-Oriented Centers:* Located at station areas outside of the Downtown Regional Center where rail transit stops are proposed, these centers are programmed for increased density and special design standards promoting enhanced pedestrian mobility and reduced parking requirements. There is some overlap with City Growth Centers.
4. *Mixed-use Community Centers:* Located generally at places where transit and urban corridors intersect, and where there is an existing base of mixed-uses, these centers are targeted for infill development and improvements to urban design and connectivity intended to retrofit them over time as more integrated, walkable centers. Examples include the Six Forks Station area, the intersections where Millbrook crosses major north-south corridors, and various aging shopping areas in Southwest and Southeast Raleigh along New Bern Avenue and Western Boulevard corridors.

Growth Framework Element: Corridors

A simple hierarchy of corridors is proposed: highway, urban, multi-modal and parkway:

1. *Highway corridors* correspond to limited access, grade-separated roadways designed to accommodate high-volume and higher-speed regional traffic flows. These include existing highways such as Interstates 40, 440, and 540; upgraded federal and state highways such as the U.S. 64 bypass; and roadways programmed for such improvements in the future, such as U.S. 1 north of I-540. Long-standing policies, continued under this Plan and implemented through the use of Special Highway Overlay Districts (or SHODs), call for these corridors to be separated from adjacent uses by wide, forested evergreen buffers, and for off-premises signs such as billboards to be prohibited. Transit services along highways would generally consist of express bus service and, in the future, incentives for car pooling.

Interstate 440 with development behind a SHOD forested buffer.

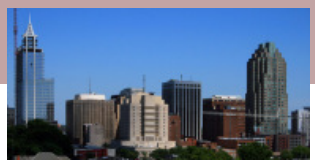
2. *Urban corridors* are characterized by denser residential and commercial development, with buildings brought forward to meet the street and sidewalk, and parking areas located to the side and/or rear of buildings. Parking between streets and buildings is strongly discouraged. Architecture is used to frame the public realm, and urban design rather than landscaped buffers is preferred as a means of integrating adjacent development which differs in use or scale. Urban corridors also generally host at least local bus service. An example of such a corridor is Peace Street.

Urban Corridors on Glenwood Avenue and at North Hills

3. *Multi-modal corridors* are similar to urban corridors in terms of development pattern and landscape approach, but are targeted for a higher level of transit service such as enhanced bus, express bus, bus rapid transit, or streetcar. Some of these corridors are high-ridership routes on the CAT system, some have been identified as corridors in the Strategic Transit Advisory Commission (STAC) plan, and others have been identified to connect identified centers. In addition, many of these corridors have been highlighted for bicycle improvements in the City's Bicycle Master Plan. Based on the level of transit service provided, development intensities are expected to be higher, and parking requirements to be lower, with a greater emphasis on shared parking. Pedestrian amenities within developments along transit corridors should be built to a higher level than other corridors. An example of such a corridor is Six Forks Road.

Multimodal Corridors

4. *Parkway corridors* are suburban roadways characterized by thick tree canopies and abundant landscaping. Buildings are generally set back further from the street, and pedestrian and transit access are not as prominent as on other corridors, although bus service may be present along parkways. Adjoining land uses



are primarily residential with locally-serving commercial. An example of such a corridor is Lynn Road.

Parkway Corridors

Growth Framework Map: Usage and Applicability

The elements of the Growth Framework Map described above do not carry specific policy implications and only acquire the force of policy via references to the map in the policy statements of the Plan Elements. The intent is to implement the vision for growth and connectivity illustrated on the Map through more specific policy tools, such as the Future Land Use Map; and through amendments to the City's ordinances, such as the adoption of special overlay districts to implement the preferred development pattern along particular segments of designated Multi-modal, Urban, and Parkway corridors. The center designations do not carry with them any recommendations for specific uses, heights, or densities for particular parcels, and will not be used by the City as part of the review of any zoning map amendment or development plan.

Likewise, the corridor designations correspond to the general character and usage of corridors, but the implementation of the corridor vision will include a more detailed specific examination of the unique character of specific corridor segments.

Future Land Use Map

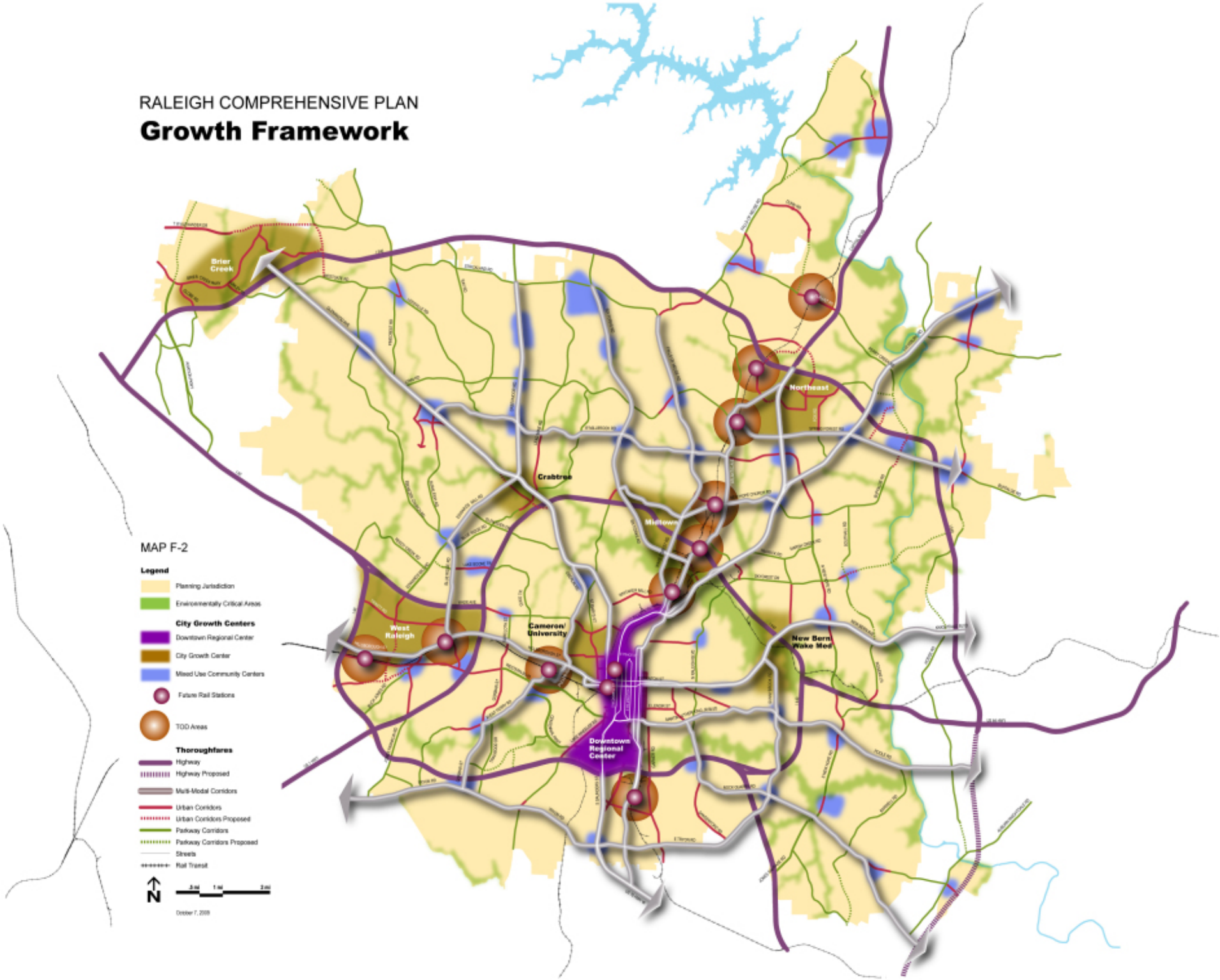
The Future Land Use Map is the centerpiece of the Land Use Element of the Comprehensive Plan and the primary means to shape the City's future growth. It sets forth the planned development pattern of the City from now until 2030.

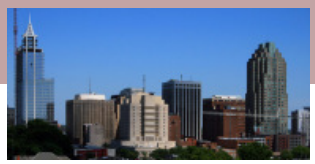
The Future Land Use Map is a policy tool designed to guide future decision-making. It provides the geographic framework for the City's land use and zoning policies. The Future Land Use Map is used alongside the Plan's written policies to determine whether specific petitions for rezoning are consistent with the Plan. It is also used to develop geographically-detailed projections for the future growth of the City, which in turn will be used to plan for roads, transit, parks, utilities, and community facilities such as police stations and libraries.

A total of 19 land use categories are designated on the Future Land Use Map, including: five residential categories; five mixed use categories; three employment categories; two public and institutional categories; two park and open space categories; and two special categories. These categories and the application and use of the Future Land Use Map are explained in the Land Use Element.

RALEIGH COMPREHENSIVE PLAN

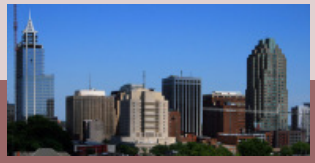
Growth Framework





2.5 The Power of Planning

Given the extensive engagement of the citizenry in the update of this Comprehensive Plan and widespread support of its key goals, the impact of the Plan and the plan-making process will have far-reaching effects on everyone who lives or works in Raleigh. It will affect where and how development occurs; where green space, recreation facilities, and parks are improved; how enhanced transit, bicycle, and pedestrian facilities are implemented, and how neighborhoods are conserved and enhanced as desirable places to live. It is also hoped that it will serve as a model for future plans, both large and small, undertaken by the City of Raleigh.



Land Use

Element A: Land Use

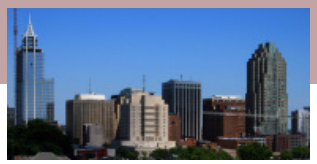
Land use defines a community's physical form and function and provides a framework for all infrastructure related decisions, including transportation, economic development, public utilities, community facilities, parks, and environmental protection. The Land Use Element of the Comprehensive Plan provides the critical foundation upon which all other elements are based. It includes a Future Land Use Map and related policies and actions to guide growth and development in a more compact and efficient pattern over the next 20 years. This element also includes a summary of existing land uses and zoning, future growth projections and development capacity, and annexation and jurisdictional boundaries. The Land Use and Zoning chapter of the Community Inventory Report provides additional land use data and analysis.

Raleigh's predominant pattern of land use since 1950 has been one of low-density development with residential uses segregated from non-residential uses. This suburban development pattern occurred beyond the inner-ring suburbs surrounding downtown Raleigh in tandem with highway expansion and infrastructure extensions, and attracted investment away from downtown Raleigh and older neighborhoods. Since 1980, Raleigh's auto-dependent suburban growth pattern has become more prevalent and continued further beyond the Beltline (I-440), the first interstate highway spur around City. From 1980 to 2000, the City's population more than doubled from about 150,000 to 370,000. During the same period, the City's land area almost tripled in size from about 55 to 140 square miles. Clearly, the City's land area is growing even faster than its population.

Existing Land Use and Zoning

Raleigh's existing land use patterns are illustrated on **Map LU-1: Existing Land Use**. Low density, single-family development is the dominant land use in Raleigh, representing 34,000 acres or 34 percent of the City's total land area. This use, more than any other, drives land consumption patterns in Raleigh and requires continued investment in road capacity and water and sewer infrastructure. The second largest land use category is vacant land, which accounts for 20,000 acres or 20 percent of the City's total land area. One of Raleigh's major land use challenges will be to shape the development and conservation of this significant available land resource. The third largest land use is parks and open space at 11 percent of the City's land area; however, nearly half of this amount is located within William B. Umstead State Park. The fourth largest land use at eight percent includes institutional uses—State, County, and City government, universities, and hospitals—highlighting the need to carefully coordinate the growth of these large employment sectors. Lastly, the fifth most substantial land use is commercial, both retail and office uses, which makes up seven percent of Raleigh. The majority of the City's commercial uses are located within mixed-use activity centers—downtown Raleigh, North Hills, and Crabtree Valley—and along commercial corridors. Other land uses in the City include industrial, multi-family residential, and infrastructure.

Raleigh's Zoning Ordinance divides the entirety of the City's planning jurisdiction into zoning districts, each with their own standards for use, bulk, and other site development regulations. **Map LU-2** shows Raleigh's existing zoning. As of 2008, over two-thirds of Raleigh's jurisdictional land area is residentially zoned, and approximately 63 percent of this area is zoned for single-family development only. Approximately one-third of the City is zoned for non-residential land uses, although nearly all of these districts also permit residential development. For example, office and institution (O&I) zoning represents 22 percent of non-residential zoning but permits medium- and high-density residential uses. Similarly, approximately 10 percent of the City is zoned for industrial uses but only four percent contains industrial development, as office and retail uses are also permitted as-of-right within industrially zoned land. One of Raleigh's key issues is that its zoning ordinance largely follows a "pyramid" structure, in which each more permissive zone allows the uses permitted in more restrictive zones. This structure makes it very difficult for the City to forecast future development patterns based on zoning, since a wide variety of residential and non-residential uses are permitted. Conditional use zoning—a special tool that allows landowners



seeking a rezoning to add conditions over and above the underlying zoning standards—applies to 16 percent of the City's land area. These additional standards are not part of the zoning ordinance, but are kept as individual case files associated with particular rezonings. They do not allow any uses as-of-right but instead allow uses conditioned on additional standards. Overall, the City's zoning ordinance makes it difficult for the general public to understand their property rights and use the zoning regulations with ease.

Table LU-1 Land Use Allocation, City of Raleigh Planning Jurisdiction

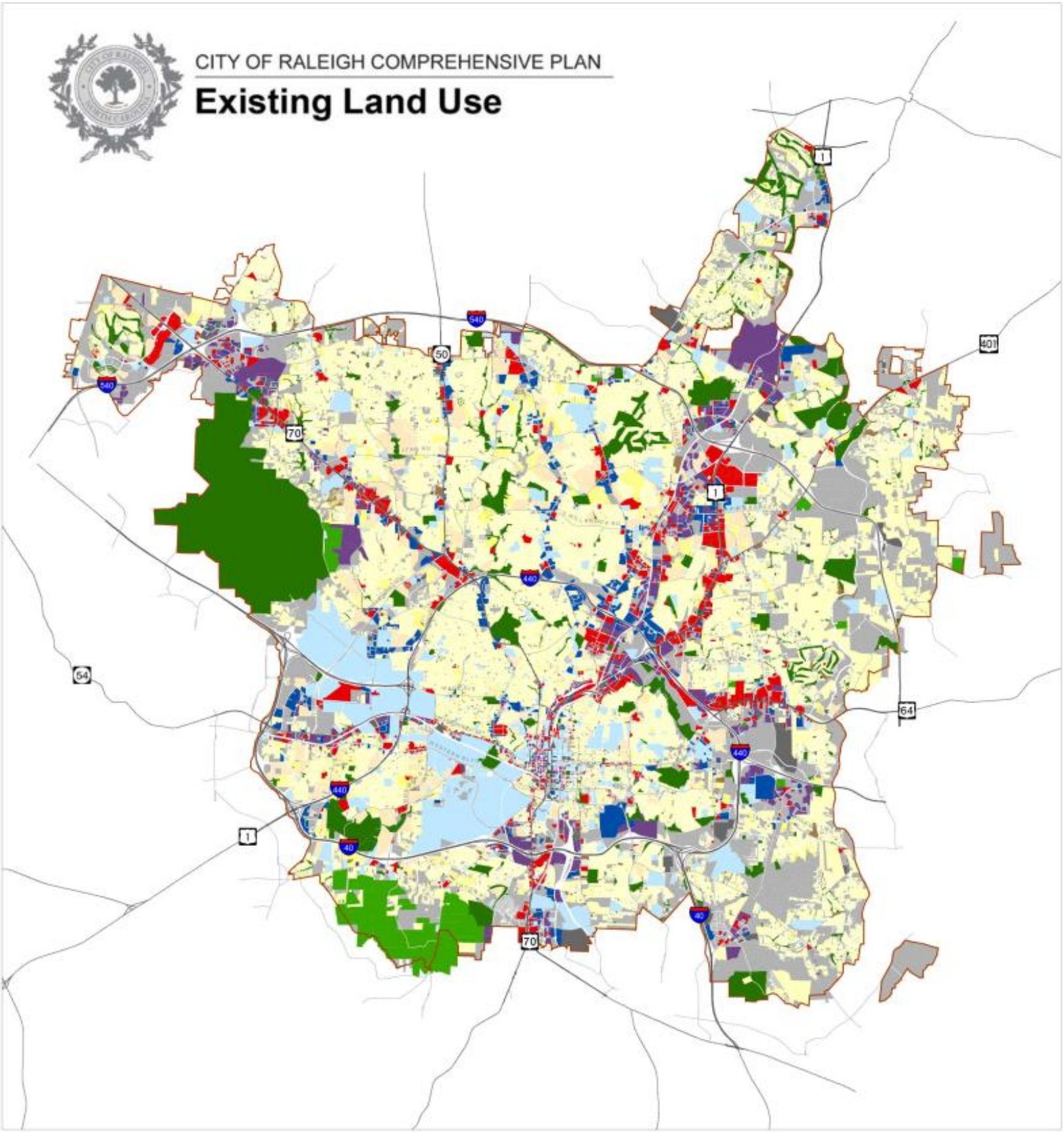
Land Use (within ETJ)	Parcels	Acres[2]	Percentage
Residential-Single Family	82,795	33,938	34.1%
Vacant	15,228	20,064	20.1%
Parks, Greenways, Open Space, Golf Courses	1,051	11,242	11.3%
Institutional	817	8,373	8.4%
Residential - Apartment, Condominium	918	4,897	4.9%
Retail	1,912	4,104	4.1%
Industrial	900	3,630	3.7%
Residential - Townhouse, Multiplex	21,692	3,222	3.2%
Office	1,230	2,926	2.9%
Unknown [3]	1,029	2,824	2.9%
Agriculture	56	2,384	2.4%
Infrastructure & Transportation	397	1,344	1.4%
Residential - Other	406	630	0.6%
Mixed Use	52	32	0.0%
TOTAL	**128,483**	**99,608**	**100.0%**

Source: City of Raleigh, Department of City Planning, 2007

2 Does not include public right of way
3 Use could not be determined from available information

CITY OF RALEIGH COMPREHENSIVE PLAN

Existing Land Use



MAP LU-1

- RESIDENTIAL - SINGLE FAMILY
- RESIDENTIAL - TOWNHOUSE, MULTIPLEX
- RESIDENTIAL - APARTMENT, CONDOMINIUM
- RESIDENTIAL - OTHER
- RETAIL
- OFFICE
- INSTITUTIONAL
- PARKS, GREENWAYS, OPEN SPACE, GOLF COURSES
- AGRICULTURE
- INDUSTRIAL
- INFRASTRUCTURE & TRANSPORTATION
- MIXED USE - OFFICE & RETAIL
- MIXED USE - OFFICE, RESIDENTIAL & RETAIL
- MIXED USE - OTHER
- MIXED USE - RESIDENTIAL & OFFICE
- MIXED USE - RESIDENTIAL & RETAIL
- MIXED USE - RESIDENTIAL, OFFICE, & RETAIL
- UNKNOWN; VACANT

- ETJ
- Highway
- Major Streets

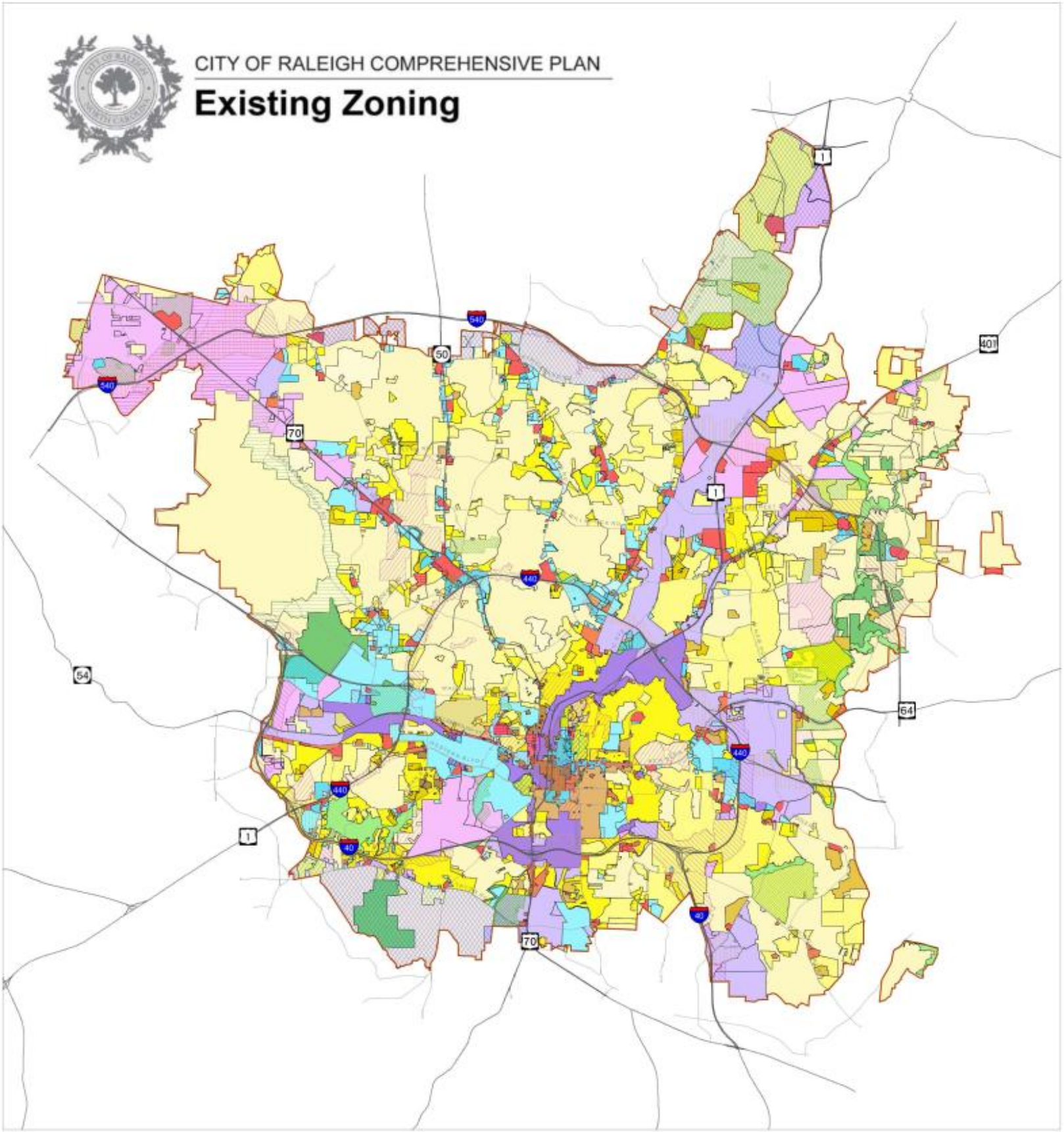
N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

CITY OF RALEIGH COMPREHENSIVE PLAN

Existing Zoning



MAP LU-2

AP	MH	CUD RB	CUD SC	AOD
CM	R-10	O&I-1	NB	HOD
CUD CM	CUD R-10	O&I-1 CUD	CUD NB	MPOD
RR	R-15	CUD O&I-1	BUS	NCOD
CUD RR	CUD R-15	O&I-2	CUD BUS	PBOD
R-2	R-20	CUD O&I-2	TD	POD
R-4	CUD R-20	O&I-3	CUD TD	DOD
CUD R-4	SP R-30	CUD O&I-3	IND-1	SHOD-1
SP R-6	R-30	BC	CUD IND-1	SHOD-2
R-6	CUD R-30	CUD BC	IND-2	SHOD-3
CUD R-6	RB	SC	CUD IND-2	SHOD-4
				WPOD

ETJ

Highway

Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

Annexation and Jurisdictional Boundaries

The City of Raleigh incorporated in 1792 with 400 acres of land, and has expanded its jurisdictional boundaries through annexation. Over 75 percent of the City's land expansion has occurred since 1960 — 40 percent between 1960 and 1990, and 35 percent between 1990 and 2007. The City's annexation expansion has accompanied major water and sewer extensions and completion of the southern Beltline (I-40) and portions of the Northern Wake Expressway (I-540). Raleigh's 2007 city limits include 89,550 acres or approximately 140 square miles of land area. This is similar in size to the cities of Atlanta, Philadelphia, and Portland, Oregon. However, Raleigh has the potential to annex an additional 24,057 acres (37.5 square miles) within its ETJ.

Based on Wake County's approval to extend water and sewer infrastructure and create a future Urban Service Area (USA), Raleigh also has the potential to annex an additional 18,934 acres beyond its current ETJ. No additional land area is available beyond these limits due to annexation agreements with neighboring jurisdictions that have essentially carved out all of Wake County outside of existing and planned water supply watersheds into urbanizing areas. Therefore, Raleigh has the ability to annex almost 43,000 acres (67 square miles), for an ultimate city size of approximately 132,500 acres or 207 square miles. Similarly-sized cities include Columbus, OH and Tucson, AZ.

Since 1990, Raleigh has averaged an annexation rate of approximately 1,900 acres per year. At this rate, it would take approximately 22 years to absorb the remaining 42,991 acres of land area with annexation potential. This timeframe generally corresponds to the time horizon of this Comprehensive Plan. However, since this Comprehensive Plan is based on the desire for a more compact and walkable development pattern with residential, retail, services, and jobs located more closely together, the land available for development should last much longer than 22 years. Please refer to A.3 'Annexation, ETJ and USA' in the Policies and Action section of this Land Use Element for related recommendations related to annexation. For policies related to regional and inter-jurisdiction cooperation, please refer to Element L: 'Regional and Inter-Jurisdictional Coordination'.

Future Land Use Map

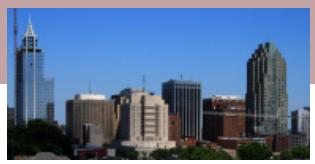
Raleigh's desired future land use patterns are shown on the Future Land Use Map, which provides the land use foundation for this Comprehensive Plan. The Future Land Use Map indicates the intended distribution and intensity of land uses over the next 20 years to achieve the following objectives:

- Provide greater land use predictability and transparency;
- Incorporate relevant aspects of the previous Urban Form Map that related to land use;
- Incorporate recommended land uses from previously adopted area plans;
- Use a nomenclature that is reasonably compatible with the Wake County Comprehensive Plan and the plans for adjacent jurisdictions;
- Advance Raleigh's Vision and Themes, as described in the Framework Element; and,
- Create a logical framework for future zoning and development.

The Future Land Use Map is part of the adopted Comprehensive Plan and carries the same legal weight as the Plan document itself. The Future Land Use Map uses color-coded categories to express public policy on future land uses across the City. Its land use designations been drawn based on existing and desired development patterns, streets, parcel lines, environmental features, and other logical boundaries. For guidance on how to use the Future Land Use Map and policies related to its interpretation and relation to zoning evaluations, please refer to A.1 'Future Land Uses' of this Land Use Element.

Primary Land Use Issues

The land use element provides guidance to enhance existing neighborhoods throughout the City, which requires an emphasis on conservation in some neighborhoods and revitalization in others. It also provides guidance to create vibrant, new walkable neighborhoods; reduce auto-dependency; increase



the viability of transit, walking, and biking through design and management of land uses; accommodate density while respecting desired neighborhood character and providing usable open space; increase mixed-use development; focus development close to already developed areas rather than in green fields further out; focus development within designated centers and transit corridors; coordinate development so that it fits-in with existing patterns; and provide for ways to ensure compatibility of land uses while still accommodating the uses that make Raleigh a thriving residential and employment center within the Triangle Region.

By 2030, Raleigh is projected to grow by approximately 220,000 people. It has a remaining growth area of about 67 square miles based on current annexation agreements. The City is poised to continue a high level of population growth because of its positive quality of life factors: a location for high-tech jobs; a highly-educated population; excellent universities and quality public school system; the diversity of its housing; a mild year-round climate; and a revitalizing downtown. However, the last 50 years of suburban growth and new global issues—energy insecurity and climate change—have created a cumulative challenge of interrelated land use issues that Raleigh will need to address over the next 20 years. The following are the main land use issues addressed in this Land Use Element:

- Without a land use plan and with an outdated zoning ordinance, Raleigh has lacked the tools to support more compact growth and to provide a more efficient and predictable development guide;
- The allocation of zoning districts on the City's zoning map has become out of step with actual use patterns, and the zoning map no longer provides a guide to the City's land use policy;
- Key corridors in gateway locations have become over-developed for commercial use, becoming lined with under-performing strip retail and services, creating the need and opportunity for mixed-use redevelopment;
- Annexation and utility extensions have led to sprawling and leapfrog development patterns, even as lands inside the City's Extra Territorial Jurisdiction (ETJ) provide for ample development capacity;
- Lack of coordination between land use and transportation planning and investment has lead to increased congestion and an under-performing transit system;
- Most Raleigh residents live in neighborhoods where jobs, goods, services, and recreation are not walkable or bikeable, even if these resources are close by, due to the lack of integration between uses;
- Proposed regional rail transit stations do not have the appropriate planning and zoning in place to ensure transit-supportive development patterns;
- Growth, changing demographics, and an evolving economy require a greater diversity of housing choices in both infill locations and in new neighborhoods;
- Demand for denser and more intense development in infill locations and near established neighborhoods raises issues of land use compatibility;
- A shift to more environmentally sustainable building practices is necessary to reduce the City's air and water pollution and its demand for energy and water; and,
- The City's economic future requires additional development opportunities for research and development firms, institutions, and hospitals.

As described in the Framework chapter, Raleigh's Vision for 2030 is structured to address these land use issues through six vision themes or citywide goals. By concentrating growth into mixed-use centers and creating more accessible communities citywide, Raleigh will help meet its goal for *Economic Prosperity and Equity*. Through a broader range of housing-related land use policies and programs, Raleigh plans to meet its goal for *Expanding Housing Choices*. Through more compact forms of development and new rural and open space policies, Raleigh will meet its over-arching goal of *Managing Our Growth*. By implementing a citywide and regional transit system that is connected with pedestrian- and bike-friendly communities, Raleigh will be closer to its goal of effectively *Coordinating Land Use and Transportation*. Through citywide policies and programs for green building, green infrastructure, and resource conservation and

preservation, Raleigh will become a national leader with its *Greenprint Raleigh* paradigm. Lastly, through a series of ordinance and subdivision changes to accommodate a smart growth model of planning and development, Raleigh will reach its goal of *Growing Successful Neighborhoods and Communities*.

The policies and actions of the Land Use Element appear in the next section. To track the efficiency of the City's policies, numbers that relate to the City's six vision themes are used throughout the policy section as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

A.1 Future Land Uses

Raleigh is a growing city both in terms of the number of residents and jobs and its physical growth and land area. Raleigh's Future Land Use Map (**Map LU-3**) builds upon the City's existing land use patterns and provides a generalized guide for development and conservation decisions. The Future Land Use Map is further defined below. For guidance on the application and use of the Future Land Use Map as it relates to zoning applications, see the text box entitled "Evaluating Zoning Proposals and Their Consistency with the Comprehensive Plan" later in this section..

- The Future Land Use Map is a generalized depiction of intended uses in the horizon year of the Comprehensive Plan, roughly 20 years in the future. It is not an "existing land use map," although in many cases future uses in an area may be the same as those that exist today.
- The Future Land Use Map is not a zoning map. Whereas zoning maps are parcel-specific, and establish detailed requirements for setbacks, height, use, parking, and other attributes, the land use categories of the Future Land Use Map recommend a range of potentially appropriate land uses and intensities. By definition, the Future Land Use Map is a guide to future zoning decisions. Related, the Future Land Use Map is not intended to be referenced as part of the site plan review process, since the zoning regulations set forth the permitted uses for particular parcels.
- Streets and public rights-of-way are not an explicit land use category on the Future Land Use Map. Within any given area, the streets that pass through are assigned the same designation as the adjacent uses.

Definition of Future Land Use Categories

Raleigh's Future Land Use Map contains 19 color-coded categories that express public policy on future land uses throughout the City as described below:

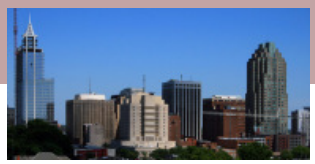
RESIDENTIAL CATEGORIES

Rural Residential (less than 1 unit per acre)

This category is generally mapped over areas zoned "RR" (or areas in the ETJ/USA with rural residential land use designations and rural County zoning) where intensification to more urban uses is not expected due to watershed constraints and existing fragmented parcel patterns. Rural Residential areas are generally developed with "ranchettes," hobby farms, estates, large-lot subdivisions, or conservation subdivisions with large common open space areas. The intent of this designation is to preserve the rural character of these areas and achieve compatible resource conservation objectives such as watershed conservation and tree protection. Overall densities in these areas would be less than one unit per acre, although clustered housing on large tracts could result in small pockets of more densely developed land.

Low Density Residential (1 – 6 units per acre)

This category encompasses most of Raleigh's single family detached residential neighborhoods, corresponding roughly to the R-2, R-4, and R-6 zoning districts (but excluding parks within these districts). It also identifies vacant or agricultural lands—in the city and in the county—where single family residential use is planned over the next 20 years. Clustered



housing, duplexes, and other housing types would be consistent with this designation as long as an overall gross density not exceeding 6 units per acre was maintained. As defined in the zoning regulations, manufactured home parks could also be appropriate in this land use category.

Moderate Density Residential (6 – 14 units per acre)

This category applies to some of the city's older single family residential neighborhoods, along with newer small lot single family subdivisions and patio home developments. Other housing types would be consistent with this designation as long as an overall gross density not exceeding 14 units per acre was maintained. Gross density in these areas would be 6 to 14 units per acre. The SPR-30 (Special Residential -30) zoning district could also be appropriate in this land use category. Other corresponding zoning districts are R-6 and R-10.

Medium Density Residential (14 – 28 units per acre)

This category applies to garden apartments, townhomes, condominiums, and suburban style apartment complexes. It would also apply to older neighborhoods with a mix of single-family and multi-family housing with average overall densities in the 14-28 unit per acre range. Most of these areas are zoned R-15 and R-20, but a few R-10 areas could also fall into this category.

High Density Residential (28 units per acre or more)

This category would apply to apartment buildings and condominiums that are generally four stories or more. Conforming zoning districts would include R-30. Other zoning districts which permit multi-family housing, appropriately conditioned, could be conforming as well. Although this is a residential category, ground floor retail uses (with upper story housing) may be permitted under certain circumstances. Comprehensive Plan Land Use Element policies should be consulted for additional guidance.

MIXED USE CATEGORIES:

Office Residential—Mixed Use

This category is applied primarily to frontage lots along thoroughfares where low density residential uses are no longer appropriate, as well as office parks and developments suitable for a more mixed-use development pattern. This category encourages a mix of moderate to medium density residential and office use. Retail not ancillary to employment and/or residential uses is discouraged so that retail can be more appropriately clustered and concentrated in retail and mixed-use centers at major intersections and planned transit stations. The Office and Institution zones provide the closest match with the proposed use pattern, although higher-impact uses such as hotels and hospitals are not contemplated or recommended in this land use category.

Neighborhood Mixed Use

This category applies to neighborhood shopping centers and pedestrian-oriented retail districts. The service area of these districts is generally about a one mile radius or less. Typical uses would include corner stores or convenience stores, restaurants, bakeries, supermarkets (other than super-stores/centers), drug stores, dry cleaners, video stores, small professional offices, retail banking, and similar uses that serve the immediately surrounding neighborhood. While this is primarily a commercial category, mixed-use projects with upper story housing are also supported by this designation. Most of the areas mapped with this designation are currently zoned NB (Neighborhood Business) or SC (Shopping Center). Where residential development complements commercial uses, it would generally be in the Moderate to Medium density range (less than 28 units per acre).

Multiple zoning districts could be developed for this category in the future, recognizing that some of the designated areas are established neighborhood "main streets" and others are suburban auto-oriented shopping plazas or strip centers. Although housing would be allowed in all cases, there could be greater incentives for "vertical mixed

use" or higher density housing (up to about 40 units per acre) where these zones adjoin future transit stations, or are on traditional "walking" streets.

Community Mixed Use

This category applies to medium-sized shopping centers and larger pedestrian-oriented retail districts such as Cameron Village. Typical commercial uses include large-format supermarkets, larger drug stores, department stores and variety stores, clothing stores, banks, offices, restaurants, movie theaters, hotels, and similar uses that draw from multiple neighborhoods. Development intensities could be higher than in Neighborhood Center areas, with mid-rise buildings as well as low rise buildings. Where residential development occurs, ground floor retail would be encouraged and minimum density standards might be applied. Densities would generally be in the Medium range (14 – 28 units per acre); although High Density (up to about 70 units per acre) would be appropriate around proposed transit stations and along transit-intensive corridors. Most of these areas are now zoned SC and O&I-1. A few are zoned O&I-2.

Multiple zoning districts could be developed for this category in the future, recognizing that some of the designated areas are established neighborhood "main streets" and others are suburban auto-oriented shopping plazas or strip centers. Although housing would be allowed in all cases, there could be greater incentives for "vertical mixed use" or higher density housing where these zones adjoin future transit stations, or are on traditional "walking" streets. For both this category and Neighborhood Mixed Use, higher densities should be accompanied by enhanced public benefits and amenities.

Regional Mixed Use

This category applies to the Triangle Town Center area, the Brier Creek area, and the North Hills/Midtown and Crabtree Centers. The intent is to identify the major retail and service hubs that draw customers from across the city. These areas may include high-density housing, office development, hotels, and region-serving retail uses such as department stores and specialty stores. The areas with this designation are currently zoned O&I-2, SC, and TD.

Central Business District

This category applies to the Raleigh Central Business District, and is intended to enhance Downtown Raleigh as a vibrant mixed use urban center. The category recognizes the area's role as the heart of the city, supporting a mix of high-intensity office, retail, housing, government, institutional, visitor-serving, cultural, and entertainment uses. Multiple zoning districts apply within the CBD, corresponding to the different character and vision for its various neighborhoods. The maximum residential density in this area would be 320 units per acre, with densities tapering off towards edge areas adjacent to established residential neighborhoods, but not falling below 40 units per acre. The closest conforming zoning district to this designation is "Bus" (Business) with DOD (Downtown Overlay District).

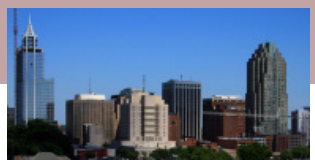
EMPLOYMENT CATEGORIES:

Office/ Research and Development

This category identifies major employment centers where housing is not considered an appropriate future land use. Principal uses are office parks, free-standing office buildings or corporate headquarters, banks, research and development uses, hotels, and ancillary service businesses and retail uses that support the office economy. This category can also apply in appropriate locations to office-industrial hybrids such as light fabrication and assembly ancillary to an R&D use, flex parks, and office-distribution combinations. Most of these areas are currently zoned O&I-1, O&I-2, O&I-3, or Thoroughfare District (TD).

Business and Commercial Services

This category is for higher-impact or "heavy" commercial activities that would not be compatible with residential uses, or that have locational needs (such as thoroughfare or interstate frontage) that are not conducive to mixed use development. Examples would include auto



dealerships, auto repair and service businesses, lumberyards, nurseries, contractor suppliers, warehousing, printers, truckstops, distribution centers, and other uses that are quasi-industrial or highway-oriented in character. Most of these areas are currently zoned TD and I-1.

General Industrial

This category designates areas programmed for industrial land uses, including manufacturing, concrete plants and other extractive industries, junkyards/ scrap yards, and outdoor storage uses. These uses tend to have greater impacts than the commercial service uses, and may require additional buffering or separation from nearby uses. Some of these uses are dependent on rail for freight movement, and others require convenient thoroughfare or interstate access for truck deliveries and shipments. Most of these areas are zoned I-1 and I-2. Railyards, power plants, and similar uses are also included in this designation.

PUBLIC AND INSTITUTIONAL CATEGORIES:

Public Facilities

This category identifies large publicly owned non-park properties, including public schools, city facilities (such as libraries, fire stations, public works yards, etc.), stadiums, state government facilities, the fairgrounds, and federal government facilities (postal distribution centers, etc.). Such sites are identified on the Future Land Use Map if they cover more than about two acres.

Institutional

This category identifies land and facilities occupied by colleges and universities, large private schools, hospitals and medical complexes, religious organizations, and similar institutions. Smaller institutional uses such as churches are generally not mapped unless they are sites that are more than two acres in size. Institutional properties may be public or private.

PARK, OPEN SPACE, AND RESOURCE CONSERVATION CATEGORIES:

Public Parks and Open Space

This category applies to permanent open space intended for recreational or resource conservation uses. Included are neighborhood, community, and regional parks and greenways. Greenways include both existing greenway property as well as potential greenway corridors designated in the Comprehensive Plan and subject to regulation under the City code. Also included are publicly owned lands that are managed for watershed protection, resource conservation, hazard prevention, and the protection of important visual resources. Land with this designation is intended to remain in open space in perpetuity. Where potential greenway corridors are mapped (typically as buffers to streams identified in the City's Greenway Master Plan), greenway dedication will be subject to the City's code requirements during the subdivision and site planning process, but shall not be a part of the rezoning process unless voluntarily offered.

Private Open Space

This category includes open space that is privately owned and maintained, including private golf courses and country clubs, cemeteries, open space easements, land zoned Conservation Management, and land that should be retained in its natural state to protect public health and safety (such as floodways and steep slopes), preserve sensitive or important ecological resources (such as important tree stands), or provide a public benefit (such as watershed protection). Land with this designation may have a limited amount of development potential, and may be used for agriculture, forestry, pasture, etc. but the overall intent is to protect its open and undeveloped character through the horizon year of the Plan.

CRITICAL AREAS:

Critical Areas

The critical areas overlay is mapped over lands that are environmentally sensitive and merit preservation and protection from

development. The critical areas overlay encompasses publicly and privately owned land mostly encumbered by the 100-year floodplain. Some of this area is currently zoned Conservation Management; other portions are zoned for a wider range of use. The use of an overlay on top of another designation recognizes that while preservation is the long term goal, private landowners are entitled to a productive use of the property as allowed by the underlying zone district until such time as the appropriate steps can be taken to protect these resources.

SPECIAL STUDY AREAS:

Special Study Area

The Future Land Use Map includes another category to identify areas where the future land use pattern has yet to be determined. These areas are outlined with a dashed line, labeled, and in some cases left "blank" (white) on the map, indicating the precise land use pattern was still under study at the time of Plan adoption. The text of the plan provides further detail.

This designation is used on large sites where land use planning studies incorporating focused community outreach are necessary to determined a preferred land use pattern. Examples include areas such as active rock quarries, landfills, large tracts outside of the City's current jurisdiction but in its future urban services area, and publicly-owned sites of particular importance. These areas should be the subject of Area Planning Studies as described under N.4 'Small Area Studies' in the Element N: 'Implementation' element.

Policy LU 1.1

Future Land Use Map Purpose

The Future Land Use Map and associated Comprehensive Plan policies shall be used to guide zoning, ensure the efficient and predictable use of land capacity, guide growth and development, protect public and private property investments from incompatible land uses, and efficiently coordinate land use and infrastructure needs. (1, 2, 3, 4, 5, 6)

Policy LU 1.2

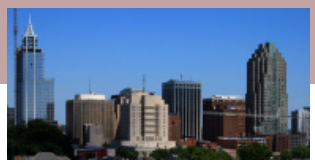
Future Land Use Map and Zoning Consistency

The Future Land Use Map shall be used in conjunction with the Comprehensive Plan policies to evaluate zoning consistency including proposed zoning map amendments and zoning text changes. The Future Land Use Map shall not be used to review development applications which do not include a zoning map or text amendment. See Text Box: *Evaluating Zoning Proposals and Consistency with the Comprehensive Plan.* (3, 4, 5, 6)

Policy LU 1.3

Conditional Use District Consistency

All conditions proposed as part of a conditional use district (CUD) should be consistent with the Comprehensive Plan. (1, 2, 3, 4, 5, 6)



Evaluating Zoning Proposals and Consistency with the Comprehensive Plan

The Future Land Use Map is based on the policies and assumptions contained in the Comprehensive Plan and the forecast growth for the City and region. The Future Land Use Map shows the general land use recommended and includes a range of potentially appropriate land uses and intensities within each land use category.

While the Future Land Use Map will influence future zoning, it does not alter current zoning or affect the right of property owners to use the land for its purpose as zoned at the time of this Plan's adoption. The Future Land Use Map will not be referenced as part of the review of development plans, including site plans and subdivisions.

The designation of an area with a particular land use category does not mean that the most intense zoning district described in the land use categories is automatically recommended. A range of densities and intensities applies within each category, and the use of different zoning districts within each category should reinforce this range and be based on infrastructure capacity, community character, protection of common open space, and prevailing density and lot size in the surrounding area.

The Future Land Use Map documents the general recommended future use for each designated area. However, other types of uses may be compatible with the designated use and deemed to be consistent with the Comprehensive Plan. For example, a school or duplex-style home could be found to be in conformance with the plan designation of Low-Density Residential.

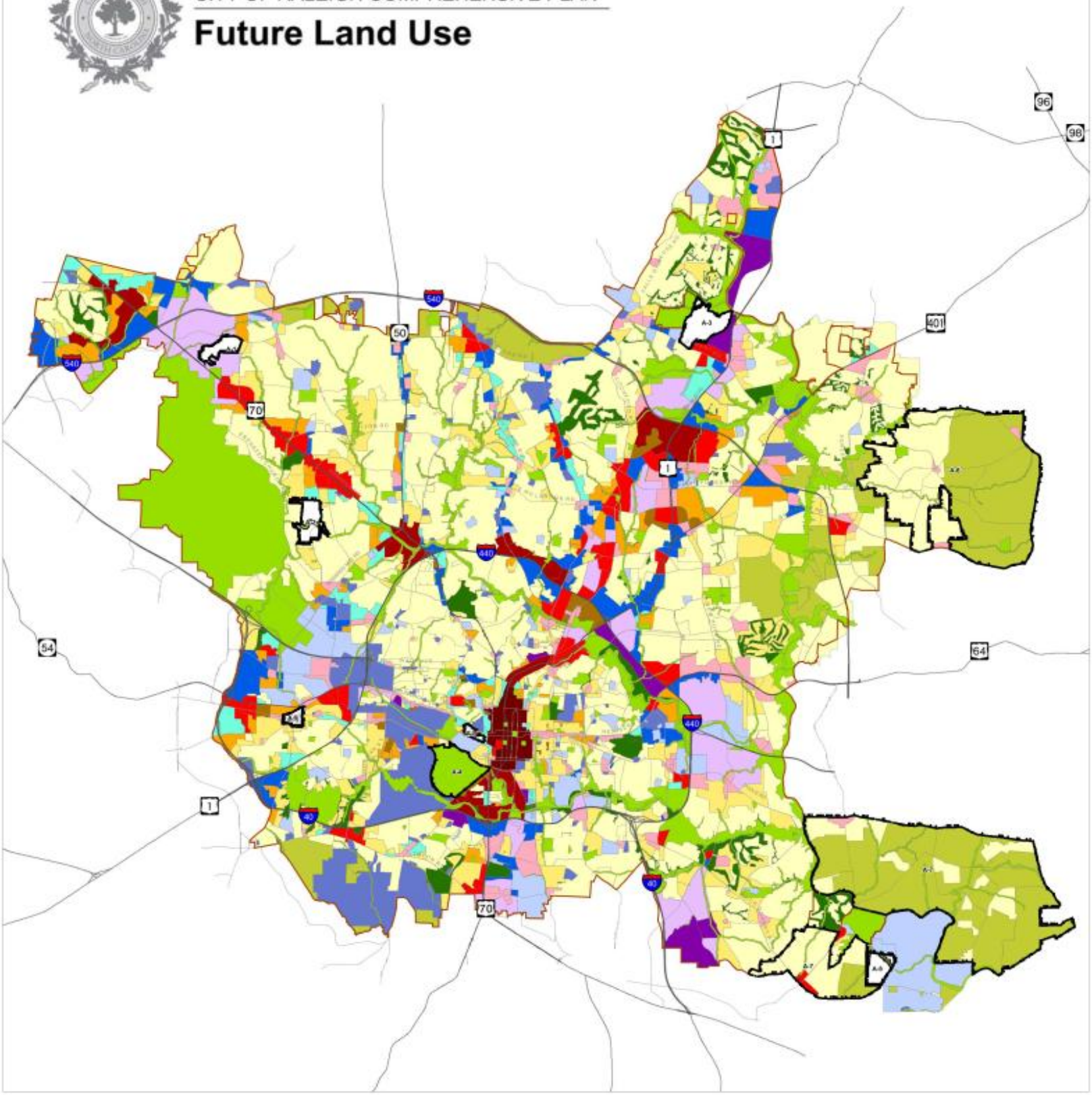
The future land use categories should not be interpreted to support nor preclude developments without consideration of the policies and intent of the Comprehensive Plan.

Site considerations relating to topography, soils, or hydrology are also important in establishing the specific use and intensity of a particular parcel on the Future Land Use Map. Similarly, the presence of adequate streets, schools, parks, and other community facilities should be assured before a development is approved that would otherwise be in conformance with the Future Land Use Map. Determination of the conformance of a proposed use or zone with the Comprehensive Plan should include consideration of the following questions:

- Is the proposal consistent with the vision, themes, and policies contained in the Comprehensive Plan?
- Is the use being considered specifically designated on the Future Land Use Map in the area where its location is proposed?
- If the use is not specifically designated on the Future Land Use Map in the area where its location is proposed, is it needed to service such a planned use or, could it be established without adversely altering the recommended land use and character of the area?
- Will community facilities and streets be available at City standards to serve the use proposed for the property?

CITY OF RALEIGH COMPREHENSIVE PLAN

Future Land Use



MAP LU-3

- Public Parks & Open Space
- Private Open Space
- Rural Residential
- Low Density Residential
- Moderate Density Residential
- Medium Density Residential
- High Density Residential
- Office & Residential Mixed Use
- Office/Research & Development
- Institutional
- Public Facilities
- Neighborhood Retail Mixed Use
- Business & Commercial Services
- Community Retail Mixed Use
- Regional Retail Mixed Use
- Central Business District
- General Industrial
- Special Study Area

ETJ

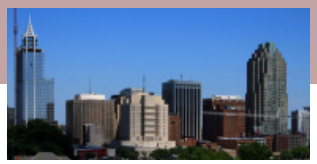
Highway

Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Action LU 1.1

Zoning Update

Update the Zoning Ordinance to reflect the Future Land Use Map classifications and associated land use recommendations.

Action LU 1.2

Zoning Innovations

Study the incorporation of new tools into the Zoning Ordinance, such as Floor Area Ratios to control building bulk, form-based overlays, and performance-based zoning.

Action LU 1.3

Special Study Area Plans

Undertake detailed land use planning in those areas designated as Special Study Areas on the Future Land Use Map before approval of development proposals or rezonings in the areas. Engage the public in the planning process.

Action LU 1.4

Future Land Use Map Maintenance and Revision

Maintain the currency of the Future Land Use Map through periodic reevaluation and revision of the map based on analysis of growth and development needs and trends, small area studies, and special area studies.

Action LU 1.5

Incorporate Adopted Regulations into Zoning

Incorporate all development regulations currently located in adopted plans into the Zoning Ordinance, including the standards from Streetscape and Parking Plans for Pedestrian Business Overlay Districts.

Action LU 1.6

Update Subdivision and Site Plan Regulations

Update the subdivision and site plan regulations to reflect that if there is a conflict between the Comprehensive Plan and the Zoning Code, the Zoning Code shall apply.

A.2 City-Wide Growth

Raleigh has expanded and grown dramatically over the last 20 years based on an auto-dependent land use pattern of segregated land uses. Due to rising infrastructure and energy costs, diminishing land resources, local environmental impacts, and global climate change, Raleigh is now committed to a smart growth pattern of development for its future and desires to be a model "sustainable city." Raleigh's citywide growth policies seek to guide development and redevelopment and promote more compact development, walkable neighborhoods, and transit-accessible corridors to use land efficiently, increase connectivity, lower vehicle miles traveled, and improve air quality.

Policy LU 2.1

Placemaking

Development within Raleigh's jurisdiction should strive to create places, streets, and spaces that in aggregate meet the needs of people at all stages of life, are visually attractive, safe, accessible, functional, inclusive, have their own distinctive identity, and maintain or improve local character. (1, 2, 3, 4, 5, 6)

Policy LU 2.2

Compact Development

New development and redevelopment should use a more compact land use pattern to support the efficient provision of public services, improve the performance of transportation networks, preserve open space, and reduce the negative impacts of low intensity and non-contiguous development. (1, 2, 3, 4, 5, 6)

Policy LU 2.3

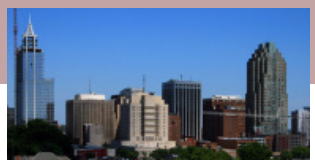
Cluster Development

Cluster development should be used to achieve open space preservation in those areas of the City planned for rural residential land uses on the Future Land Use Map. (1, 2, 3, 5)

Policy LU 2.4

Large Site Development

Developments on large sites should set aside land for future parks and community facilities to help meet identified needs for public amenities and services and to offset the impacts of the development. (1, 2, 5)



Policy LU 2.5

Healthy Communities

New development, redevelopment, and infrastructure investment should strive to promote healthy communities and active lifestyles by providing or encouraging enhanced bicycle and pedestrian circulation, access, and safety along roads near areas of employment, schools, libraries, and parks. (4, 5, 6)
See Element I: 'Urban Design' for additional policies and actions related to pedestrian-friendly design.

Policy LU 2.6

Zoning and Infrastructure Impacts

Carefully evaluate all amendments to the zoning map that significantly increase permitted density or floor area to ensure that impacts to infrastructure capacity resulting from the projected intensification of development are adequately mitigated or addressed. (3, 4)

Action LU 2.1

Future Studies in High-Density Areas

As necessary, undertake detailed studies and plans for growth centers, mixed-use centers, and transit station areas (rail or bus transfer nodes) to identify areas appropriate for higher-density mixed-use development.

Action LU 2.2

Zoning for Smarter Growth

During the update of the development regulations, consider changes to existing zoning districts or the creation of new districts that will result in development patterns that implement the City's land use policies for more walkable, transit supportive, and compact development. Consider the use of minimum densities and requirements for more integrated mixed use development.

Action LU 2.3

Strengthening Site Plan Standards

As part of the update of the City's development regulations, seek ways to improve the site plan review process by adopting more objective review standards, strengthening the standards for administrative review, and broadening the range of site plans that are reviewed administratively.

Action LU 2.4

Linking Development and Infrastructure

During the update of the development regulations, consider regulations that would require the appropriate public infrastructure and facilities to be programmed before new development is permitted.

Action LU 2.5

Regulatory Incentives

As part of the update to the City's development regulations, incorporate where appropriate incentives aimed at achieving Comprehensive Plan policies for development and redevelopment. Incentives can include bonuses, streamlined approvals, enhanced flexibility, or other mechanisms.

Action LU 2.6

Targeting Development Incentives

Target incentives for designated redevelopment areas and areas for public intervention to encourage new mixed-use center development, multi-family residential, and office uses. (Refer to Element D: 'Economic Development' for recommended redevelopment and intervention areas.)

Action LU 2.7

Land Conservation Approaches

During the update of the development regulations, consider regulatory approaches that promote land conservation and retard urban sprawl within Raleigh, especially in areas planned for Rural Residential on the Future Land Use Map. Such approaches may include a mandatory cluster provision. Cluster development refers to building homes on smaller lots while maintaining a minimum portion of the site as open space. This is a density-neutral technique in that the same number of homes is built as the zoning originally permitted.

A.3 Annexation, ETJ and USA

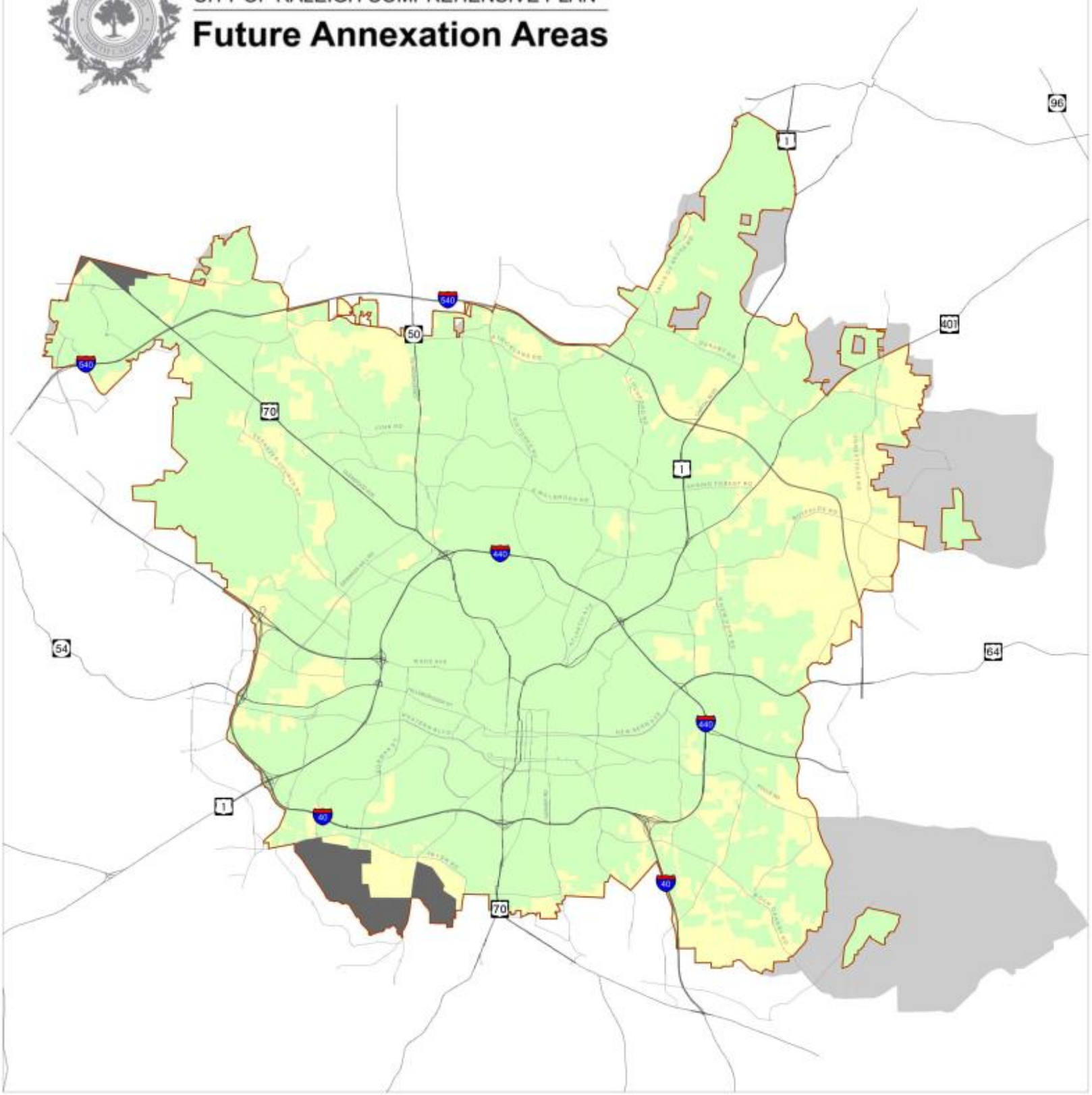
North Carolina provides annexation authority for municipalities to provide for their orderly growth and expansion over time (see text box: *North Carolina Law on Annexation*). Currently, Raleigh encompasses 89,550 acres of land within its city limits, but has the potential to annex an additional 24,057 acres within its extra-territorial jurisdiction (ETJ). Beyond its current ETJ, Raleigh has the potential to annex an additional 18,934 acres from its Urban Service Area (USA). No additional land area is available beyond these limits due to annexation agreements with neighboring jurisdictions that have essentially carved out all of Wake County except protected watersheds into urbanizing areas. Therefore, Raleigh has approximately 43,000 acres available for future annexation and expansion. As stated below, Raleigh's annexation policies focus on managing annexation outside of the ETJ to provide for more compact and orderly growth and to better phase land development with infrastructure, public services, and facilities within the ETJ prior to annexation and urban expansion into the Urban Service Area.

Map LU-4 illustrates areas available for future annexation, both within the City's ETJ and outside the ETJ but within the USA. The map also shows watershed lands within the ETJ that the City has agreed never to annex, even though the City exercises land use authority over these areas.

Much of Raleigh's annexation activity, both within and outside of its ETJ, is a result of annexation petitions from landowners wishing to connect to the City's utility infrastructure. Annexation policies are closely related to policies on utility extensions, and vice versa. Policy guidance on utility extension can be found under G.2 'Utility Extensions' in Element G: 'Public Utilities'.

CITY OF RALEIGH COMPREHENSIVE PLAN

Future Annexation Areas



MAP LU-4

Jurisdiction

- Non-Annexation Area within ETJ
- Raleigh City Limits
- Raleigh ETJ
- Urban Service Areas

- ETJ
- Highway
- Major Streets

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division

Policy LU 3.1

Zoning of Annexed Lands

The zoning designation for newly annexed land into the City of Raleigh shall be consistent with the Future Land Use Map. In those cases where the annexed lands are within a special study area (as shown on the Future Land Use Map), a special study will need to be completed prior to zoning and development of the property. (1, 3, 5)

Policy LU 3.2

Location of Growth

The development of vacant properties should occur first within the City's limits, then within the City's planning jurisdiction, and lastly within the City's USAs to provide for more compact and orderly growth, including provision of conservation areas. (For more detail, see Resolution 2008-460: *Raleigh's Policy on Individual Annexation Petitions*.) (1, 3, 5)

Policy LU 3.3

Annexation Agreements

Support and honor current annexation agreements between the City of Raleigh and neighboring jurisdictions that essentially apportion the remaining unincorporated land within Wake County. (3)

Policy LU 3.4

Infrastructure Concurrency

The City of Raleigh should only approve development within newly annexed areas or Raleigh's ETJ when the appropriate transportation, water, stormwater, and wastewater infrastructure is programmed to be in place concurrent with the development. (3, 6)

Policy LU 3.5

Watershed Management

When the City annexes land that includes designated watershed supply areas, development of these lands should be managed to minimize impervious surface cover and protect the quality of the water supply. (3, 5, 6)

See also Element L: 'Regional and Inter-Jurisdictional Coordination' for additional policies and actions related to annexation and management of land development within the region.

North Carolina Law on Annexation

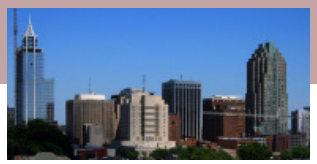
Authority to Annex

North Carolina law permits municipalities to expand boundaries to keep pace with growth more easily than municipalities in most states. The state's principal annexation statute permits a municipality to expand its borders by simple action of the municipality's elected officials.

The law does require that the annexed area be generally developed with urban uses and that the municipality provide basic services within a reasonable time. If an area is urban in character and the municipality can provide services, state policy is that the area ought to be part of the municipality.

Rationale

State policy declares that sound urban development is essential to economic development and that municipalities are created to provide services essential for such development.



General Criteria

To qualify for involuntary annexation, an area, in general, must:

- Be contiguous to the current corporate limits;
- Have at least one-eighth of the total boundary contiguous to the current corporate limits;
- Not be located within another incorporated municipality; and
- Be developed for urban purposes.

Defining "Developed for Urban Purposes"

At least part of the area must be developed for urban purposes when the annexation report is approved. An area is developed for urban purposes if it meets ***any one*** of the following:

- Population Test - Total population equaling at least 2.3 persons per acre.
- Population & Subdivision Test - Total population equaling 1 person per acre if:
  - At least 60 percent of the acreage is in lots and tracts of 3 acres or less;
  - At least 65 percent of the total number of lots and tracts are 1 acre or smaller.
- Use & Subdivision Test - At least 60 percent of lots and tracts are used for residential, commercial, industrial, institutional or governmental purposes and at least 60 percent of the total acreage - not counting commercial, industrial, governmental or institutional uses - is in lots and tracts of 3 acres or less.

A.4 Land Use and Transportation Coordination

Outside of Raleigh's inner core—downtown and its adjacent neighborhoods—the majority of Raleigh's populace lives, works, and socializes within an auto-dependent land use framework. To reduce vehicle miles traveled and improve air quality, Raleigh's land use and transportation coordination policies focus on shortening trips and encouraging more pedestrian, bicycle, and transit-friendly communities within and adjacent to mixed-use centers and corridors or accessible to them via sidewalks, trails, or transit. It also directs growth to areas with development capacity that are less congested.

Transit Oriented Development (TOD)

Transit-oriented development (TOD) is defined as a moderate- to high-density mix of uses—such as residences, retail shops, offices, and civic and entertainment uses—located within one-half mile of a transit station and designed to support transit use. The typical "station area" is considered to be a half-mile radius, which is an acceptable 10-minute walking distance for most transit users if the area contains a destination, provides dedicated walking routes, and is safe and visually appealing. If a transit corridor contains a station once every mile, TOD could extend along the entire corridor with the highest densities and intensities of uses occurring near each station. Within the U.S., TOD is typically associated with rail transit; however, TOD could occur with other fixed guideway transit service, such as bus rapid transit, if it provides facilities and service levels similar to rail transit.

See also B.1 'Land Use and Transportation Coordination' in Element B: 'Transportation' for additional policies and actions.

Policy LU 4.1

Coordinate Transportation Investments with Land Use

Ensure that transportation decisions, strategies, and investments are coordinated with and support the City's land use objectives. (1, 2, 3, 4, 5, 6)

Policy LU 4.2

Transportation in Support of Walkable Neighborhoods

Make the design and scale of transportation facilities compatible with planned land uses and with consideration for the character anticipated by this Comprehensive Plan for the surrounding neighborhood. (1, 2, 3, 4, 5, 6)

Policy LU 4.3

Directing Transportation Investments

Target transportation facilities, services, and investments to promote and accommodate the growth this Comprehensive Plan anticipates in mixed-use centers, commercial corridors, and residential neighborhoods while reducing reliance on single occupancy vehicles. (1, 2, 3, 4, 5, 6)

Policy LU 4.4

Reducing VMT Through Mixed Use

Promote mixed-use development that provides a range of services within a short distance of residences as a way to reduce the growth of vehicle miles traveled (VMT). (1, 3, 4, 5, 6)

Policy LU 4.5

Connectivity

New development and redevelopment should provide pedestrian and vehicular connectivity between individual development sites to provide alternative means of access along corridors. (3, 4, 6)

Policy LU 4.6

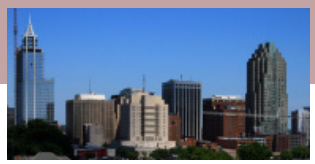
Transit-Oriented Development

Promote transit-oriented development around planned transit stations through appropriate development regulation, education, station area planning, public-private partnerships, and regional cooperation. (1, 2, 3, 4, 5, 6)

Policy LU 4.7

Capitalizing on Transit Access

Sites within a half-mile of planned and proposed fixed guideway transit stations should be developed with intense residential and mixed-uses to take full advantage of and support the City and region's investment in transit infrastructure. (1, 2, 3, 4, 5, 6)



Policy LU 4.8

Station Area Land Uses

Complementary mixed-uses, including multi-family residential, offices, retail, civic, and entertainment uses, should be located within transit station areas. (1, 2, 3, 4, 5, 6)

Policy LU 4.9

Corridor Development

Promote pedestrian-friendly and transit-supportive development patterns along multi-modal corridors designated on the Growth Framework Map, and any corridor programmed for "transit intensive" investments such as reduced headways, consolidated stops, and bus priority lanes and signals. (3, 4, 6)

Policy LU 4.10

Development at Freeway Interchanges

Development near freeway interchanges should cluster to create a node or nodes located at a nearby intersection of two streets, preferably classified minor thoroughfare or higher, and preferably including a vertical and/or horizontal mixture of uses. Development should be encouraged to build either frontage or access roads behind businesses to provide visibility to the business from the major thoroughfare while limiting driveway connections to the major thoroughfare. (4)

Action LU 4.1

Accommodating Mixed-Uses

During the update of the City's development regulations, revise the zoning regulations to permit mixed-use, including retail uses, in appropriate areas.

Action LU 4.2

Connective Site Design

Amend site plan submittal standards to require provision of site improvements that support connective site design for the future development of contiguous properties, such as inter-parcel access, stub streets and sidewalks, greenway connectivity, and grading elevations.

Action LU 4.3

Station Area Plans

Prioritize and prepare station area plans to guide development patterns within one-half mile of identified regional and local fixed guideway transit stops.

See also Element B: 'Transportation' for additional policies and actions related to land use and transportation coordination and transit development including recommendations of the Special Transit Advisory Committee (STAC).

A.5 Land Use Compatibility

During the past decade, development and redevelopment within already built-up areas has been a greater share of total development activity within Raleigh. New growth and infill development has occurred throughout the City, and sometimes

had the unintended consequences of negatively affecting adjacent land uses with shadows, noise, light, glare, vibration, odors, and other nuisances due to incompatible height, bulk, or intensity of use.

The Future Land Use map has been developed by considering existing land use patterns, development trends, transportation corridors, and the compatibility of existing and future uses. However, in order to accommodate appropriate densities in areas designated for transit investment and mixed-use development within the context of 60 years of low-density suburban growth, there are many areas where higher-intensity future land use categories abut areas intended to be conserved or developed at lower densities or intensity. The following policies and actions are meant to supplement the Future Land Use policies and actions and ensure that future land uses do not negatively affect existing land uses, and that appropriate transitions are provided between land uses of differing intensity.

Policy LU 5.1

Reinforcing the Urban Pattern

New development should be visually integrated with adjacent buildings, and more generally with the surrounding area. Quality design and site planning is required so that new development opportunities within the existing urban fabric of Raleigh are implemented without adverse impacts on local character and appearance. (3, 4, 6)

Policy LU 5.2

Managing Commercial Development Impacts

Manage new commercial development using zoning regulations and through the conditional use zoning and development review processes so that it does not result in unreasonable and unexpected traffic, parking, litter, shadow, view obstruction, odor, noise, and vibration impacts on surrounding residential areas. (3, 4, 6)

Policy LU 5.3

Institutional Uses

Ensure that when institutional uses, such as private schools, child care facilities, and similar uses are permitted in residential neighborhoods, they are designed and operated in a manner that is sensitive to neighborhood issues and that maintains quality of life. Encourage institutions and neighborhoods to work proactively to address issues such as traffic and parking, hours of operation, outside use of facilities, and facility expansion. (1, 3, 6)

Policy LU 5.4

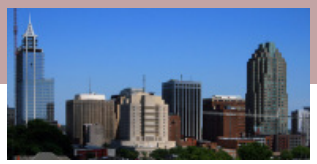
Density Transitions

Low- to medium-density residential development and/or low-impact office uses should serve as transitional densities between lower-density neighborhoods and more intensive commercial and residential uses. Where two areas designated for significantly different development intensity abut on the Future Land Use Map, the implementing zoning should ensure that the appropriate transition occurs on the site with the higher intensity. (1, 3, 6)

Policy LU 5.5

Transitional and Buffer Zone Districts

Maintain and enhance zoning districts which serve as transitional or buffer areas between residential and commercial districts and which also may contain institutional, non-profit, and



office-type uses. Zoning regulations and conditions for these areas should ensure that development achieves appropriate height and density transitions, and protects neighborhood character. (1, 3, 6)

Policy LU 5.6

Buffering Requirements

New development adjacent to areas of lower intensity should provide effective physical buffers to avoid adverse effects. Buffers may include larger setbacks, landscaped or forested strips, transition zones, fencing, screening, height and/or density step downs, and other architectural and site planning measures that avoid potential conflicts. (See Text Box: *Transitions Defined)* (1, 3, 6)

Transitions Defined

Successful transitions mitigate incompatibilities between adjacent and nearby land uses. Incompatibilities arise when nearby uses differ significantly in terms of intensity, height, and/or bulk. Tools such as change in scale, attention to architectural detail, increase in landscaping quantity, distance between buildings or uses, and compatible height can allow successful transitions between properties with dissimilar characteristics. Where the incompatibility arises from use, an intermediate intervening use can serve as a buffer.

The following list defines appropriate parameters for successful transitions:

- Higher intensity commercial uses are appropriately buffered from low to moderate density residential areas through an intervening area of low-intensity office or medium- to high-density residential use.
- Building design can successfully transition by utilizing a multi-dimensional façade that mitigates the height of a building. A taller building can utilize increased setbacks and/or stepbacks to soften the building mass and create a compatible streetwall.
- A transition in height should consist of a combination of distance and height that allows access to light and air, and can be achieved through a combination of height limits, setbacks, and/or stepbacks.
- Additional landscaping measures beyond existing landscape ordinance requirements may be needed to buffer certain use combinations.

Action LU 5.1

Buffering and Screening Regulations

During the update of the City's development regulations, review and amend the buffering and screening requirements between high-intensity land uses and lower-density residential uses. Differentiate between contexts where buffering is the preferred option, and contexts where an urban design solution (integration of height and building elements) is appropriate.

Action LU 5.2

Interface Area Standards

Work with citizens and the development community to define transition or "interface" areas for those areas planned for higher and more dense commercial development that are adjacent to lower density residential areas or designated historic districts and structures. Define tapering standards or establish building "step-backs."

Action LU 5.3

Zoning Changes to Reduce Conflicts

As part of the revisions to the zoning regulations, develop text amendments that:

- Define appropriate buffering, screening, and landscaping requirements along the edges between residential and commercial and/or industrial zones;
- Identify appropriate urban design treatments for managing transitions in mixed-use and urban settings;
- More effectively manage the non-residential uses that are permitted as a matter of right within commercial and residential zones to protect neighborhoods from new uses which generate external impacts, including institutions such as schools, churches, and daycares;
- Ensure that the height, density, and bulk requirements for commercial districts balance business needs with the need to protect the scale and character of adjacent residential neighborhoods; and
- Provide for ground-level retail where appropriate while retaining the residential zoning along major corridors.

A.6 Mixed Use Development

The resurgence of mixed-use downtowns, employment centers, and retail centers is a national development trend that is evident in Raleigh in such areas as downtown, North Hills, and Forestville Village Center. Mixed-use centers bring together medium- to high-density residential and non-residential uses within a walkable, bicycle-friendly, and/or transit-accessible development framework. Uses can be mixed vertically, within buildings; or horizontally, when tightly clustered in a pedestrian-friendly arrangement. Due to the diversity of uses and activities, mixed-use centers are typically vibrant destinations that attract attention due to their level of activity. Fundamentally, a mixed-use center should provide a full service environment and diverse land uses—residences, offices, retail, service, entertainment, civic, and open space—for residents, employees, and visitors.

Policy LU 6.1

Composition of Mixed-Use Centers

Mixed-use centers should be comprised of well-mixed and integrated developments that avoid segregated uses and have well planned public spaces that bring people together and provide opportunities for active living and interaction. (1, 2, 3, 4, 5, 6)

Policy LU 6.2

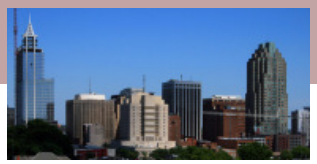
Complementary Uses and Urban Vitality

A complementary integration and mixture of land uses should be provided within regional, city, and community mixed-use centers to maintain the City's livability, manage future growth, and provide walkable and transit accessible destinations. (1, 2, 3, 4, 5, 6)

Policy LU 6.3

Mixed-Use and Multi-Modal Transportation

Promote the development of mixed-use activity centers with multi-modal transportation connections to provide convenient and accessible residential and employment areas. (1, 2, 3, 4, 5, 6)



Policy LU 6.4

Bus Stop Dedication

The City shall coordinate the dedication of land for the construction of bus stop facilities within mixed-use centers on bus lines as part of the development review and zoning process. (3, 4, 6)

Action LU 6.1

Zoning Standards for Mixed-Use

Revise the Zoning Ordinance to modify setback and buffering to the site design requirements within designated mixed-use centers and mixed-use zoning districts to ensure compatibility and encourage dynamic communities.

A.7 Commercial Districts and Corridors

As Raleigh annexed and grew outward over the last 20 years, new residential and commercial development followed and often left behind underutilized commercial areas and maturing neighborhoods. The revitalization of Raleigh's commercial districts and corridors is a primary issue for the City due to their positive or negative influence on an area's development potential, adjacent property values, and gateway aesthetics in and out of the City. Raleigh's commercial districts and corridors hold great potential for "capturing" future residential and commercial demand and for providing viable transit options.

Policy LU 7.1

Encouraging Nodal Development

Discourage auto-oriented commercial "strip" development and instead encourage pedestrian-oriented "nodes" of commercial development at key locations along major corridors. Zoning and design standards should ensure that the height, mass, and scale of development within nodes respects the integrity and character of surrounding residential areas and does not unreasonably impact them. (1, 3, 4, 5, 6)

Policy LU 7.2

Shopping Center Reuse

Promote the redevelopment of aging and high vacancy shopping centers into mixed-use developments with housing and public recreation facilities. (1, 2, 3, 4, 5, 6)

Policy LU 7.3

Single-Family Lots on Thoroughfares

No new single-family residential lots should have direct vehicular access from thoroughfares,in an effort to minimize traffic impacts and preserve the long-term viability of these residential uses when located adjacent to thoroughfares. (3, 4)

Policy LU 7.4

Scale and Design of New Commercial Uses

New uses within commercial districts should be developed at a height, mass, scale, and design that is appropriate and compatible with surrounding areas. (3, 6)

Policy LU 7.5

High-Impact Commercial Uses

Ensure that the City's zoning regulations limit the location and proliferation of fast food restaurants, sexually-oriented businesses, late night alcoholic beverage establishments, 24-hour mini-marts and convenience stores, and similar high impact commercial establishments that generate excessive late night activity, noise, or otherwise affect the quality of life in nearby residential neighborhoods. (3, 6)

Policy LU 7.6

Pedestrian-Friendly Development

New commercial developments and redeveloped commercial areas should be pedestrian-friendly. (4, 5, 6)

Action LU 7.1

Zoning Changes to Reduce Land Use Conflicts in Commercial Zones

As part of the update of the zoning regulations, consider text amendments that:

- More effectively control the uses that are permitted as a matter-of-right in commercial zones;
- Avoid the excessive concentration of particular uses with the potential for adverse effects, such as convenience stores, fast food establishments, and liquor-licensed establishments; and
- Consider performance standards to reduce potential conflicts between certain incompatible uses.

Action LU 7.2

Height and Bulk Hierarchy

Revise the City's Zoning Ordinance to differentiate the height and bulk requirements for commercial and residential development based on its location within a designated center.

Action LU 7.3

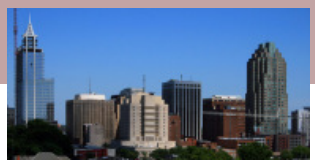
Promoting Commercial Reinvestment

Identify incentives and other economic development tools to promote reinvestment in underperforming commercial corridors.

See also Element D: 'Economic Development' for additional corridor development and revitalization policies and actions.

A.8 Neighborhood Conservation and Development

One of Raleigh's major assets is its tree-lined, historic residential neighborhoods and street-car suburbs within and adjacent to downtown Raleigh. The City also has a number of historic districts. The inner-ring suburbs of the 1950s and 1960s are also well-regarded due to their housing stock, mature trees, and connectivity to surrounding



neighborhoods and shopping centers. The outer-ring suburbs of the last generation contain more auto-dependent residential neighborhoods that lack connectivity. However, more recent developments are applying the design principles of early- and mid-20th century neighborhoods with better connectivity to shopping centers, schools, parks, and open space. The City of Raleigh desires to maintain and conserve its historic residential neighborhoods, maintain and reinvest in its aging inner-ring residential neighborhoods, adapt more recent residential neighborhoods for greater connectivity, guide infill development, and promote traditional neighborhood development (TND) patterns for new residential developments. Two important tools for preserving neighborhood character are the Historic Overlay District (HOD) and the Neighborhood Conservation Overlay District (NCOD), which provide for neighborhood-specific zoning standards and, in the case of the HOD, design standards.

Policy LU 8.1

Housing Variety

Accommodate growth in newly developing areas of the City through mixed-use neighborhoods with a variety of housing types. (1, 2, 3, 4, 5, 6)

Policy LU 8.2

Neighborhood Revitalization

Facilitate neighborhood revitalization and stabilization by focusing grants, loans, housing rehabilitation efforts, commercial investment programs, capital improvements, and other government actions in those areas that are most in need. Use social, economic, and physical indicators such as the poverty rate, the number of abandoned or substandard buildings, the crime rate, and the unemployment rate as key indicators of need. (2, 3, 6)

Policy LU 8.3

Conserving, Enhancing, and Revitalizing Neighborhoods

Recognize the importance of balancing the need to increase the housing supply and expand neighborhood commerce with the parallel need to protect neighborhood character, preserve historic resources, and restore the environment. (2, 3, 6)

Policy LU 8.4

Rehabilitation Before Demolition

In redeveloping areas characterized by vacant, abandoned, and underutilized older buildings, generally encourage rehabilitation and adaptive use of existing buildings rather than demolition. (3, 6)

Policy LU 8.5

Conservation of Single-Family Neighborhoods

Protect and conserve the City's single-family neighborhoods and ensure that their zoning reflects their established low density character. Carefully manage the development of vacant land and the alteration of existing structures in and adjacent to single-family neighborhoods to protect low density character, preserve open space, and maintain neighborhood scale. (2, 3, 6)

Policy LU 8.6

Teardowns

Discourage the replacement of quality homes in good physical condition with new homes that are substantially larger, taller, and bulkier than the prevailing building stock. (3, 6)

Policy LU 8.7

Flag Lots

Generally discourage the use of "flag lots" (lots with little or no street frontage, accessed by a driveway easement or narrow strip of land, and typically located to the rear of another lot) when subdividing residential property. (3, 6)

Policy LU 8.8

Finer-Grained Development

Large oversized blocks in new neighborhoods and subdivisions should be avoided in favor of smaller blocks and enhanced pedestrian networks that create better connections and help facilitate walking and reduce driving. (3, 4, 5, 6)

Policy LU 8.9

Open Space in New Development

New residential development should be developed with common and usable open space that preserves the natural landscape and the highest quality ecological resources on the site. (5, 6)

Policy LU 8.10

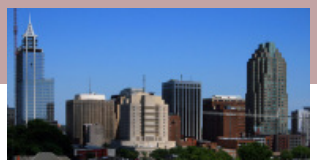
Infill Development

Encourage infill development on vacant land within the City, particularly in areas where there are vacant lots that create "gaps" in the urban fabric and detract from the character of a commercial or residential street. Such development should complement the established character of the area and should not create sharp changes in the physical development pattern. (3, 6)

Policy LU 8.11

Development of Vacant Sites

Facilitate the development of vacant lots that have historically been difficult to develop due to infrastructure or access problems, inadequate lot dimensions, fragmented or absentee ownership, or other constraints. Explore lot consolidation, acquisition, and other measures that would address these. (3, 6)



Policy LU 8.12

Infill Compatibility

Vacant lots and infill sites within existing neighborhoods should be developed consistently with the design elements of adjacent structures, including height, setbacks, and massing through the use of zoning tools including Neighborhood Conservation Overlay Districts. (3, 6)

Policy LU 8.13

Traditional Neighborhood Development

Encourage Traditional Neighborhood Development (TND) and planning for large undeveloped sites within the City's municipal boundaries to improve neighborhood and street connectivity. Traditional Neighborhood Development is an urban form characterized by compact, pedestrian-oriented design, which provides a variety of uses and diverse housing types within easy walking distance, and is anchored by a central public space and civic activity (school, library, church, or similar institution). (2, 3, 4, 5, 6)

Policy LU 8.14

Student-Oriented Housing

Encourage student-oriented housing, including fraternities, sororities, dormitories and rent-by-the-room, multi-bedroom apartments, to locate in the area immediately adjacent to colleges/universities, in transit-oriented development areas, or in downtown. (2, 3, 4, 6)

Action LU 8.1

Common Open Space

During the update of the City's development regulations, revise the zoning ordinance to require common usable open space within newly-constructed subdivisions.

Action LU 8.2

Open Space Networks

Study amending the City's subdivision regulations to require the preservation of ecological resources such as contiguous woodlands, wetlands, floodplains, riparian areas, Significant Natural Heritage Areas, and priority wildlife habitats identified in the "NC Wildlife Action Plan" as part of a development's open space requirements.

Action LU 8.3

Acquisition of Vacant Lots

Identify smaller vacant lots within developed areas for potential acquisition for public open space.

Action LU 8.4

Infill Standards

As part of the Zoning Code update, introduce new zoning districts and/or other zoning tools for infill development.

Action LU 8.5

Infill Procedures

Make changes to the City's procedures (including administrative review) for approving infill residential development proposals to improve consistency and predictability of the process that will ensure that such developments are compatible with the built environment of established neighborhoods into which they are placed.

See also Element J: 'Historic Preservation' for additional policies and actions related to neighborhood conservation.

A.9 Research and Development/Institutional Land Uses

Raleigh is well-known regionally and nationally for its level of excellence in colleges and universities, research and development industries, and hospital research and care. However, since these public and private institutions and industries often have large campus settings, their future growth and expansion could affect adjacent residential neighborhoods. Due to their contribution to the City's economic and social fabric, Raleigh wants to encourage additional institutional growth while protecting existing neighborhoods through proactive planning and communication.

Policy LU 9.1

Planning for the Tech Sector

Plan for and designate adequate land for offices, laboratories, business incubators, and flex space buildings to accommodate Raleigh's growing technology industries on the Future Land Use Map. (1, 3)

Policy LU 9.2

Coordinating Institutional Growth

Expand and encourage partnerships among the City's many large institutions to coordinate future growth and development of these institutions with surrounding land uses and neighborhoods. (1, 3, 6)

Policy LU 9.3

Hospitals

Plan for and designate adequate land for the equitable distribution of hospitals and their facilities throughout the City on the Future Land Use Map. (1, 3, 6)

Policy LU 9.4

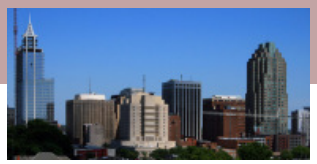
Health Care Industry

Support the continued growth and expansion of the City's health care providers to serve the needs of Raleigh's residents. (1, 3, 6)

Action LU 9.1

Zoning for the Tech Sector

As part of the update to the City's development regulations, consider the creation of a new zoning district targeting office, research and development, and flex space development, including associated light assembly, fabrication and distribution. This district should include performance standards encouraging a higher quality of development than is typical for traditional industrial areas.



Action LU 9.2

Small Area Studies in Institutional Areas

Prepare small area studies for the areas surrounding large educational, health care, and research facilities to ensure orderly, low-impact growth.

Action LU 9.3

Institutional Overlay District

Work with higher education institutions to prepare an overlay district for large institution and campus uses, such as colleges, universities, hospitals, and research centers, that tailors zoning requirements more closely to the needs of these institutions.

A.10 Retail Land Uses

Raleigh's retail uses are primarily located within mixed-use centers—such as downtown Raleigh, North Hills, and Crabtree Valley—and along commercial corridors. Downtown Raleigh contains a number of mixed-use districts—Fayetteville Street, Moore Square, Glenwood Avenue—that provide an expanding base of local retail goods and services and limited national retailers. Cameron Village is one of the first retail shopping centers built in this country after WWII, and offers a strong and diverse mix of local and national retailers in a pedestrian-friendly environment. North Hills is the location of Raleigh's first enclosed retail shopping mall, built with large national department stores to anchor smaller national and local retailers. North Hills is now a pedestrian-oriented lifestyle center with a greater mix of office and residential uses. Crabtree Valley, Raleigh's second and larger enclosed shopping mall, is also undergoing a transformation into a more mixed-use center, and is attracting more retail uses through infill development. Triangle Town Center is Raleigh's most recently built enclosed retail shopping mall. The remainder of Raleigh's retail uses are located in commercial shopping centers along the City's thoroughfares. Raleigh's retail policies focus on strengthening its current mixed-use centers, encouraging retail uses within new pedestrian-friendly, mixed-use centers, and minimizing the impact of auto-oriented commercial retail uses.

Policy LU 10.1

Mixed-Use Retail

Encourage new retail development in mixed-use developments. (3, 4)

Policy LU 10.2

Retail in Industrial Zones

Discourage retail uses in industrial zones to maintain viable industrial areas and avoid an oversupply of retail uses. (1, 3)

Policy LU 10.3

Ancillary Retail Uses

Ancillary retail uses in residential and office developments located in areas designated *High Density Residential*, *Office Residential—Mixed Use* and *Office/Research and Development* should not be larger in size than appropriate to serve primarily the residents, employees, visitors, and patrons of the primary uses in the area; should preferably be located within a mixed-use building; and should be sited to minimize adverse traffic, noise, and visual impacts on adjoining residential areas. (3, 4)

Policy LU 10.4

Siting of Regional Retail

Regional retail uses—including big box, power centers, and regional malls—should be located where access is available from at least two roadways classified as Major Thoroughfare or higher on the Thoroughfare Map (*see Element B: 'Transportation' for the Thoroughfare Map, Map T-1*). Access should be obtained from both roadways. (3, 4)

Policy LU 10.5

Regional Retail and Residential Areas

Regional retail uses should not be located adjacent to areas designated for Low- to Moderate-Density Residential use on the Zoning Map or Future Land Use Map, or areas currently developed for such use. (3, 4)

Policy LU 10.6

Retail Nodes

Retail uses should concentrate in mixed-use centers and should not spread along thoroughfares in a linear "strip" pattern unless ancillary to office or high-density residential use. (3, 4)

Action LU 10.1

Performance Standards for Big Box Retail

During the update of the City's development regulations, consider zoning revisions that establish locational and requirements and/or performance and design standards for big box retail.

See also Element D: 'Economic Development' for additional policies related to retail and economic development.

A.11 Industrial Land Uses

The City's industrial areas support a variety of uses. Industrial uses occupy approximately 3,600 acres or 3.7 percent of the City's jurisdiction. These uses are typically concentrated along rail corridors and the roads that run parallel to them, with some corresponding to warehousing and distribution areas adjacent to interstate highways, such as the area off of the I-40 interchange with Jones Sausage Road in southeast Raleigh. While only 3.7 percent of the City's jurisdiction is occupied by industrial uses, over 10 percent of the land is zoned for industrial uses (Industrial-1 and -2). The majority of industrially-zoned lands are developed with office or retail uses, which are currently permitted as-of-right within industrial zoning districts. The Comprehensive Plan text and the Future Land Use Map address the location, zoning, and compatibility aspects of Raleigh's industrial areas.

Policy LU 11.1

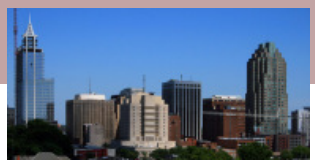
Preserving Industrial Land

Support land use policies that protect competitive opportunities to locate industrial, flex, and warehouse sites near major transportation corridors and the airport. (1, 4)

Policy LU 11.2

Location of Industrial Areas

Accommodate industrial uses— including municipal public works facilities—in areas that are well buffered from residential uses (and other sensitive uses such as schools), easily accessed from major roads and railroads, and characterized by existing concentrations of industrial uses. Such areas are generally designated as "General Industrial" on the Future Land Use Map. (3, 4, 6)



Policy LU 11.3

Commercial Uses in Industrial Areas

Limit specified non-industrial uses in industrially zoned areas, including office and retail development, in order to preserve these areas for industrial development. (1)

Policy LU 11.4

Rezoning/Development of Industrial Areas

Allow the rezoning and/or redevelopment of industrial land for non-industrial purposes when the land can no longer viably support industrial activities or is located such that industry is not consistent with the Future Land Use Map. Examples include land in the immediate vicinity of planned transit stations. (1, 3)

Policy LU 11.5

Mitigating Industrial Land Use Impacts

Mitigate the adverse impacts created by industrial uses through a variety of measures, including buffering, site planning and design, strict environmental controls, performance standards, and the use of a range of industrial zones that reflect the varying impacts of different kinds of industrial uses. (6)

Action LU 11.1

Industrial Zoning Amendments

Amend the Zoning Ordinance to remove retail uses as "by-right" uses permitted within industrial zones.

Action LU 11.2

Industrial Land Use Compatibility

During the revision of the zoning regulations, develop performance standards and buffering guidelines to improve edge conditions where industrial uses abut residential uses, and to address areas where residential uses currently exist within industrially zoned areas.

A.12 Large Site Development

The City's Future Land Use Map will guide the future development of Raleigh, with the exception of "Special Study Areas." These areas will be treated separately due to their large size, unknown market potentials, environmental constraints, or other significant land use variables. For example, the Dorothea Dix State Hospital is located near downtown Raleigh and may be decommissioned as a hospital; therefore, the City and the public are concerned about future re-use and development of this large site due to its potential positive and negative impacts. Raleigh's policies on the development of large sites provide a mechanism for planned and orderly growth.

Policy LU 12.1

Planning Process for Large Sites

Ensure the appropriate development of large sites proposed for redevelopment within Raleigh—such as the Dorothea Dix Hospital property—through visioning, design workshops, special studies, and iterative public involvement processes that build consensus as part of the site's special study process. (3, 6)

Policy LU 12.2

Large Sites Outside the ETJ

Ensure the appropriate development of large sites outside of Raleigh's current ETJ boundaries but within its USA boundaries—such as the City-owned Randleigh Farm property—through special studies to determine potential future land uses and impacts on City revenues and services. (1, 3, 5, 6)

Policy LU 12.3

Reservations for Community Facilities

Plans for large sites should identify park and community facility needs and reserve appropriate portions of the site for schools, parks, public safety buildings, and other facilities. (3, 4, 6)

Policy LU 12.4

Community Involvement and Special Study Areas

Engage the public and adjacent property owners in all special study area deliberations, meetings, and actions that could affect an area's future land uses. (1, 3, 6)

Action LU 12.1

PDD Revisions for Large Sites

Revise the City's Planned Development District (PDD) regulations to encourage more fine-grained planning of large site developments through an approved master plan, which may establish custom land use regulations to apply after the master plan is approved.

Action LU 12.2

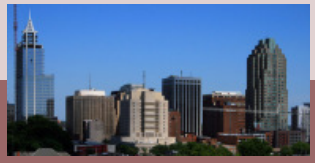
Dix Property Acquisition

Pursue the acquisition of the Dorothea Dix property from the State of North Carolina.

Action LU 12.3

Dix Property Plan

Engage in a public planning process for the 80 acres of existing structures and 226 acres of open space.



Transportation

Element B: Transportation

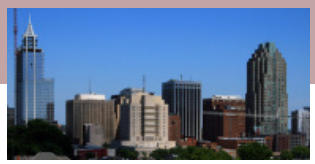
The City of Raleigh recognizes the importance of developing a balanced, efficient, multi-modal transportation network that minimizes impacts to the environment and reinforces the livability of neighborhoods. The Transportation Element is meant to guide future development of the City's corridors, roads and highways for motorized and non-motorized transportation including public transit systems, bicycle, and pedestrian networks. The transportation network is developed in a sustainable pattern that supports the City's future land uses and urban form, minimizes vehicle miles traveled and single-occupancy vehicles, and reduces air pollution and greenhouse gas emissions.

Raleigh has a well-established roadway network of approximately 130 miles of arterials and thoroughfares and 1,631 miles of collectors and local streets. While some of these roads are maintained by the NCDOT, the City itself maintains approximately 1,017 miles of thoroughfares, collectors, and local streets, as well as 1,190 miles of sidewalks, nearly 60 miles of bikeable greenway trails and bikeways, and 4 miles of bicycle lanes.

By 2035, Raleigh's roadway network is projected to become more congested, with both the amount of time and number of miles spent on the roads increasing. Vehicle miles traveled (VMT) and vehicle hours traveled (VHT) are both projected to increase from 2005 levels by over 50 percent – travel along freeway, collector, and local roadways will be most affected. In addition, the total number of trips (AM, PM, and overall) taken on Raleigh's road network is projected to increase by over 50 percent. Capital Boulevard (north of I-540), I-540 (from Capital Boulevard to I-40), and U.S. 401 (north of I-540) in north Raleigh are three roadways where both the traffic and level of service are projected to worsen greatly from 2005 to 2035. To affect these projections, not only will existing facilities and services have to be improved, but new mobility options – including increased and higher capacity transit service – must be created to meet the growing needs of Raleigh through the year 2030.

The Transportation Element contains policies that will create a well-connected, multi-modal transportation network, support increased densities, help walking become more practical for short trips, support bicycling for both short- and long-distance trips, improve transit to serve frequented destinations, conserve energy resources, reduce greenhouse gas emissions and air pollution, and do so while maintaining vehicular access and circulation. More specifically, the policies and actions within this element address the following key transportation issues:

- Sprawling and segregated land use patterns have led to a high dependency on single-occupancy automobile trips;
- There is a need for better coordination of land use and transportation project review procedures to enable efficient and connected development patterns;
- Road widening and new facilities to address automobile congestion are not by themselves feasible solutions to the region's mounting congestion and long commutes (*See Policy T 3.3: Redefining LOS*);
- Even with programmed investments, the future transportation system is projected to be severely constrained by the year 2035;
- The enormous growth experienced and planned in Raleigh will transform the City into the center of the region, and has the potential of changing the dynamics of the region's transportation system;
- Traffic calming will continue to be an issue for many neighborhoods as traffic levels increase on major thoroughfares and drivers seek alternative routes using local residential streets;



- There are limited multi-modal facilities that provide transit, bicycle and pedestrian accessibility, and help reduce congestion;
- Better coordination is needed among transportation planning partners such as: NCDOT, CAMPO, Triangle Transit, Capital Area Transit, and the surrounding counties and cities;
- Safety issues must be addressed along corridors, at intersections, and at locations with bicycles and pedestrians; and,
- Limited efficiency and coverage area of the current transit system prevents it from being an attractive alternative to the automobile.

Achieving a balanced and effective transportation system will require a greater investment in transit, pedestrian, and bicycle infrastructure. Detailed information concerning the underlying issues and background information can be found in the *Community Inventory Report*.

For Raleigh to meet the vision theme of *Economic Prosperity and Equity*, the transportation system must be multi-modal, operate efficiently, and provide all users with the ability to reach their destinations safely. Raleigh needs to provide facilities and services that meet the needs of the City's residents and visitors including senior citizens, the disabled, and transit-dependent persons.

Not only does the transportation system provide for the mobility of people and goods, but over the long term it influences patterns of growth and the level of economic activity through the accessibility it provides to adjacent land uses. To meet the vision theme of *Coordinating Land Use and Transportation*, the Comprehensive Plan must provide policies to help reduce the need for trip-making (particularly single-occupant vehicle, or SOV, trips), provide choices for shorter trips, and encourage walking, bicycling, and transit use. The Transportation and Land Use Elements must mutually reinforce one another and provide Raleigh with a foundation to make informed decisions.

When considering the relationship of transportation with vision themes such as *Growing Successful Neighborhoods and Communities* and *Greenprint Raleigh*, it is important to consider social and environmental impacts. Reducing auto trips and auto dependency can make significant improvements to air quality. By using Context Sensitive Solutions (CSS), transportation investments can be developed that meet the needs of citizens and the surrounding land uses.

Another vision theme addressed in the Transportation Element is *Managing Our Growth*. By 2035, Raleigh's roadway network will be extremely congested. It will not be possible to widen many congested roads due to limited funding and right-of-way. The problem can be attributed to extensive low density growth patterns, where 35 percent of commuters have a commuting travel time greater than 30 minutes, and per capita vehicle miles greatly exceed national norms for metro areas. Additionally, nearly 94 percent of Raleigh's population relies on highway-based trips, concentrating traffic pressure on highway corridors. In order for Raleigh's transportation network to remain sustainable and continue to operate effectively, it will be important to manage the assets already in place and determine the most fiscally responsible transportation investments. This will also take considerable coordination between planning partners such as: North Carolina Department of Transportation (NCDOT), Capital Area Metropolitan Planning Organization (CAMPO), Triangle Transit, Capital Area Transit, and the surrounding counties and cities.

Policies and actions of this element appear below. Numbers indicate their relationship to the themes, as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth

4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

B.1 Land Use and Transportation Coordination

Like many growing cities, Raleigh is experiencing extensive low density suburban growth that has had a negative impact on the overall transportation system. Projects exclusively designed to address automobile congestion are not feasible solutions to the City's mounting congestion and long commutes. Roadway investments must be balanced with investments in other transportation modes such as public transportation and greenways. In addition, it is important to link development to sidewalks and greenways, as well as provide adequate connections to transit.

Land use patterns have a significant effect on trip generation and travel behavior. Compact, mixed-use and walkable developments mitigate traffic generation and thoroughfare impacts by shortening trip distances, capturing a greater share of trips internally, and facilitating transit and non-motorized trip-making. Successful mixed-use areas with multi-modal access can thrive with lower parking ratios, freeing up land and capital for open space amenities and productive, revenue-producing uses.

Policies in this section are used to develop and maintain a sustainable multi-modal transportation system that supports new and existing residential, commercial and recreational areas, preserves and enhances neighborhood livability and the quality of life for Raleigh's residents, and provides for the safe and efficient movement of people and goods. Land use and transportation decisions should mutually reinforce each other.

See also A.4 'Land Use and Transportation Coordination' in Element A: 'Land Use' for additional policies related to improving land use and transportation coordination.

Policy T 1.1

Coordination with Land Use Map

Transportation planning, development, expansion, and investment in transportation facilities should be coordinated with the Future Land Use Map. (2, 3, 4, 5)

Policy T 1.2

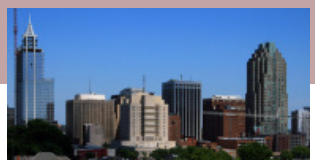
Right-of-Way Reservation

Support the early identification and acquisition of land for future transportation corridors through land use planning and development permitting. (3, 4, 5)

Policy T 1.3

Multi-modal Transportation Design

Offer residents safe and attractive choices among modes including pedestrian walkways, bikeways, public transportation, roadways, railways, and aviation. The street patterns of newly developed areas should provide multi-modal transportation alternatives for access to and circulation between adjacent neighborhoods, parks, shopping centers, and employment areas. (4, 5, 6)



Policy T 1.4

Increasing Mobility Choice

Diversify the mobility choices for work trips by targeting transit investments along corridors that connect concentrations of office, retail, and residential uses. (4, 6)

Policy T 1.5

Context Sensitive Road Design

"Context Sensitive" approaches shall be used for new roadways or widening of existing roads to minimize impacts to historic business districts and neighborhoods and sensitive natural areas (particularly in watershed protection, conservation management and metro park protection areas). (4, 5, 6)
See Text Box: Sensitive Area Thoroughfares.

Policy T 1.6

Transportation Impacts

Identify and address transportation impacts before a development is implemented. (3, 4)

Sensitive Area Thoroughfares

Sensitive area thoroughfares are thoroughfares designed with a shoulder and swale section. They are defined as any major or minor thoroughfare located within a Metro Park or Watershed Protection Overlay District, or other areas approved by the City Council. Special design standards for these thoroughfares are contained within the Streets, Sidewalks, and Driveway Access Handbook.

Action T 1.1

Corridor Preservation

Create a "tool kit" of actions to help preserve future transportation corridors through development review and land use planning.

Action T 1.2

Transportation Impact Analysis

Develop and adopt regulations that establish a threshold to require a multi-modal transportation impact analysis (TIA) for all proposed new and expanded development, as well as zoning map amendments. These regulations should meet or exceed the requirements detailed in NCDOT Traffic Impact Analysis Guidelines (see Text Box: *Thresholds for Transportation Impact Analysis*).

Action T 1.3

Context Sensitive Solutions

Adopt Context Sensitive Solution practices to determine the most appropriate transportation improvements to minimize environmental impacts and serve adjacent and future land uses within a multi-modal network. These practices should be included in a revision to the Streets, Sidewalks, and Driveway Access Handbook.

Thresholds for Transportation Impact Analysis

NCDOT has adopted guidelines for when and how a Transportation Impact Analysis (TIA) should be performed. Many local jurisdictions, including Wake County, have also adopted TIA thresholds, typically lower than those chosen by NCDOT. NCDOT recommends a TIA when one of the following conditions is met:

- Access is from a major arterial roadway;
- Daily trips exceed 3,000 vehicles per day (VPD);
- Within 1,000 feet of an interchange;
- Affects a location with a high crash history;
- Involves existing or proposed median crossover;
- Involves an active roadway construction project; or
- Involves an active TIP project.

Some example thresholds from local jurisdictions include:

- City of Durham: Peak Hour Trips ≥ 150 Vehicles per Hour (VPH);
- Wake County: Peak Hour Trips ≥ 100 VPH or Daily Trips ≥ 1,000 VPD;
- Town of Cary: Peak Hour Trips ≥ 20 VPH *and* any development where expected trips exceed traffic generated by R-20 development (2.2 units per acre);
- City of Charlotte: Daily Trips ≥ 2,500 VPD; or affects a location with a high crash history; or takes place at a high congestion location (vehicles/capacity > 1); or creates a fourth leg at an existing signalized intersection; or exacerbates an already difficult situation (railroad crossing, school access, etc.).

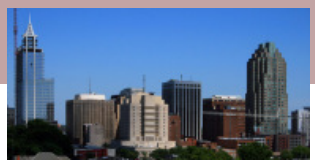
B.2 Roadway System and Transportation Demand Management

Raleigh is currently served by a mixture of classified roadways including arterials, thoroughfares, collectors, and local roads. **Map T.1: Arterials, Thoroughfares and Collector Streets**, illustrates the current functional classification of Raleigh's major roadways, as well as proposed connections that the City will work to construct through right-of-way preservation, developer contributions, and capital improvements. Currently the typical road designs used by the City are determined by the roadway classification and provide little flexibility, particularly when evaluating the surrounding land uses and potential users of the corridor.

While the Transportation Plan includes this classification system, the Transportation Plan also recommends that the City study and implement a complete streets approach that provides a revised classification system better integrating multiple modes and land use accessibility (see B.3 'Complete Streets: Hierarchy and Design'). The function of each of the roadways illustrated on **Map T.1** are described below:

Thoroughfare System

Map T.1 reflects the adopted Thoroughfare Plan for the urbanized area, mutually approved by the governing bodies of all local jurisdictions in the region through the Capital Area Metropolitan Planning Organization and the North Carolina



Department of Transportation. The Thoroughfare System is composed of the Arterial and Non-Arterial Systems. Thoroughfare system classifications are described below and summarized in **Table T-1**.

Arterial System

Composed of both principal arterials and secondary arterials, this system's purpose is to provide for safe and efficient travel through the area, as well as to the major activity centers within the region.

Principal Arterials are comprised of limited-access freeways and expressways, as well as major, non-access controlled facilities, also referred to as gateway arterials. Arterials serve as the principal routes for movement of traffic through the City. These regionally-important highways, generally Federal Interstate and U.S. primary routes, have extensive statewide continuity and are the predominant routes used by non-local traffic, as well as the City's motorists.

- Freeways are multi-lane, median-divided highways designed to the highest possible standard. Access is provided through grade-separated interchanges and no perpendicular access via at-grade intersections or driveways is allowed. Examples of this type of roadway are Interstates 40 and 440.
- Expressways are multi-lane, median-divided highways with lower design standards than freeways. Access restrictions still apply, however. Capital Boulevard between Wade Avenue and Wake Forest Road is an example of an expressway.
- Gateway arterials are typical of most of the U.S. routes serving the City. These highways are similar to expressways except that there are driveways and at-grade intersections. Gateway arterials are U.S. 1 and U.S. 401 North, U.S. 64 East, U.S. 70 East/401 South and U.S. 70 West.

Secondary Arterials serve predominantly locally-generated traffic. Access limitations are less strict than for principal arterials, as these facilities also must provide access to adjacent land and serve to distribute traffic from principal arterials to thoroughfare and collector streets. Separate turning lanes at all major access points should be provided to reduce impediments to smooth travel flow. The land uses along secondary arterial major thoroughfares can be either primarily residential or primarily non-residential. Design guidelines for thoroughfares vary accordingly. Examples are Millbrook Road and Western Boulevard.

Non-Arterial System

Major Thoroughfares are typically undivided five-lane streets or four-lane streets with medians on 90 feet of right-of-way. Non-arterial major thoroughfares serve both residential or non-residential land uses. Examples are Spring Forest Road and Rock Quarry Road.

Minor Thoroughfares are typically undivided four-lane streets on 80 feet of right-of-way. These roadways are appropriate where adjacent land uses are low- to medium-density residential or where existing driveways are limited, such that a continuous center turn lane serves no useful purpose.

Collector Street System

This intermediate street system is designed to provide the primary connections between the thoroughfare system and the remainder of the local street system. In most areas, collector streets should provide a travel lane in each direction, with additional width for turning lanes at intersections. Where high-density residential or commercial development is proposed, greater capacity may be required.

Proposed collector streets are also shown on **Map T-1**. Proposed collector streets illustrate the need for such a facility within a general area, not a specific location. The exact locations of new collectors will be determined through specific studies or as development occurs.

Table T-1 Summary of Thoroughfare System Classification

Classification	Typical Two-Way Volumes	Typical Section	Examples
Principal Arterial	40,000 Vehicles per Day (VPD) and above	At least three lanes in each direction, with medians and limitations or restrictions on driveway access	I-40, I-440, US 1 (Capital Blvd.), US 70 (Glenwood Ave.), US 401 (Louisburg Rd.)
Secondary Arterial	25,000 – 45,000 VPD	Three lanes in each direction, with medians or a center turn lane and limitations on driveway access	NC 50 (Creedmor Rd.), Wake Forest Road, Falls of Neuse Road, Hammond Road, Brier Creek Parkway
Major Thoroughfare	15,000 – 35,000 VPD	Two lanes in each direction, with medians or a center turn lane and limitations on driveway access	Millbrook Road, Lynn Road, Hillsborough Street, Blue Ridge Road, Leesville Road, Martin Luther King Jr. Blvd.
Minor Thoroughfare	8,000 – 20,000 VPD	At least one lane in each direction, with medians or a center turn lane	Clark Avenue, Ray Road, Newton Raod, Lassiter Mill Road, St. Marys St., Tarboro Road
Collector Street	2,000 – 8,000 VPD	One lane in each direction	Method Road, Athens Drive, Marvino Lane, Harps Mill Road, Falls River Avenue, Old Poole Rd.

Residential Access System

With relatively low traffic volumes, residential streets are designed to connect individual residences to the larger street system and disperse traffic throughout a system of interconnected roadways. It is important that the residential street system be well connected to help relieve traffic burdens on individual collector streets and thoroughfares and to provide alternative routes for traffic within and between neighborhoods. Residential streets are relatively narrow, with two lanes, designed for the intensity of abutting development. Residential streets are not illustrated on **Map T.1**.

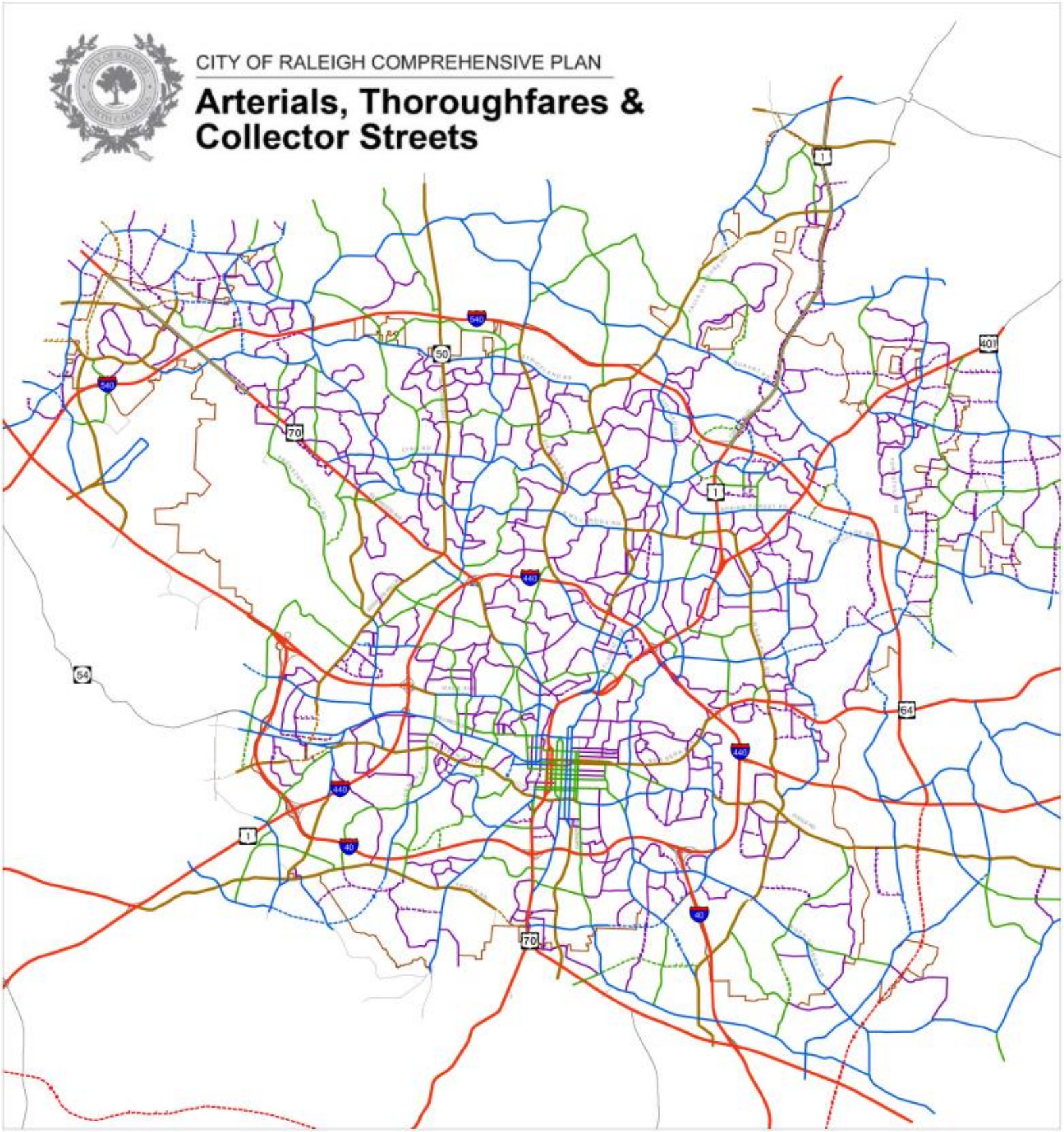
Policies in this section provide for strategies that improve connectivity by extending roadways and filling in gaps in the roadway network. These investments are also intended to reflect a balance among the diverse needs of pedestrians, bicyclists, transit riders, and motorists. Roadway investments should consider surrounding land use context and be designed to minimize environmental and neighborhood impacts. Transportation Demand Management (TDM) practices should be utilized to make the best use of existing transportation investments.

Special Study Areas

During the comprehensive planning process, five specific areas of Raleigh were identified for focused transportation studies to either determine preferred roadway alignments, locate potential new connections, or identify other roadway projects needed to address specific transportation and land use issues or problems. Some areas are forecasted to suffer from significant congestion based 2035 growth projections; some require increased connectivity to set the stage for future redevelopment; and in some cases the City and affected property owners would greatly benefit from resolving uncertainty regarding future alignments. The five areas and the study purpose are described below:

CITY OF RALEIGH COMPREHENSIVE PLAN

Arterials, Thoroughfares & Collector Streets



MAP T-1

Types of Thoroughfares

- Upgrade to Freeway
- Principal Arterials
- Principal Arterials Proposed
- Secondary Arterials
- Secondary Arterials Proposed
- Major Thoroughfares
- Major Thoroughfares Proposed
- Minor Thoroughfares
- Minor Thoroughfares Proposed
- Collectors
- Collectors Proposed

- ETJ
- Highway
- Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division

1. **Gorman Street Extension Corridor:** Evaluate the proposed extension of Gorman Street as a major thoroughfare south of Tryon Road to connect to Cary Parkway at Holly Springs Road. It is anticipated that a corridor study would determine the purpose and need for the facility and evaluate multiple alignment alternatives. This study will be coordinated by CAMPO in conjunction with NCDOT, Wake County, and the Town of Cary.
2. **Six Forks/Wake Forest Road Corridor:** Evaluate the growth projections for this area from I-440 to Wake Forest Road. Future volume projections indicate roadways in this area may be significantly over capacity in the future.
3. **Centennial Parkway/Lake Wheeler Road/Maywood Avenue Area:** Evaluate future roadway improvements and connectivity needs, consistent with the recommendations of the "Big Ideas" workshops to accommodate a new land use vision for this area.
4. **Atlantic Avenue Corridor:** Evaluate the growth projections for the corridor between Capital Boulevard and Millbrook Road. Future volume projections indicate Atlantic Avenue may be over capacity in the future and may warrant reclassification.
5. **Crabtree Valley:** Evaluate future roadway improvement alternatives for this area, including possible new interchanges, new roadway construction, and transit options. This study will also evaluate the land use growth pattern for the area and determine solutions to handle future growth in this area.

Policy T 2.1

Integration of Travel Modes

Promote and develop an integrated, mXulti-modal transportation system that offers safe and attractive choices among modes including pedestrian walkways, bikeways, public transportation, roadways, railways, and aviation. (3, 5, 6)

Policy T 2.2

Defining Future Rights-of-Way

As resources permit, move from "conceptual" routes for future streets to more specifically mapped future rights-of-way, backed by engineering studies. Mapping streets also determines where to install water and sewer infrastructure and reduces the need for easements across private property. (3, 5)

Policy T 2.3

Eliminating Gaps

Eliminate "gaps" in the roadway system and provide a higher roadway grid density that will increase mobility options and promote the accessibility of nearby land uses. (3, 4, 5)

Policy T 2.4

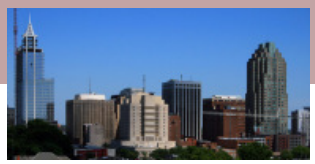
Road Connectivity

The use of cul-de-sacs and dead-end streets should be minimized. (3, 5)

Policy T 2.5

Multi-modal Grids

All new residential, commercial, or mixed-use developments that construct or extend roadways should include a multi-modal network (including non-motorized modes) that provides for a well-connected, walkable community, preferably as a grid or modified grid. (4, 6, 5)



Policy T 2.6

Preserving the Grid

Existing street grid networks should be preserved and extended where feasible and appropriate to increase overall connectivity. (4, 6, 5)

Policy T 2.7

Conditions for Roadway Closure

No street, alley, or other public right-of-way shall be abandoned without the highest level of scrutiny and concurrence among affected City departments and utility companies. Right-of-way abandonment shall be subject to the following findings:

- The closure will not compromise the integrity of the City's street network, nor lead to a significant loss of vehicular or pedestrian connectivity;
- The closure will not impair the ability to provide utility service;
- The closure will not adversely impact the health, safety and welfare of the community, including access by emergency vehicles;
- The proposed closure is not in conflict with adopted Raleigh Historic Districts Commission policy regarding alley closures in local historic and National Register districts; and
- Reasonable alternatives have been investigated and found to be impractical or more detrimental to the public welfare than the proposed closure. (4, 6)

Policy T 2.8

Access Management Strategies

Appropriate access management strategies (i.e. location and spacing of permitted driveways) should be applied based on a roadway's functional characteristics, surrounding land uses, and the roadway's users. (3, 4, 5)

Policy T 2.9

Curb Cuts

The development of curb cuts along public streets—particularly on thoroughfares and arterials—should be minimized to reduce vehicular conflicts, increase pedestrian safety, and improve roadway capacity. (3, 4, 5)

Policy T 2.10

Level of Service

Maintain level of service (LOS) "E" or better on all roadways and for overall intersection operation at all times, including peak travel times, unless maintaining this LOS would be infeasible and/or conflict with the achievement of other goals. (3)

Level of Service (LOS)

LOS A	Drivers perceive little or no delay and easily progress along a corridor.
LOS B	Drivers experience some delay but generally driving conditions are favorable.
LOS C	Travel speeds are slightly lower than the posted speed with noticeable delay in intersection areas.
LOS D	Travel speeds are well below the posted speed with few opportunities to pass and considerable intersection delay.
LOS E	The facility is operating at capacity and there are virtually no useable gaps in the traffic. This is typically the acceptable threshold for urban areas.
LOS F	More traffic desires to use a particular facility than it is designed to handle resulting in extreme delays.

Source: Highway Capacity Manual 2000 (HCM)

Policy T 2.11

Lane Additions

Consider adding lanes to increase roadway capacity only after the roadway exceeds 20 percent of full capacity and all other alternative approaches have been considered. This includes enhancing other transportation modes and roadway modifications such as restricting driveway access and adding turn lanes. Improvements to the roadway network should increase vehicle dispersion and circulation. (3, 5)

Policy T 2.12

Interjurisdictional Transportation Planning

Continue to work with regional planning partners and local transportation agencies to coordinate transportation planning, operations, and funding priorities and to identify existing and future transportation corridors that should be linked across jurisdictional boundaries so that sufficient right-of-way may be preserved. (3, 5, 6)

Policy T 2.13

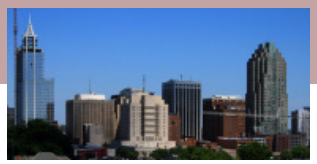
Increasing Vehicle Occupancy

Encourage and support programs that increase vehicle occupancy, including the provision of traveler information, shuttles, preferential parking for carpools/vanpools, park and ride, transit pass subsidies, and other methods (refer to Triangle Region Long Range TDM Plan). (3, 5)

Policy T 2.14

Employer-Based Trip Reduction

Encourage employers to provide transit subsidies, bicycle facilities, alternative work schedules, ridesharing, telecommuting and



work-at-home programs, employee education, and preferential parking for carpools/vanpools. (3, 5)

Policy T 2.15

Sensitive Road Design

Ensure that all new roadway projects and major reconstruction projects preserve existing trees and topography to the maximum extent feasible and provide an adequate street tree canopy while providing for the safest facility possible. Involve relevant experts (such as a certified arborist) in project planning when implementing this policy. (5)

Policy T 2.16

Assessing Changes in Road Design

Subject all proposed changes to the treatment of existing vehicular rights-of-way, such as changes to the number and type of travel lanes, to a study prior to implementation to determine the impacts on the larger network and the level of service of all relevant modes. (3, 4)

Policy T 2.17

Bridge Improvements

Coordinate with NCDOT for bridge monitoring, maintenance, and rehabilitation. Bridge improvements should be considered when roadway investments are being pursued. (3, 5)

Policy T 2.18

Roadway Tree Canopies

Provide additional tree canopies consistent with recommendations from the Urban Forestry Division. Along multi-lane roads with planted medians, this reduces the visual height-to-width ratio of the overall streetscape and provides pedestrian refuges at signalized crossings. (5)

Action T 2.1

Transportation Demand Management

Develop a City of Raleigh Transportation Demand Management Plan or adopt the Triangle Region TDM Plan to reduce the use of single-occupant vehicles. The plan should contain elements such as: transit and vanpool subsidies, ride matching services, commuter information center, and telecommuting.

Action T 2.2

Access Management Plan

Establish a flexible Access Management Plan that identifies and helps preserve priority corridors.

Action T 2.3

Right-of-Way Reservation

Conduct detailed analyses of proposed corridors and roadway connections to establish alignments, and take proactive

steps to resolve future corridors and connections via development coordination or by acquisition.

Action T 2.4

Limited Access Lane Management

Coordinate with NCDOT on limited access facilities to investigate the feasibility of establishing lane management policies such as high occupancy vehicle (HOV) lanes, truck lanes, express lanes, and toll lanes.

Action T 2.5

Inter-modal Facility Prioritization

Work with CAMPO in the prioritization of inter-modal transportation facilities to ensure that adequate funding consideration for the planning and programming of these facilities is being given as part of CAMPO's Transportation Improvement Program (TIP).

Action T 2.6

Reducing Single Occupant Driving

Provide incentives for public-private transportation partnerships (such as car sharing companies) to establish pilot programs within downtown, activity centers, and other appropriate areas to reduce single-occupant vehicles. (5)

Action T 2.7

Special Transportation Studies

Undertake special studies for the five areas identified in the introduction to this section:

1. Gorman Street Extension Corridor
2. Six Forks/Wake Forest Road Corridor
3. Centennial Parkway/Lake Wheeler Road/Maywood Avenue Area
4. Atlantic Avenue Corridor
5. Crabtree Valley

Action T 2.8

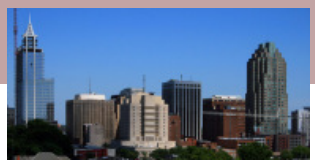
Transportation Funding Strategy

Develop a funding strategy for all maintenance and new construction transportation projects, including public/private partnerships for construction of strategic transportation facilities. The strategy should reflect a multi-modal approach to transportation issues.

Action T 2.9

Connectivity Index

Adopt connectivity index standards within the subdivision regulations to promote greater connectivity of the City's street network (see Text Box: *Measures of Roadway Connectivity* for detailed description).

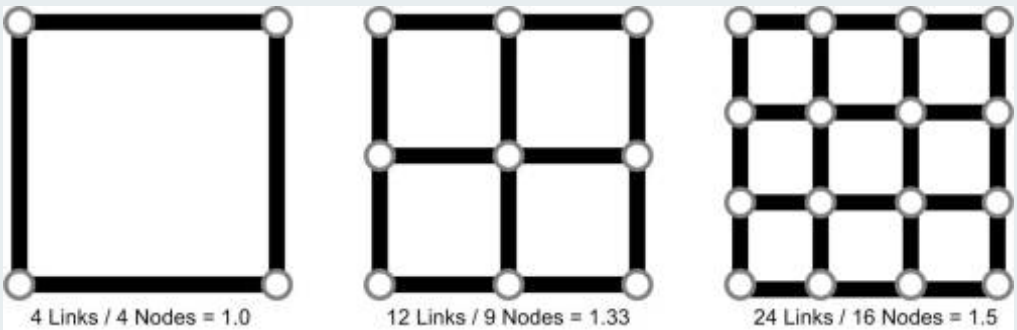


Measures of Roadway Connectivity

A Connectivity Index can be used to quantify how well a roadway network connects destinations. Indices can be measured separately for motorized and non-motorized travel, taking into account non-motorized shortcuts, such as paths that connect cul-de-sacs, and barriers such as highways and roads that lack sidewalks. Several different methods can be used:

- The number of roadway links divided by the number of roadway nodes. Links are the segments between intersections, not the intersections themselves. Cul-de-sac heads count the same as any other link end point. A higher index means that travelers have increased route choice, allowing more direct connections for access between any two locations. Dead-end and cul-de-sac streets reduce the index value. This sort of connectivity is particularly important for non-motorized accessibility. A score of 1.4 is the minimum needed for a walkable community. (Ewing, 1996).

Links-Nodes Ratio



- The ratio of intersections divided by intersections and dead-ends, expressed on scale from zero to 1.0. An index over 0.75 is desirable. (USEPA, 2002).
- The number of surface street intersections within a given area, such as a square mile. The more intersections, the greater the degree of connectivity.

An Accessibility Index can be calculated by dividing direct travel distances by actual travel distances. For example, if streets are connected on relatively small blocks and have good sidewalks, people can travel nearly directly to destinations, resulting in a low index. If the street network has many unconnected dead-ends and blocks are large, people must travel farther to reach destinations, resulting in a higher index. An average value of 1.0 is the best possible rating, indicating that pedestrians can walk directly to a destination. An average value of 1.5 is considered acceptable.

B.3 Complete Streets: Hierarchy and Design

Transportation corridors should be more than just roadways for automobiles. Corridors can be designed and classified to reflect a balance between various modes and surrounding land uses. The term "Complete Streets" refers to streets that are designed to enable safe access and mobility for all users (i.e., pedestrians, bicyclists, motorists, and transit riders) of all ages and abilities. The urban form, trees, and buffers along such streets should also relate to the modes of transportation they support and the land uses they serve. Complete streets further social justice by accommodating users of different means and abilities, and enhance real estate value by improving the public realm.

Currently, Raleigh's Thoroughfare Plan (Comprehensive Transportation Plan) classifies roadways based on vehicle capacity and function. The resulting classifications—major and minor thoroughfares and arterials—provide little to no guidance on how such streets should relate to the land uses they serve, and the role of pedestrian and bicycle circulation and transit. Looking long-term, there is a desire to move to a new typology that would include the dimensions of street character and land use in addition to capacity and function, and to broaden the notion of capacity to encompass the movement of people, not just cars. Classification might include typologies such as Main Streets and Boulevards, for example. It is recommended that the City undertake an in-depth study and evaluation of its hierarchy based on the Complete Streets concept.

The current classification system is deeply embedded in the transportation planning framework promulgated by CAMPO and NCDOT, making such a move difficult at present. As an alternative, this Comprehensive Plan updates the traditional Thoroughfare Map, displayed in **Map T-1**, and further applies a new system of street overlays as part of the Growth Framework Map (see **Map F-1** in 2 'Framework'). There are four types of corridors identified on the Map: highway, multi-modal, urban, and parkway. These types have been applied to all existing and proposed streets in Raleigh classified as minor thoroughfares or higher. It modifies the existing thoroughfare map in the following ways:

- **Highways:** These are limited-access, grade separated roadways providing little to no direct access to adjacent land uses. Such streets are classified as primary arterials on the Thoroughfare Plan and no changes are proposed to how these are planned and developed.
- **Multi-modal Streets:** Transit and non-motorized modes are anticipated to provide a significant share of the total capacity of these streets, and the street right-of-way should be managed accordingly. Where bus is the transit mode, these streets should be targeted for improvements such as turn-out lanes, shelters and benches at every stop. Queue jump lanes, signal priorities, and exclusive lanes for transit may also be appropriate. Some transit streets may eventually convert to streetcar service, and for all such streets, a high level of pedestrian facilities and amenities should be provided. Land uses are expected to directly connect to and address the street. Bicycles should be accommodated. Alternative cross-sections may be employed to meet these goals.
- **Urban Streets:** These are like multi-modal streets but are not anticipated to have the same level of transit service. Urban streets can be narrower than other streets in the same classification, and should include on-street parking (where appropriate) and enhanced pedestrian facilities.
- **Parkways:** These streets are suburban in nature and more likely to be framed by landscaping rather than buildings. More traditional cross-sections can be employed on these streets. Landscaped medians are encouraged.

Complete Streets

Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and bus riders of all ages and abilities are able to safely move along and across a complete street. Many cities across the United States have successfully implemented Complete Streets including: Charlotte, Chicago, Sacramento, and Seattle. These cities, and others, have made a commitment to provide a safe and efficient network for all users of the transportation system.

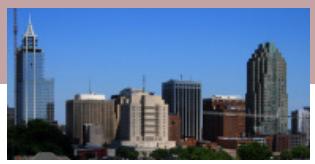
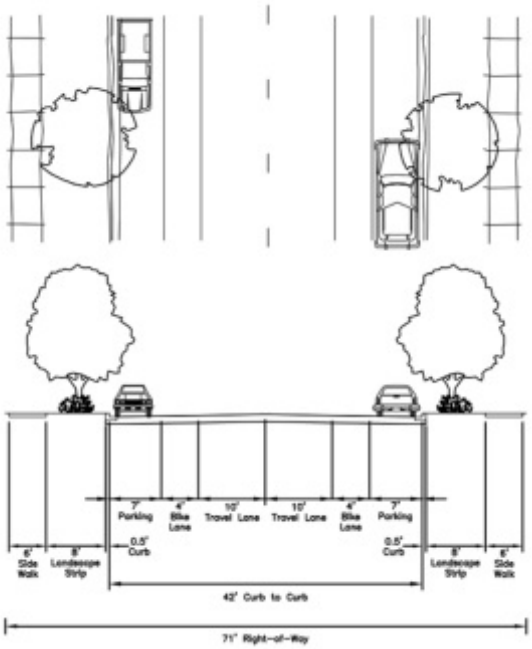


Figure T-1: Sample Complete Streets Cross Section



Source: Sacramento Transportation and Air Quality Collaborative

Policy T 3.1

Complete Street Standards

Promote Complete Street design standards that provide mobility for all types of transportation modes (pedestrian, bicycle, auto, transit) and support mutually-reinforcing land use and transportation decisions. Work with NCDOT to implement these design standards for state-maintained roads within the City's jurisdiction. (3, 4, 5, 6)

Policy T 3.2

Accommodating Multiple Users

Ensure that all new roadway projects and major reconstruction projects provide appropriate and adequate right-of-way for safe and convenient movement for all users including bicyclists, pedestrians, transit riders, and motorists. Manage the use of rights-of-way to best serve future travel demand (e.g., Multi-modal Streets—incorporate wider sidewalks where appropriate). (3, 5)

Policy T 3.3

Redefining LOS

Expand the City's use of level of service standards to include bicycle (BLOS), and pedestrian (PLOS), and transit (TLOS) levels of service. (3, 5)

Policy T 3.4

Pedestrian-Friendly Road Design

Design Complete Street amenities with the pedestrian in mind, avoiding the use of traffic control and safety devices that favor vehicles. (4, 5, 6)

Policy T 3.5

Medians

Limit the use of undivided multi-lane streets and utilize raised or landscaped medians, where feasible, to improve safety and vehicle throughput while providing opportunities for pedestrian refuges and landscaping. (5)

Action T 3.1

Designation of Complete Streets

Develop a framework for designating roadways under a Complete Streets classification. Create a hierarchy that accommodates multiple modes of travel serving pedestrians, bicyclists, transit vehicles and users, and motorists of all ages and abilities.

Action T 3.2

Redefining Road Classification

Develop a comprehensive roadway network that categorizes streets according to function and type while considering all of the potential users and the surrounding land use context.

Action T 3.3

Streets, Sidewalks, and Driveway Access Handbook

Update the Streets, Sidewalks, and Driveway Access Handbook to better address all modes of travel. Examples include provisions for bicycles in the road bed cross-section; requiring sidewalks on both sides of a greater number of streets; and addressing how different transit modes might be accommodated within the right-of-way.

Action T 3.4

Transportation Data Collection

Collect data that supports the monitoring of roadway, transit, bicycle, and pedestrian performance measures such as level of service. (Refer to Bicycle Transportation Plan to obtain BLOS)

Action T 3.5

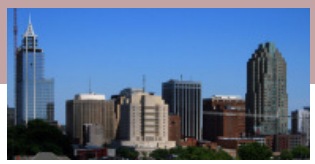
Operationalizing Complete Streets

Restructure planning, design, and construction procedures to accommodate the new Complete Streets approach in every project.

Figure T-2

B.4 Public Transportation

While Raleigh supports efforts for a regional transit system, emphasis must also be placed on improving transit services within the City. Additional transit services will be required to enhance mobility options, reduce vehicle miles traveled, and



encourage transit-oriented development around planned transit station areas. Transit connections need to be considered for the major trip generators in Raleigh (e.g. Wake Medical Campus, NCSU, downtown Raleigh, Crabtree, the Blue Ridge corridor, Highwoods, etc.). Further, enhanced local bus service will be needed to deliver riders to new rail stations, reducing the need to drive to these stations.

Policies in this section seek to foster increased transit use through the extension of existing lines, the provision of new services, increased frequency of service, and the provision of direct pedestrian and bicycle access to transit station areas. Increased transit use will further the City's efforts to become more sustainable and energy efficient. Transit and land use will be tightly linked, with transit stations integrated into walkable, transit-oriented developments. Plans will be developed for new transit services such as regional rail, bus rapid transit (BRT), new bus routes between activity centers, and neighborhood bus service. Planned transit facilities are shown in **Map T-2**.

See also L.2 Transportation Investments in Element L: Regional and Inter-Jurisdictional Element for related policies.

The Special Transit Advisory Commission (STAC) Report

The Special Transit Advisory Commission (STAC) was appointed by the Capital Area MPO and the Durham-Chapel Hill-Carrboro MPO to reevaluate regional transit options and develop a regional transit vision plan. The Commission's final report, presented May 2008, covers three major categories of investment – enhanced region-wide bus service, circulators, and rail.

Enhanced region-wide bus service

This would expand bus service throughout the region to connect communities and bring communities not presently served by transit into a regional transit network. Specific elements of this service include:

- High frequency express service between the Raleigh-Durham International Airport (RDU) and downtown Durham, downtown Raleigh (including the Convention Center), and the Cary train station park and ride;
- Rush Hour Only service to outlying communities;
- Enhanced bus service in core areas to support the rail and circulator investments;
- A system of park and ride lots to be served by the regional network and the express service; and
- Enhanced transit access for pedestrians and bicycles around park and ride lots and bus stops.

Circulators

New circulator service would provide increased and flexible travel options within major activity centers. The report recommends circulator "zones," leaving the specific designation of routes to individual jurisdictions and the MPOs. All circulators are anticipated to be buses initially, with the potential to transition to modern streetcars or trolleys in the future, depending on conditions and cost. Specific elements of this service include:

- RDU/RTP circulator connecting RDU to the Triangle Metro Center and other major activity areas in RTP; and
- Circulators in the downtown areas of Raleigh, Durham, Chapel Hill/Carrboro and Cary.

Rail

Recommended rail service and investments would connect the region's major activity centers, serve congested corridors, and provide opportunities to influence land use and development patterns. The North Carolina Railroad Shared Corridor Track Expansion Study is examining the feasibility of rush hour rail service on the Burlington-to-Goldsboro and Hillsborough-to-Chapel Hill/Carrboro corridors; STAC-recommended investments should be coordinated with the results of this study. Specific aspects of the recommended rail service include:

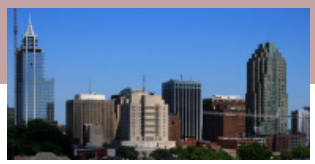
- The segments connecting Durham, RTP, Cary, downtown Raleigh, and north Raleigh will use diesel multiple unit (DMU) rail cars operating within existing railroad rights-of-way; and
- The segment connecting Chapel Hill to Durham will use Light Rail Transit (LRT), electrically-driven rail cars on a new alignment.

Implementation Challenges

Three central implementation challenges for this Vision Plan are funding, land use, and leadership and governance. STAC recommends a half-cent sales tax (5¢ per $10 in purchases) and a $10 increase in vehicle registration fee as two ways to increase local funding available for transit investments. These new funds, when combined with existing local, state, and federal funding, plus debt financing, would be adequate to make the recommended transit improvements.

Pairing transit service and investment with local government investment in transit-supportive development policies and applying existing transit-supportive policies consistently are two specific strategies STAC recommends be used to encourage development patterns suited to transit investments and provide opportunities for increased transit usage.

Leadership and governance recommendations center on increased local and regional coordination. Specific STAC recommendations include: a greater accountability to voters by ensuring that elected officials serve in decision-making capacities for regional transit investments; encouraging continued cooperation between the MPOs; and establishing a regional staff committee from the working group that supported the work of the STAC to consult, study, and coordinate the completion of the Regional Transit Vision Plan.



Policy T 4.1

Promoting Transit

Promote and support quality transit services to enhance mobility options and to meet the needs of the City's residents and visitors, with a focus on transit-dependent households. (1, 2, 5)

Policy T 4.2

Short-Term Bus Improvements

Enhance local and regional bus transit service in the short-term along key corridors where long-term rail transit improvements are planned and identified in the Regional Transit Vision Plan. (3, 4, 5)

Policy T 4.3

Fixed Guideway Priorities

Prioritize fixed-guideway transit investments in corridors with the greatest potential to attract riders and shape development and redevelopment. (5)

Policy T 4.4

R.O.W. Reservation for Transit

Preserve right-of-way for future transit and require that new development and redevelopment provide transit easements for planned alignments, rail stations, and bus stops within existing and planned transit corridors as identified in the Regional Transit Vision Plan. (3, 4, 5)

Policy T 4.5

Transit Efficiency

Promote transit efficiency by reducing waiting time and transfer time within the Capital Area Transit (CAT) system and to other transit providers. (3)

Policy T 4.6

Event-Based Transit Services

Substitute event-based transit services for on-site parking capacity where feasible, to free land for other uses around event locations. (3, 4, 5, 6)

Policy T 4.7

Transit Availability

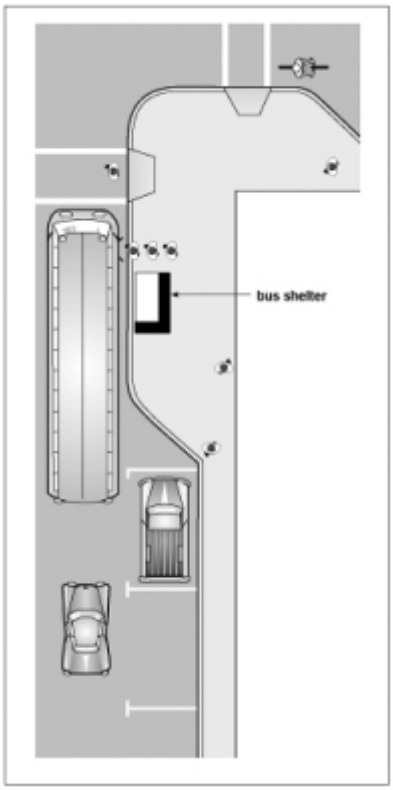
Increase the availability of public transportation between residential and employment areas, as well as to regional facilities such as RDU International Airport and Research Triangle Park. (2, 5, 6)

Policy T 4.8

Bus Waiting Areas

Developments subject to Planning Commission review and located within existing and planned bus transit corridors should coordinate with CAT to provide a stop facility that is lit and includes a shelter, bench, and other amenities (such as a waste receptacle) as appropriate. (4, 6)

Picture T-3 Bus Stop Design



Bus Stop Standards
(distances represent the appropriate no parking zone to encompass the actual stopping point of the bus, plus room for it to approach and leave the stop)
Near side of intersection: 85 – 100 feet in length
Mid-block: 130 – 175 feet in length
Far side of intersection: 80 – 85 feet in length

Policy T 4.9

Sidewalk Improvements Near Transit

Coordinate with local transit providers to identify sidewalks within one-third mile of transit stops in need of enhancement for persons with disabilities. (4)

Policy T 4.10

Transit-First Features

Incorporate features such as traffic signal priority, queue jumps, and exclusive transit lanes to improve transit operations and reliability, where appropriate. (3, 5)

Policy T 4.11

Demand-Responsive Transit

Support the provision of demand-responsive services [e.g., expansion of Accessible Raleigh Transportation (ART) and paratransit services] and other transportation services for those unable to use conventional transit. (1)

Policy T 4.12

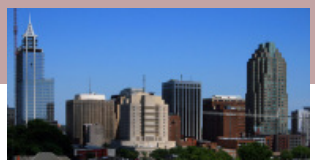
Special Needs

Provide adequate and accessible transit for residents and visitors with special needs, including senior citizens, the disabled, and transit-dependent persons. (1)

Policy T 4.13

Crosstown Travel

Create routes and a network of secondary transfer hubs that facilitate cross-town and suburb-to-suburb travel patterns. (4, 5)



Policy T 4.14

Growth Centers

Provide circulator services to facilitate mobility within identified City Growth Centers and to connect these centers with fixed-guideway stops and major transit routes. (4)

Policy T 4.15

Enhanced Rider Amenities

Promote the use of transit facilities and services through enhanced pedestrian access and provisions for seating, shelter, and amenities. (6)

Policy T 4.16

Bus Stop Spacing

Explore opportunities to provide more widely spaced bus stops with higher amenity levels, trading shorter walking distances with faster transit service and better facilities. (6)

Policy T 4.17

Anticipating Streetcar Service

Infrastructure investments impacting proposed streetcar corridors, such as new or replacement bridges, should be designed to accommodate such service in the future. (3, 4)

Policy T 47

Transit Service Coordination

Coordinate local bus route planning including feeder services with new fixed-guideway services, as they become available. (3, 4)

Action T 4.1

Multi-modal Transportation Center

Pursue the development of the Multi-modal Transportation Center in downtown Raleigh. The Multi-modal Center is a proposed central station linking multiple travel modes including local, regional, and long-distance bus; regional, commuter, and long-distance rail (Amtrak); taxis, cars, and downtown transit circulators. (4)

Action T 4.2

Transit Stop Evaluations

Evaluate transit stops to determine their convenience and effectiveness to serve riders and support land use policies.

Action T 4.3

Intercity Fixed Route Transit

Explore, develop, and promote options for an intercity fixed-route transit system that will link neighborhoods to major activity centers in the region. Work with regional partners to use existing rail lines within the next 10 to 15 years, but also allow for services to run outside of existing rail lines in the longer-term.

Action T 4.4

Streetcars

Explore future streetcar service for key multi-modal corridors including New Bern and Glenwood avenues, and South Saunders and Hillsborough streets.

Action T 4.5

Transit Infrastructure

Study and implement a network of premium transit infrastructure that builds upon the STAC recommendations and augments the planned regional transit with enhanced local transit service, such as light rail transit, bus rapid transit, and/or streetcar lines to provide travel options, better connect Raleigh, and improve surface-level public transportation.

Action T 4.6

Park and Ride Lots

Locate Park and Ride lots along the fringes of the City, with a direct connection to transit. Specifically, develop Park and Ride facilities along the following existing and proposed Express Bus Routes: Capital Boulevard/Atlantic Avenue; Six Forks Avenue; Glenwood Avenue; Creedmoor Road; and New Bern Avenue. Also develop enhanced Park and Ride facilities in West Raleigh in the Arena area and in the South Saunders/Tryon area near the proposed secondary bus hub.

Action T 4.7

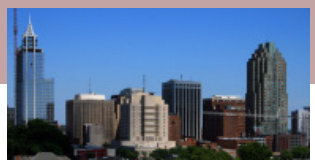
Shared Parking and Transit

Evaluate the need and benefits of shared Park and Ride lots in areas that have significant unused daytime parking, such as shopping malls. Work with property owners and local communities to allocate off-street parking surpluses for carpooling and transit users.

Action T 4.8

Secondary Transit Hubs

Enhance secondary transit hubs at Crabtree Mall, NCSU, Triangle Town Center, and Wake Med. Establish a new hub in south Raleigh near Garner (e.g. South Saunders Street Park and Ride facility) and explore the potential for additional hubs as the system expands.



Action T 4.9

Commitment to Regional Rail

Lead regional efforts to improve transit services and pursue a regional rail system. This includes supporting a half-cent sales tax dedicated to transit funding.

Action T 4.10

Local Financing for Transit

Pursue local and innovative financing options, beyond the proposed transit sales tax, to assist in funding transit infrastructure investments.

Action T 4.11

Bench and Shelter Standards

Revise CAT's passenger load standards for benches and shelters to better reflect the best practices of similarly-sized municipal transit systems.

Action T 4.12

Bench and Shelter Siting

Work with NCDOT to modernize the rules governing state-maintained roadways, to facilitate the placement of benches and shelters along Raleigh's major transit corridors.

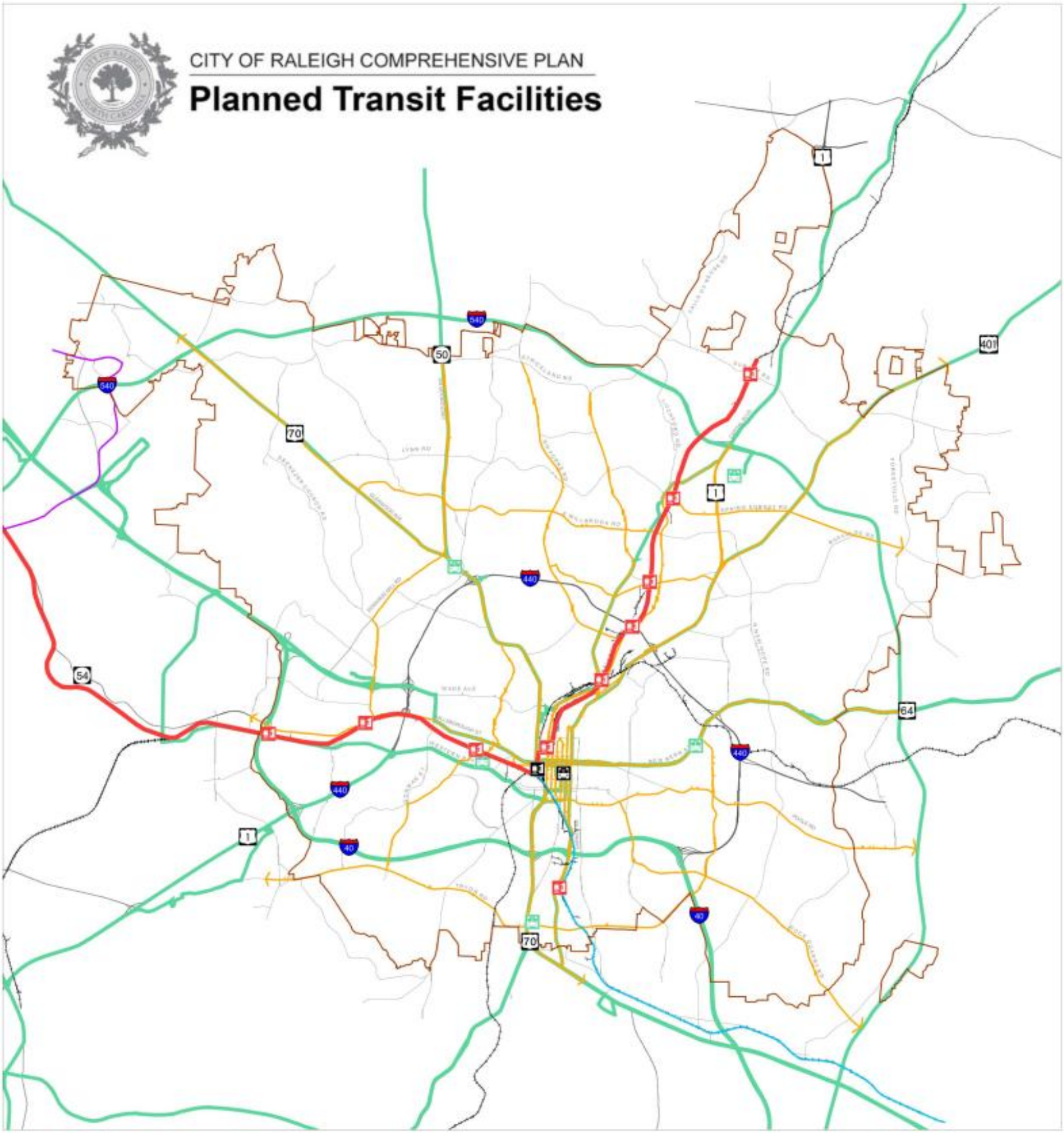
Action T 4.13

Transit Stop Design

Develop unique transit shelter, bench, and sign designs for Raleigh, either through a design competition or a competitive process.

CITY OF RALEIGH COMPREHENSIVE PLAN

Planned Transit Facilities



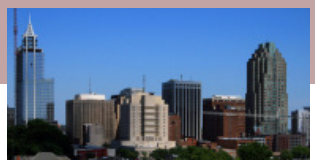
MAP T-2

- Regional Rail
- Multi-Modal Transit Center
- Rail Transit Stations
- Moore Square Station
- Secondary Bus Hubs
- Proposed Commuter Rail
- CORE Loop
- Railroad
- Multi-Modal Corridors
- Enhanced Regional Bus Service
- ETJ
- Highway
- Major Streets

N

0 0.5 1 2 Miles

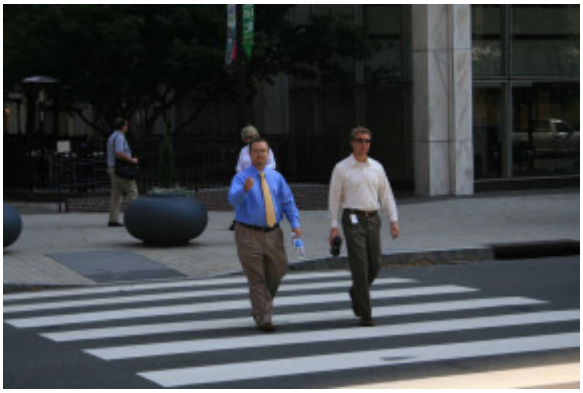
Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



B.5 Pedestrian and Bicycle Circulation

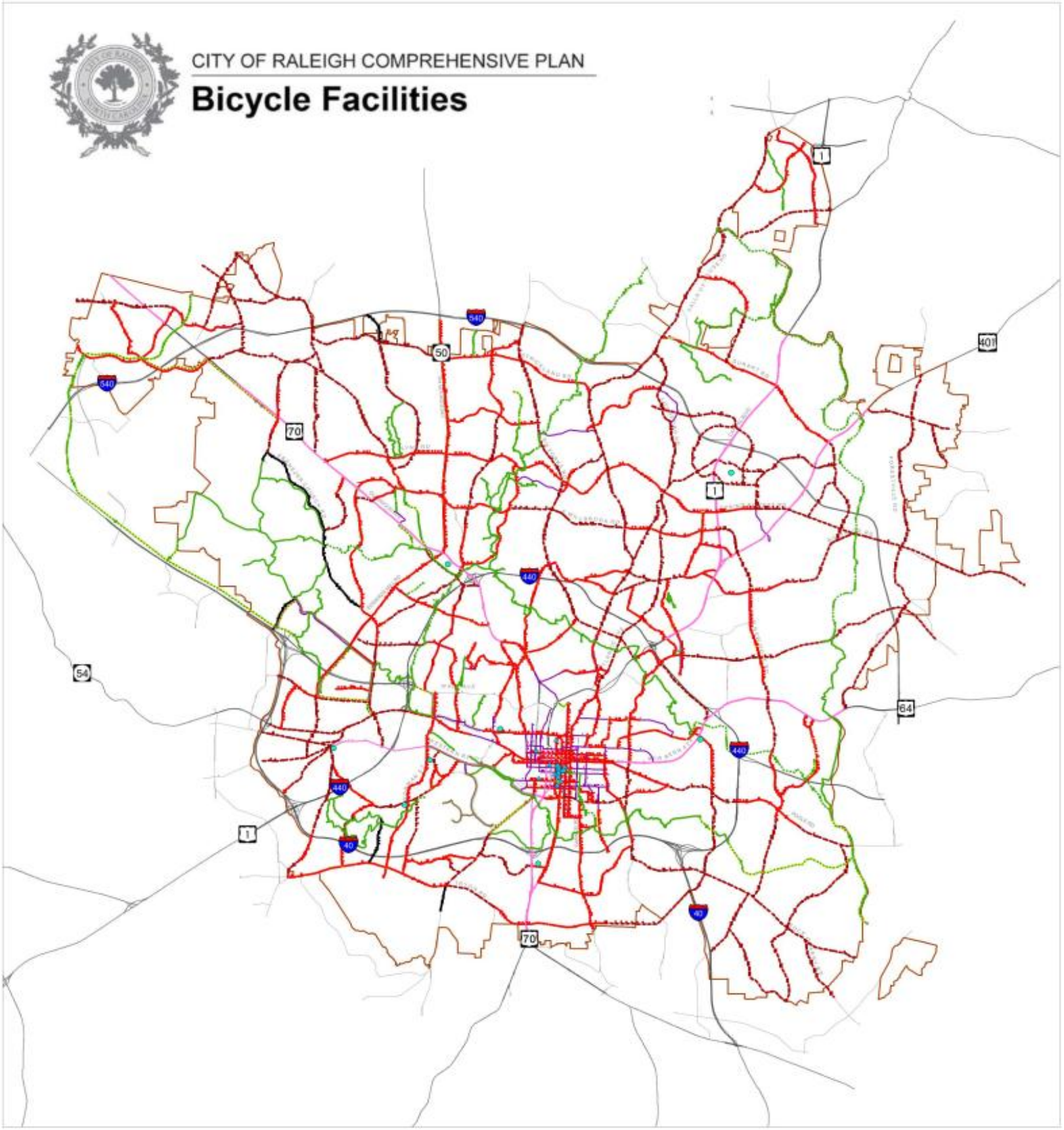
Bicycles and pedestrians are an important component of Raleigh's transportation system. There are significant gaps in the bicycle and pedestrian networks that hinder effective and safe circulation. This is particularly important in key locations such as retail and mixed used centers, schools, libraries, and parks. The quality of life will be greatly enhanced in Raleigh by investing in bicycle and pedestrian networks and amenities.

Policies in this section support the goal of providing Raleigh with a safe, walkable, and bikeable environment through a continuous pedestrian and bicycle network. Residents will be encouraged to integrate bicycling and walking into their daily activities to promote a healthier lifestyle and improve energy conservation. According to the 2001 Nationwide Personal Transportation Survey, 25 percent of all trips are made within a mile of the home, 40 percent of all trips are within two miles of the home, and 50 percent of the working population commutes five miles or less to work. The construction of a comprehensive citywide bicycle and pedestrian network, support facilities such as convenient and secure bicycle parking, and an educated driving and bicycling public will facilitate increased bicycling and walking. The existing and planned bicycle and pedestrian facilities are displayed in **Map T-3**.



CITY OF RALEIGH COMPREHENSIVE PLAN

Bicycle Facilities



MAP T-3

Bicycle Network

- Sharrow, Stripe
- Wide Lane, Restripe
- Bicycle Lane, Road Diet
- Bicycle Lane, Stripe
- Bicycle Lane, Restripe
- Bicycle Lane, New Construction
- Paved Shoulder, New Construction
- Bicycle Lane, Existing

Greenways & Sidepaths

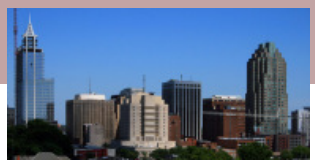
- Sidepath, Existing
- Sidepath, Proposed
- Greenway, Existing
- Greenway, Proposed
- Greenway, Planned
- Existing Bicycle Racks
- Rec. Bicycle Stations (Transit Hubs)

- ETJ
- Highway
- Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Policy T 5.1

Enhancing Bike/Pedestrian Circulation

Enhance pedestrian and bicycle circulation, access, and safety along corridors, downtown, in activity and employment centers, at densely developed areas and transit stations, and near schools, libraries, and parks. (4, 5, 6)

Policy T 5.2

Incorporating Bicycle and Pedestrian Improvements

All new developments, roadway reconstruction projects, and roadway resurfacing projects in the City of Raleigh's jurisdiction should include appropriate bicycle facilities as indicated in the Recommended Bicycle Network of the 2008 City of Raleigh Bicycle Transportation Plan. (3, 4, 5, 6)

Policy T 5.3

Bicycle and Pedestrian Mobility

Maintain and construct safe and convenient pedestrian and bicycle facilities that are universally accessible, adequately illuminated, and properly designed to reduce conflicts among motor vehicles, bicycles, and pedestrians. (1, 3, 5, 6)

Policy T 5.4

Pedestrian and Bicycle Network Connectivity

Continuous pedestrian and bicycle networks should be provided within and between existing and new developments to facilitate safe and convenient pedestrian and bicycle travel free of major barriers and impediments such as cul-de-sacs and large parking lots. (5, 6)

Policy T 5.5

Sidewalk Requirements

New subdivisions and developments should provide sidewalks on both sides of the street. (5, 6)

Policy T 5.6

Bridges, Underpasses, and Interchanges

Pedestrians and bicyclists shall be accommodated on roadway bridges, underpasses, and interchanges (except on roadways where they are prohibited by law). Bicycle lanes and wide sidewalks should be included on all new bridges and underpasses (requires NCDOT coordination on state-maintained roads). (1, 3)

Policy T 5.7

Capital Area Greenway

Treat the Capital Area Greenway Trail system as part of the City's transportation network for bicycles and pedestrians and plan connections to the system accordingly. (4, 5, 6)

Policy T 5.8

Workplace Bicycle Facilities

Encourage bicycle facilities, such as secured bicycle racks, personal lockers, and showers for new and existing office developments to encourage bicycling as an alternative mode for work commutes. (5, 6)

Policy T 5.9

Pedestrian Networks

New subdivisions and large-scale developments should include safe pedestrian walkways or multi-use paths that provide direct links between roadways and major destinations such as transit stops, schools, parks, and shopping centers. (5, 6)

Policy T 5.10

Building Orientation

All primary building entrances should front onto a publicly accessible, and easily discernible, and ADA-compliant walkway that leads directly from the street to the front door to improve pedestrian access. (4, 5, 6)

Policy T 5.11

New Bike Routes

Convert underused right-of-way along travel lanes and railroad corridors to bikeways or widen outside lanes wherever possible and desirable. (3, 4, 5)

Policy T 5.12

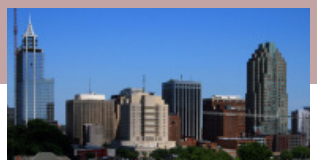
Safe Routes to School

Support infrastructure and programs that encourage children to walk and bicycle safely to school. Coordinate with Wake County Public School System and NCDOT Bike/Pedestrian Division to identify projects eligible for "Safe Routes to Schools" funding. (1, 5, 6)

Policy T 5.13

Pedestrian Infrastructure

Ensure that streets in areas with high levels of pedestrian activity (e.g., employment centers, residential areas, mixed-use areas, schools) support pedestrian travel by providing such elements as frequent and safe pedestrian crossings, large medians for pedestrian refuges,



bicycle lanes, frontage roads with on-street parking, and/or grade separated crossings. (1, 4, 5, 6)

Policy T 5.14

Rails to Trails

Encourage the development of greenway trails along existing rail corridors. (3, 4, 5, 6)

Action T 5.1

Sidewalk Inventory

Update the sidewalk inventory to help determine gaps in connectivity and areas in need of rehabilitation. *See also I.7 'Pedestrian-Friendly Design' in the Urban Design Element.*

Action T 5.2

Updating Sidewalk Standards

Update sidewalk standards and requirements after the completion of the Public Realm Study.

Action T 5.3

Sidewalk Requirements

Revise the City's Streets, Sidewalks, and Driveways Access Handbook to require sidewalks on both sides of the street for most contexts.

Action T 5.4

Sidewalk Funding

Increase the level of funding available for sidewalk installation, maintenance, and repair; as part of this action, revisit current assessment policies.

Action T 5.5

Trail and Path Width

Develop and maintain greenway trails and multi-use paths to be no less than ten feet wide as identified in the 2008 City of Raleigh Bicycle Transportation Plan and current AASHTO standards.

Action T 5.6

Bicycle Plan Implementation

Maintain and implement the Comprehensive Bicycle Transportation Plan.

Action T 5.7

Bicycle and Pedestrian Coordinator

Provide dedicated annual funding for pedestrian and bicycle improvements to be administered by a full-time City of Raleigh Bicycle and Pedestrian Coordinator. Require the Bicycle and Pedestrian Coordinator to review all preliminary site plans and subdivisions in the City.

Action T 5.8

Pedestrian and Bicycle Facilities in Development Regulations

Update the City's development regulations to require pedestrian and bicycle facilities – including bike racks, bike trails, and signed crosswalks – within mixed-use centers, future transit station areas, employment centers, office buildings, multi-family developments, and public parks. Revise subdivision regulations to require developers to provide, and homeowners associations to maintain, pedestrian and bicycle facilities to accepted standards of design, construction, and maintenance within all new developments.
(Refer to the 2008 City of Raleigh Bicycle Transportation Plan and Right-Sizing Citywide Off-Street Parking Standards study for more detailed parking policy statements on all developments.)

Action T 5.9

Personal Motorized Modes

Consider how and to what extent personal motorized modes of travel, including Segways and other emerging Personal Accessibility Vehicles (PAVs), might safely be accommodated within the pedestrian and bicycle network

Action T 5.10

Pedestrian Crossing Standards

Establish standards for maximum distances between pedestrian crossings that are also associated with roadway classification to enhance walking and transit use.

Action T 5.11

Crosswalk Safety

Widen crosswalks and install durable painted crosswalks and/or other investments to increase pedestrian safety and visibility at crossings.

Action T 5.12

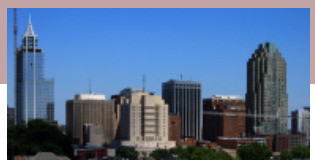
Pedestrian Signals

Install countdown pedestrian signals at important intersections.

Action T 5.13

Pedestrian Plan

Develop a pedestrian plan with a multi-year priority and funding stream to repair and expand pedestrian connections throughout the City.



Action T 5.14

Railroad Greenway Trails

Partner with railroad entities to locate additional greenway trails along existing rail lines.

B.6 Parking Management

While Raleigh currently has parking standards, there is a need to modify and enforce these standards to optimize supply. In some instances there is an over-abundance of parking supply, incentivizing Single Occupancy Vehicle (SOV) travel. By managing and pricing the parking supply, the City can encourage transit, bicycling, and walking as means of travel. This also results in positive effects to air quality and reduces overall congestion on the roadway network.

Policies in this section focus on providing sufficient parking for businesses, while protecting adjacent land uses and the environment. Reduced parking requirements will be provided where appropriate to promote walkable communities and alternative modes of transportation. On-street parking use and shared parking will be maximized through the use of parking management tools.

Policy T 6.1

Surface Parking Alternatives

Reduce the amount of land devoted to parking through measures such as development of parking structures and underground parking, the application of shared parking for mixed-use developments, flexible ordinance requirements, maximum parking standards, and the implementation of Transportation Demand Management plans to reduce parking needs. (3, 4)

Policy T 6.2

Transit Station Parking

Establish transit station area parking program and management strategies for proposed and planned transit stations. (3, 4)

Policy T 6.3

Parking as a Buffer

Encourage the location of on-street parking and drop-off areas adjacent to sidewalks as a buffer to vehicular traffic, and for customer convenience, and maximizing on-street parking turnover. Parking between sidewalk areas and building fronts should be minimized. (4, 6)

Policy T 6.4

Shared Parking

Strongly encourage shared-use car parking for land uses where peak parking demand occurs at different times of the day, reducing the total number of spaces required. (3, 4)

Shared Parking

Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions: (1) variations in the accumulation of vehicles by hour; by day; or by season at the individual land uses; and (2) relationships among the land uses that result in visiting multiple land uses on the same auto trip. (*Shared Parking*, Urban Land Institute, 2005)

Policy T 6.5

Minimum Parking Standards

Reduce the minimum parking standards over time and as appropriate to promote walkable neighborhoods and to increase use of transit and bicycles. (3, 5)

Policy T 6.6

Parking Connectivity

Promote parking and development that encourage multiple destinations within an area to be connected by pedestrian trips. (3, 4, 5)

Policy T 6.7

Parking Demand Management

Discourage single occupant vehicle trips through parking supply and pricing controls in areas where supply is limited and alternative transportation modes are available. (3, 4)

Policy T 6.8

Parking Lot Design

Parking areas should be designed to minimize conflicts with pedestrians. (3, 4)
See also M.2 'Transportation' in Element M: 'Downtown Raleigh'.

Policy T 6.9

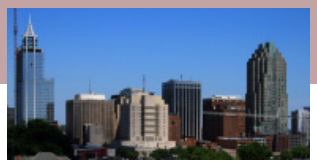
Green Parking Facilities

Reduce stormwater runoff generated by parking facilities by promoting an increase in the use of tree planting and landscaping, green roofs for parking decks, and permeable materials for parking lots, driveways, and walkways. (3, 4, 5)

Action T 6.1

Large Surface Lots

Revise the City's development regulations to require large parking lots to be visually and functionally segmented into smaller lots with cross access.



Action T 6.2

Shopping Center Park and Ride

Require shopping centers on existing or planned transit routes that provide 400 or more parking spaces to designate at least 5 percent of the required spaces as "Park and Ride" spaces. In addition, amend the parking design standards in the Streets, Sidewalks, and Driveway Access Handbook to encourage these spaces to be contiguous and located near the transit facility. *See also B.5 'Public Transportation'.*

Action T 6.3

Parking Study Implementation

Implement the recommendations of the "Right-sizing Citywide Parking Standards" study and the Downtown Parking Master Plan, including:

- Permitting shared parking arrangements as-of-right downtown, in activity centers, and mixed-use developments;
- Developing parking standards specific to different types of development patterns, such as downtown, mixed-use centers, and pedestrian-oriented business districts;
- Revise curbside management and on-street parking techniques on City thoroughfares to best manage these transportation resources to serve multiple uses (e.g., through traffic during peak periods, local residents, shoppers, houses of worship, special events, and others);
- Revising off-street parking standards to reduce and/or adjust minimums and add maximums; and
- A fee-in-lieu of parking option for development downtown and in other areas where the City intends to provide municipal parking.

Action T 6.4

Criteria for Changing On-Street Parking Regulations

Adopt a set of criteria for evaluating changes to the on-street parking regulations such as requests for no-parking and loading zones.

Action T 6.5

Parking Lot Landscaping

Update the City's development regulations to increase landscaping requirements including shade trees in large surface parking lots.

B.7 Transportation Safety Improvements

While it is important to provide a multi-modal transportation system that efficiently moves users to their destinations, it is more important that the users arrive to their destinations safely. Reducing the conflict points between modes, such as vehicles with bicycles and pedestrians, can greatly enhance safety.

Traffic calming is another way to enhance safety and is a common desire in many neighborhoods and communities. As traffic levels increase on major thoroughfares, drivers will use alternative routes to make their trips. This additional through traffic, which is typically generalized as traveling above posted speeds, is undesirable in residential areas.

Policies in this section support the provision of a safe multi-modal transportation network for all users. Policies include consideration of traffic calming, bicycle and pedestrian crossings, and crash analysis.

Policy T 7.1

Safety Improvements

Work with all parties necessary to improve the multi-modal transportation system so that safe routes for motorists, transit riders, bicycles, and pedestrians are provided. (5, 6)

Policy T 7.2

Traffic Calming

Incorporate traffic calming techniques and treatments into the design of new or retrofitted local and collector streets, as well as within school, park, and pedestrian-oriented business areas, to emphasize lower auto speeds, encourage bicycling and walking, and provide pedestrians with a convenient, well-marked, and safe means to cross streets. (3, 5, 6)

Policy T 7.3

Transportation Safety Data

Maintain data necessary to assess roadway safety performance and support enforcement and education. Data may include traffic volume data for major roadway network facilities, geographically referenced crash report data, and digital crash report archives for injury crashes. (5, 6)

Policy T 7.4

Road Capacity and Safety

Evaluate and document the safety impacts of proposed roadway capacity projects including impacts to bicycle and pedestrian safety. (6)

Policy T 7.5

Reducing Cut-Through Traffic

Work with the community on an individual-project basis to identify feasible solutions to lessen the impacts of arterial, thoroughfare, and collector improvements on local streets. (5)

Action T 7.1

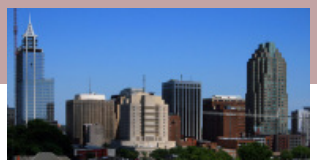
Street Lighting

Add street lights where necessary to critical intersections, bus shelter stops, and neighborhood dark spots and maintain existing street lights to enhance safety. Remove lights where they are unnecessary for safety and where a reduction in lighting would be an environmental enhancement.

Action T 7.2

Crash Analysis

Review locations with high vehicular crashes involving pedestrians and bicyclists to identify needed improvements.



B.8 Commercial Truck and Rail Freight

The movement of freight, both by train and by truck, is an important part of Raleigh's economy. There are numerous at-grade railroad crossings that could pose potential traffic and safety concerns as traffic increases on both the railroad and the roadway. Although some businesses are located along railroads and utilize trains for the movement of freight, a majority of freight operations involve trucks. The existing freight routes are displayed in **Map T-4**.

Policies in this section support the safe and efficient movement of goods via rail, truck, and air transportation modes. Policies also seek to reduce the impacts of rail and truck operations on adjacent neighborhoods and sensitive land uses.

Policy T 8.1

Truck Routes

Promote the safe and efficient movement of truck traffic in and around the City through designated truck routes and alternate truck routes for heavily-traveled corridors. (1, 3)

Policy T 8.2

Grade Separations

Outside of the downtown street grid, seek additional opportunities to provide grade-separated street connections across the City's passenger and freight rail corridors, and look to grade separate existing crossings where feasible and desirable. (3, 5)

Policy T 8.3

Intermodal Transfer of Goods

Support infrastructure improvements and the use of emerging technologies that facilitate the clearance, timely movement, and security of trade, including facilities for the efficient intermodal transfer of goods between truck, rail, and air transportation modes. (3)

Action T 8.1

Railroad Crossing Safety

Monitor traffic and safety conditions for at-grade railroad crossings as freight traffic increases to determine the need for grade separations.

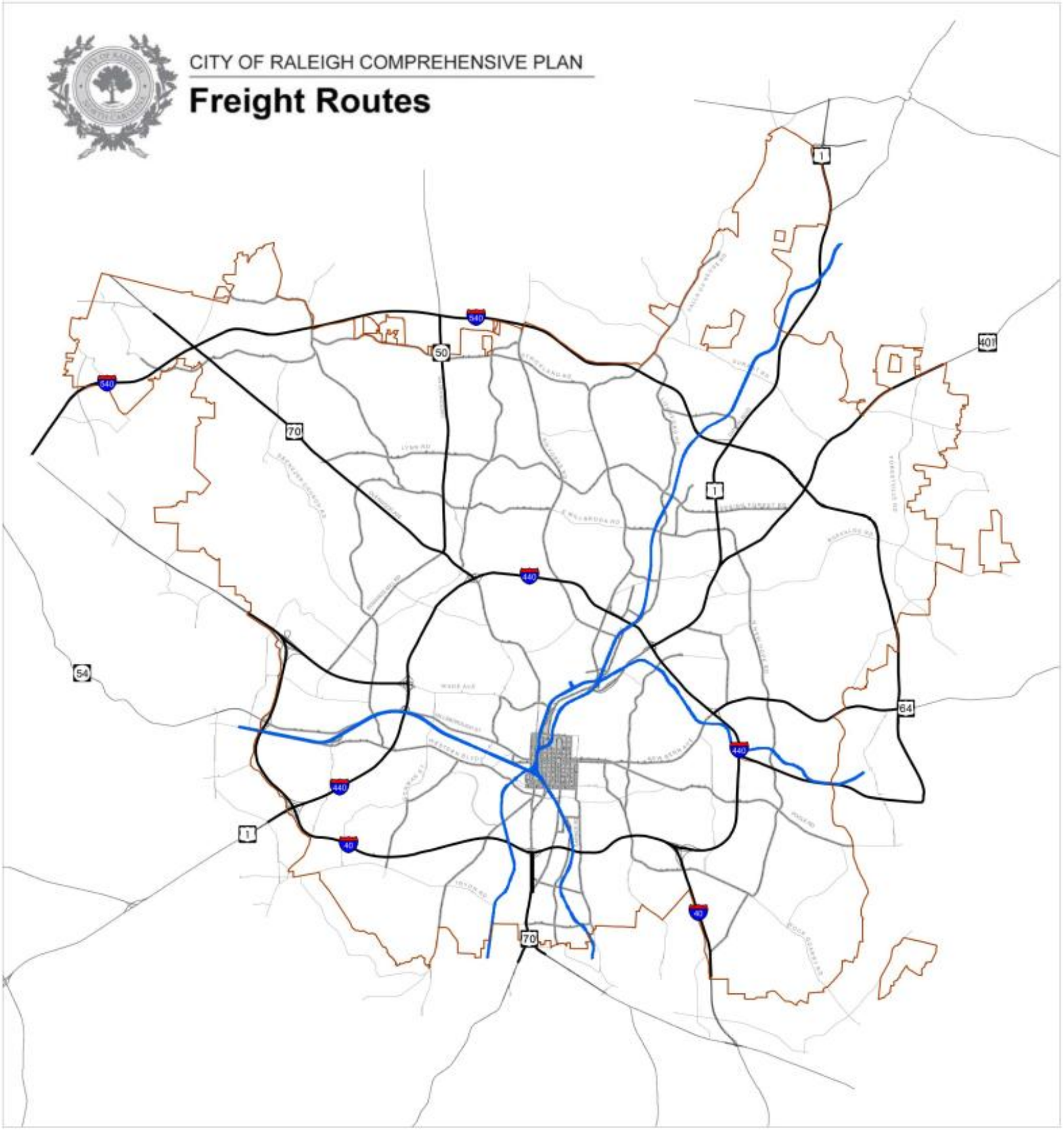
Action T 8.2

Improving Freight Movement

Identify and correct roadway design and operational deficiencies that affect the safe and efficient movement of freight on designated freight routes while maintaining the health and safety of residents.

CITY OF RALEIGH COMPREHENSIVE PLAN

Freight Routes



MAP T-4

- Rail Corridors
- Through Truck Routes
- Local Truck Routes
- Local Truck Areas
- ETJ
- Highway
- Major Streets

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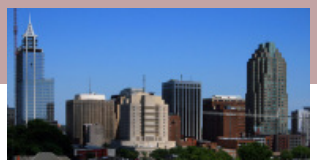
Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



B.9 Future Thoroughfare Improvements

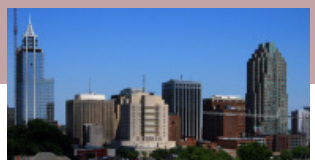
The following tables list identified improvements to Arterial and Thoroughfare streets necessary to bring these streets up to the City's guidelines for cross section, create new points of connection, and to ensure adequate vehicular capacity into the future. The tables address two types of improvements. New Location projects, listed in **Table T-2**, involve the extension of existing roadways and the creation of new connections. These correspond to the dashed lines on **Map T-1: Arterial, Thoroughfare and Collector Streets.** The second class of project, listed in **Table T-3**, are specific road segments proposed to be widened to increase capacity and better align the roadway cross section with its intended function.

See also B.2 'Roadway System and Transportation Demand Management'.

Table T-2 New Location Projects

Road Name	Segment Description	Ultimate Future Cross-Section	Classification
ACC Boulevard	Existing ACC Boulevard to Leesville-Westgate Connector	3 lanes	Minor Thoroughfare
Auburn-Knightdale Road	Bethlehem Road to existing Auburn-Knightdale Road	4-lane divided	Major Thoroughfare
Aviation Parkway	Brier Creek Parkway to Wake County line	6-lane divided	Secondary Arterial
Barwell Road	Pearl Road to Auburn Church Road	3 lanes	Minor Thoroughfare
Beckom Drive	Spring Forest Road Ext to Perry Creek Road Ext	3 lanes	Minor Thoroughfare
Brier Creek Parkway	TW Alexander Parkway Ext to Andrews Chapel Road	4-lane divided	Major Thoroughfare
Capital Boulevard	Realign U.S. 1 from south of Durant Road to Thorton Road	8-lane divided	Principal Arterial
Carpenter Pond Road	Hickory Grove Church Road to Wake County line	4-lane divided	Major Thoroughfare
Carpenter Pond Road	West of Olive Branch Road to existing Carpenter Pond Road	4-lane divided	Major Thoroughfare
Crabtree Valley Avenue	Blue Ridge Road to Glenwood Avenue	4-lane divided	Major Thoroughfare
Creech Road	Sanderford Road to Wilmington Road	4-lane divided	Major Thoroughfare
Dunn Road	Falls River Avenue to Durant Road	3 lanes	Minor Thoroughfare

Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Edwards Mill Road	Chapel Hill Road to Western Boulevard	4-lane divided	Secondary Arterial
Edwards Mill Road	Western Boulevard Ext to existing Edwards Mill Road	6-lane divided	Secondary Arterial
Falls of Neuse Road	Realign with N.C. 98 Highway	4-lane divided	Major Thoroughfare
Globe Road	East of Page Road to Durham County	6-lane divided	Secondary Arterial
Gorman Street	South of Tryon Road to Yates Mill Pond Road	4-lane divided	Major Thoroughfare
Greshams Lake Road	Reba Drive to Capital Boulevard	4-lane divided	Major Thoroughfare
Highwoods Boulevard	Realign Highwoods Boulevard to Westinghouse Boulevard	4-lane divided	Minor Thoroughfare
Hodge Road	Auburn-Knightdale Road to existing Hodge Road	4-lane divided	Major Thoroughfare
Hodge Road	Knightdale Boulevard to Old Milburnie Road	4-lane divided	Major Thoroughfare
Lake Boone Trail	Atrium Drive to Edwards Mill Road	4-lane divided	Major Thoroughfare
Leesville-Westgate Connector	Westgate Road to Leesville Road	4-lane divided	Major Thoroughfare
Louisbury Road	Mitchell Mill Road to existing Louisbury Road	3 lanes	Minor Thoroughfare
Lynn Road	Realign at Glenwood Avenue	4-lane divided	Major Thoroughfare
Morgan Street Connector	Western Boulevard to existing Morgan Street	4-lane divided	Major Thoroughfare
New Falls of Neuse Road	Fonville Road to existing New Falls of Neuse Road	6-lanes divided	Secondary Arterial
New Leesville Boulevard	Existing New Leesville Boulevard to Carpenter Pond Road and Realign intersection of Carpenter Pond Road and Shady Grove Road	4-lane divided	Major Thoroughfare
New Pearl Road	Pearl Road to Wall Store Road	3 lanes	Minor Thoroughfare
Old Milburne Road	Forestville Road to existing Old Milburnie Road	3 lanes	Minor Thoroughfare

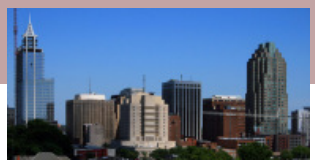


Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Page Road	Glenwood Avenue to east of Aviation Parkway Ext	4-lane divided	Major Thoroughfare
Pearl Road/Barwell Road Realignment	Realign Pearl Road at Barwell Road intersection	3 lanes	Minor Thoroughfare
Perry Creek Road	Fox Road to Buffaloe Road	4-lane divided	Major Thoroughfare
Poyner Road	Burcliff Place to Longhill Lane	3 lanes	Minor Thoroughfare
Rogers Lane	New Bern Avenue to existing Rogers Lane	4-lane divided	Major Thoroughfare
Shady Grove Road Realignment	North of N. Exeter Way to existing Shady Grove Road	4-lane divided	Major Thoroughfare
Six Forks Road	East of Atlantic Avenue to Capital Boulevard	4-lane divided	Major Thoroughfare
Skycrest Drive	Southall Road to Forestville Road	4-lane divided	Major Thoroughfare
Southall Road	Rogers Lane to Raleigh Beach Road	4-lane divided	Major Thoroughfare
Southall Road	Skycrest Drive to existing Southall Road	4-lane divided	Major Thoroughfare
Southall Road	Groundwater Place to Hedingham Boulevard	4-lane divided	Major Thoroughfare
Spring Forest Road	Louisburg Road to Buffaloe Road	4-lane divided	Major Thoroughfare
Sumner Boulevard	Old Wake Forest Road to Capital Boulevard	5 lanes	Minor Thoroughfare
Sumner Boulevard	Ruritana Street to Gresham Lake Road	3 lanes	Minor Thoroughfare
Sunnybrook Road	Creech Road to existing Sunnybrook Road	4-lane divided	Major Thoroughfare
Triangle Town Boulevard	I-540 to Capital Boulevard	4-lane divided	Major Thoroughfare
Tryon Road	Cyrus Street to Sanderford Road	4-lane divided	Major Thoroughfare
TW Alexander Drive	Brier Creek Parkway to Leesville Road	4-lane divided	Major Thoroughfare

Road Name	Segment Description	Ultimate Future Cross-Section	Classification
TW Alexander Drive	Glenwood Avenue to Brier Creek Parkway	6-lane divided	Secondary Arterial
Watkins Road	Mitchell Mill Road to Louisbury Road	3 lanes	Minor Thoroughfare
Western Boulevard	Jones Franklin Road to existing Western Boulevard	6-lane divided	Secondary Arterial
Whitaker Mill Road	Atlantic Avenue to Capital Boulevard	3 lanes	Minor Thoroughfare

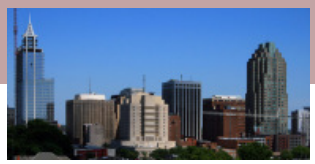
Table T-3 Widening Projects

Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Atlantic Avenue	Highwoods Boulevard to New Hope Church Road	5 lanes	Major Thoroughfare
Auburn Church Road	Jones Sausage Road to Wall Store Road	3 lanes	Minor Thoroughfare
Auburn-Knightdale Road	Rock Quarry Road to I-540	4-lane divided	Major Thoroughfare
Avent Ferry Road	Tryon Road to Athens Drive	3 lanes	Minor Thoroughfare
Barwell Road	Rock Quarry Road to Poole Road	3 lanes	Minor Thoroughfare
Battle Bridge Road	Rock Quarry Road to Auburn-Knightdale Road	3 lanes	Minor Thoroughfare
Blue Ridge Road	Duraleigh Road to Crabtree Valley Avenue	3 lanes	Minor Thoroughfare
Brier Creek Parkway	Globe Road to TW Alexander Drive	6-lane divided	Secondary Arterial
Buck Jones Road	Farmgate Road to Xebec Way	3 lanes	Minor Thoroughfare
Buffaloe Road	Southall Road to Perry Creek Road Ext	4-lane divided	Major Thoroughfare
Buffaloe Road	Perry Creek Road Ext to I-540	4-lane divided	Major Thoroughfare
Buffaloe Road	I-540 to Old Milburne Road	6-lane divided	Secondary Arterial
Capital Boulevard	I-540 to New Falls to Neuse Road	Freeway Conversion	Principal Arterial



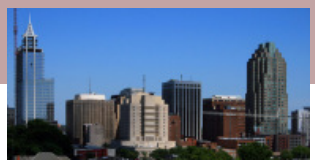
Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Capital Boulevard	Spring Forest Road to Old Wake Forest Road	8-lane divided	Principal Arterial
Carolina Pines Drive	Lake Wheeler Road to S. Saunders Street	3 lanes	Minor Thoroughfare
Chapel Hill Road	Hillsborough Street to Corporate Center Drive	4-lane divided	Major Thoroughfare
Creech Road	Sanderford Road to Wilmington Road Ext	4-lane divided	Major Thoroughfare
Creedmoor Road	Edwards Mill Road to I-540	6-lane divided	Secondary Arterial
Dillard Drive	Jones Franklin Road to Tryon Road	3 lanes	Minor Thoroughfare
Duraleigh Road	Pleasant Valley Road to Edwards Mill Road	6-lane divided	Secondary Arterial
Ebenezer Church Road	Westgate Road to Graylyn Road	3 lanes	Minor Thoroughfare
Edwards Mill Road	Creedmoor Road to Trinity Road	6-lane divided	Secondary Arterial
Fairbanks Road	Westgate Road to Leesville Road	3 lanes	Minor Thoroughfare
Falls of Neuse Road	Old Wake Forest Road to New Falls of Neuse Road	6-lane divided	Secondary Arterial
Falls of Neuse Road	New Falls of Neuse Road to N.C. 98 Bypass	4-lane divided	Major Thoroughfare
Forestville Road	Old Milburnie Road Realignment to Lillie Liles Road	4-lane divided	Major Thoroughfare
Fox Road	Spring Forest Road to Old Wake Forest Road	3 lanes	Minor Thoroughfare
Fox Road	Old Wake Forest Road to Louisburg Road	4-lane divided	Major Thoroughfare
Glenwood Avenue	Womans Club Drive to Oberlin Road	6-lane divided	Secondary Arterial
Globe Road	Brier Creek Parkway to Globe Road Ext	6-lane divided	Secondary Arterial
Gorman Street	Avent Ferry Road to Western Boulevard	3 lanes	Minor Thoroughfare

Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Greshams Lake Road	Litchford Road to Greshams Lake Road Ext	4-lane divided	Major Thoroughfare
Hickory Grove Church Road	Leesville Road to Carpenter Pond Road	3 lanes	Minor Thoroughfare
Hillsborough Street	Chapel Hill Road to I-440	4-lane divided	Major Thoroughfare
Hillsborough Street	I-40 to Western Boulevard	4-lane divided	Major Thoroughfare
Hillsborough Street (streetscape project)	Gardner Street to Faircloth Street	3 lanes (road diet)	Minor Thoroughfare
Hodge Road	Sidecreek Drive to Poole Road	4-lane divided	Major Thoroughfare
Howard Road	Ray Road to Creedmoor Road	3 lanes	Minor Thoroughfare
Jones Franklin Road	Tryon Road to I-440	6-lane divided	Secondary Arterial
Jones Franklin Road	I-440 to Buck Jones Road	4-lane divided	Major Thoroughfare
Jones Sausage Road	I-40 to Rock Quarry	6-lane divided	Secondary Arterial
Lake Wheeler Road	Tryon Road to S. Saunders Street	4-lane divided	Major Thoroughfare
Lead Mine Road	Town & Country Road to Sawmill Road	4-lane divided	Major Thoroughfare
Leesville Road	I-540 to New Leesville Road/Hickory Grove Church Road	4-lane divided	Major Thoroughfare
Leesville Road	Leesville-Westgate Connector to Hickory Grove Church Road	4-lane divided	Major Thoroughfare
Leesville Road	Lynn Road to Westgate Road	4-lane divided	Major Thoroughfare
Leesville Road	Leesville-Westgate Connector to Shady Grove Realignment	4-lane divided	Major Thoroughfare
Litchford Road	Old Wake Forest Road to Falls of Neuse Road	4-lane divided	Major Thoroughfare
Louisbury Road	Louisbury Road Realignment to Louisburg Road	3 lanes	Minor Thoroughfare

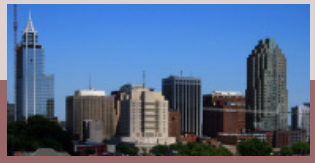


Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Marsh Creek Road	Trawick Road to New Hope Road	3 lanes	Minor Thoroughfare
Martin L. King Jr. Boulevard	Dawson/McDowell to Garner Road	6-lanes divided	Secondary Arterial
Millbrook Road	Falls of Neuse Road to Capital Boulevard	6-lanes divided	Secondary Arterial
Mitchell Mill Road	Louisburg Road to Peebles Road	4-lane divided	Major Thoroughfare
New Falls of Neuse Road	New Falls to Neuse Road Ext to US 1/Capital Boulevard	6-lane divided	Secondary Arterial
New Hope Church Road	Atlantic Avenue to Deana Lane	4-lane divided	Major Thoroughfare
New Hope Road	Rock Quarry Road to US 1/Capital Boulevard	6-lane divided	Secondary Arterial
Old Milburnie Road	Hodge Road Ext to Forestville Road	4-lane divided	Major Thoroughfare
Old Milburnie Road	Old Lewis Farm Road to Watkins Town Road	3 lanes	Minor Thoroughfare
Old Wake Forest Road	Litchford Road to Capital Boulevard	4-lane divided	Major Thoroughfare
Page Road	Airport Road to TW Alexander Drive	4-lane divided	Major Thoroughfare
Pearl Road	New Pearl Road to Rock Quarry Road	3 lanes	Minor Thoroughfare
Perry Creek Road	Fox Road to Louisburg Road	4-lane divided	Major Thoroughfare
Pinecrest Road	Glenwood Avenue to Fairbanks Road	3 lanes	Minor Thoroughfare
Pleasant Valley Road	Duraleigh Road to Glenwood Avenue	3 lanes	Minor Thoroughfare
Poole Road	Sunnybrook Road to I-540	6-lane divided	Secondary Arterial
Raven Ridge Road	Durant Road to Falls of Neuse Road	3 lanes	Minor Thoroughfare
Ray Road	Leesville Road to Strickland Road	3 lanes	Minor Thoroughfare

Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Rock Quarry Road	Olde Birch Road to Old Baucom Road	4-lane divided	Major Thoroughfare
Rogers Lane	New Hope Road to U.S. 64 bypass	4-lane divided	Major Thoroughfare
Rogers Lane	Robbins Drive to Southall Road Ext	4-lane divided	Major Thoroughfare
Sanderford Road	Rock Quarry Road to Creech Road	4-lane divided	Major Thoroughfare
Shady Grove Road	Shady Grove Road Realignment to New Leesville Boulevard Ext	4-lane divided	Major Thoroughfare
Six Forks Road	I-440 to I-540	6-lane divided	Secondary Arterial
Skycrest Drive	Brentwood Road to Southall Road	4-lane divided	Major Thoroughfare
Southall Road	Southall Road Ext to Buffaloe Road	4-lane divided	Major Thoroughfare
Spring Forest Road	Fox Road to Louisburg Road	4-lane divided	Major Thoroughfare
Strickland Road	Leesville Road to Creedmoor Road	4-lane divided	Major Thoroughfare
Sunnybrook Road	Dutchman Trail to Poole Road	4-lane divided	Major Thoroughfare
Trailwood Drive	Tryon Road to Avent Ferry Road	3 lanes	Minor Thoroughfare
Trawick Road	Marsh Creek Road to Capital Boulevard	3 lanes	Minor Thoroughfare
Triangle Town Boulevard	Old Wake Forest Road to I-540	4-lane divided	Major Thoroughfare
Trinity Road	Trenton Road to Edwards Mill Road	5 lanes	Major Thoroughfare
Tryon Road	Lake Wheeler Road to Norfolk-Southern railroad overpass	4-lane divided	Major Thoroughfare
TW Alexander Drive	Page Road to Glenwood Avenue	6-lane divided	Secondary Arterial
Wade Avenue	Ridge Road to Faircloth Street	6-lane divided	Secondary Arterial



Road Name	Segment Description	Ultimate Future Cross-Section	Classification
Wade Avenue	Faircloth Street to Glenwood Avenue	4-lane divided	Major Thoroughfare
Wake Forest Road	I-440 to Old Wake Forest Road	6-lane divided	Secondary Arterial
Watkins Road	Watkins Town Road to Mitchell Mill Road	3 lanes	Minor Thoroughfare
Western Boulevard	Hillsborough Street to Kent Road	6-lane divided	Secondary Arterial
Western Boulevard	Faircloth Street to Dawson/McDowell Connector	6-lane divided	Secondary Arterial
Westgate Road	Glenwood Avenue to Leesville Road	4-lane divided	Major Thoroughfare



Environmental Protection

Element C: Environmental Protection

The future success of cities in the 21st century will most likely be judged by their ability to adapt and meet the challenges presented by global climate change and the need to become more sustainable in their form and function. This Environmental Protection Element contains the policies and actions required for the City of Raleigh to begin meeting these challenges, improving the long-term health of local residents and regional ecological systems. In doing so, Raleigh will become a model for cities in the southeastern United States, serving as a key player in the national reversal of sprawling development patterns and environmentally degrading development practices, with the goal of one day becoming carbon neutral.

The City of Raleigh has a number of laudable programs and initiatives that are designed to protect and enhance environmental resources—such as its broad array of recycling services, the greening of its automobile fleet, moving toward green building and infrastructure programs, and its attempts at reusing and conserving water. Adoption, implementation, and enforcement of this Environmental Protection Element presents the City of Raleigh with an opportunity to surpass these efforts, and move toward more comprehensive solutions to complex environmental problems.

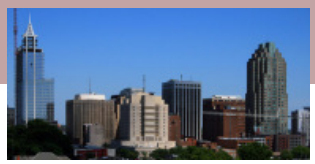
Raleigh's Climate Protection Commitment

As a member of the International Council for Local Environmental Initiatives (ICLEI), Raleigh joined forces with other progressive cities in the country by signing the U.S. Mayors Climate Protection Agreement to strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution. The following actions from the Climate Protection Agreement shape the land use, transportation, and natural resource preservation policies in the Plan:

- Adopt and enforce land use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities.
- Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for car pooling, and public transit.
- Increase the use of clean, alternative energy by, for example, advocating for the development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste-to-energy technology.
- Maintain healthy urban forests; promote tree planting to increase shading and to absorb carbon dioxide.
- Make energy efficiency a priority through building code improvements and retrofitting City facilities with energy efficient lighting to conserve energy.
- Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or similar system.

Some of the key issues this Element aims to address through its policies include:

- The City will be challenged by the localized effects of climate change, including increased risk of droughts and flood, and a fluctuating supply of drinking water;
- The City's recent commitment to helping to fight climate change at the local level will require coordinated responses involving City operations as well as land use and transportation policy;
- The Neuse River is one of the most polluted rivers in the country, and as the capital city, Raleigh must champion measures to protect this degraded state resource;
- The City's ongoing efforts to improve air quality must address the region's high degree of reliance on the automobile, loss of tree coverage, and loss of undeveloped land;
- The conservation of urban, suburban, and native forests will be important to Raleigh's environment and quality of life; and
- There is a need for greater sensitivity for wildlife and natural habitat protection. Raleigh



has the opportunity to become a leader in environmental policy at the national level.

Further information associated with these topics, and how they relate to Raleigh, can be found in the Environmental Resources section of the City of Raleigh Community Inventory Report.

The following policies and actions are most directly related to the vision theme of Greenprint Raleigh. In fact, for the purposes of this Comprehensive Plan, the word 'greenprint' simply refers to a plan for sustainability. Issues such as clean air and climate change, water quality and quantity, land conservation and habitat protection, and material resource management, all influence urban sustainability.

However, achieving sustainability depends upon and plays a critical role in the fulfillment of each vision theme, including not only Greenprint Raleigh, but also Economic Prosperity and Equity; Expanding Housing Choices; Managing Our Growth; Coordinating Land Use and Transportation; and Growing Successful Neighborhoods and Communities. An environmentally focused, collaborative effort on behalf of all parties working towards the realization of each vision theme will be critical in transforming Raleigh into a truly sustainable city.

For example, urban sustainability is strongly related to the vision theme of Economic Prosperity and Equity. By enforcing policies that promote energy conservation and efficiency, the City of Raleigh is helping to insulate local business and residents from energy price increases by reducing the amount of energy used—and income spent—on heating and cooling, hot water, and lighting. Furthermore, 'Green Collar' jobs are created when large-scale investments are made in developing energy efficient infrastructure, such as solar panel installation, green roof installation, brownfield restoration, and ecological restoration, thereby further contributing to overall economic prosperity.

Environmental policy also influences equity, and the vision theme of Growing Successful Neighborhoods and Communities, through the promotion of environmental justice. In essence, environmental justice is the redressing of inequitable distributions of environmental burdens such as air pollution, noise pollution, and noxious industrial facilities; and access to environmental goods such as clean air and water, parks, urban forests, recreation, and transportation. As with all urban areas, as greater equity in the distribution of environmental burdens and goods is achieved, better positioned cities will be able to accommodate the increases in density that are needed to support transit and curtail sprawling development patterns.

In addition to promoting regional transit and density, this Element also supports transit-oriented development, mixed-use development, infill development, bicycle facilities, and other building blocks of sustainability that advance the vision themes of Managing Our Growth and Coordinating Land Use and Transportation. Such policies will take more cars off the road, and more pollutants out of the air and water, while at the same time expanding housing choices and diverting development pressure from Raleigh's few remaining bucolic and natural landscapes.

Part of Raleigh's natural landscape includes the Neuse River, one of the most polluted rivers in the state. In 2007, American Rivers—a national organization that advocates for healthy rivers—identified the Neuse as the eighth most endangered river in the United States. As a capital city and as a community at the headwaters of the river, Raleigh is uniquely positioned to champion the recovery of this degraded resource. The Water Quality and Conservation section of this element outlines various strategies to make this goal of recovery a reality. Looking beyond the river, and at

the watershed as a whole, both water quality and water quantity will play significant roles in the City's ability to meet the needs of its growing population.

Finally, regional air quality in the Triangle area has shown some improvement in recent years, but significant effort will be needed to sustain and expand upon recent improvements. Regional cooperation will be essential to meaningful progress in the enhancement of air quality. This Element's policies on energy security and climate change preparedness will help to ensure that Raleigh is doing its part for this regional and global environmental challenge.

Policies and actions of this element appear below. Numbers indicate their relationship to the Themes, as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

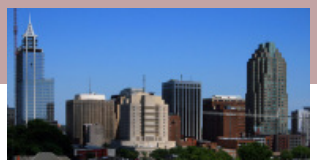
Rating Systems for Sustainability

As the real estate and construction industries move towards more sustainable practices, third-party rating systems have played an important role both in defining what constitutes a sustainable development practice, and also in certifying that such practices have been employed to a degree that the resulting structure or development can be labeled "green" or "sustainable."

The most famous and widely-used rating system in the U.S. is the Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ of the U.S. Green Building Council (USGBC). The LEED system addresses three stages of building—design, construction, and operations—and has separate criteria for commercial, institutional, and residential construction; existing buildings versus new construction; and includes a new pilot program for rating neighborhood development. As stated on the USGBC's web site, "LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality."

If the LEED system focuses primarily on sustainable building practices, a relatively new and evolving standard for sustainable site development and landscaping is being developed by the Sustainable Sites Initiative (SSI), an interdisciplinary effort by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden to create voluntary national guidelines and performance benchmarks for sustainable land design, construction, and maintenance practices.

Sources: *U.S. Green Building Council*, *Sustainable Sites Initiative* (2009).



C.1 Energy Security and Climate Change Preparedness

Globally, cities are taking the lead in preparing for climate change by proactively conserving energy, using renewable energy resources, and improving air quality. Having the foresight to make investments in energy security by preparing residents, businesses, and local infrastructure will be a hallmark of successful cities in the 21st century. As energy prices rise from the combined effects of fossil fuel depletion and public policies aimed at avoiding climate change, those cities and regions that can be the most productive with the least amount of energy input will be best positioned to prosper.

The policies and actions of this section are included not only because of the City of Raleigh's responsibility to the health, safety, and welfare of constituents, but also because they represent a move towards the responsible use of limited resources in a growing world—and a desire to leave a better world for future generations. In practical terms, adoption and enforcement of the following policies could also translate to lower energy bills and cleaner air for local residents.

As with all urban areas, Raleigh's 'carbon footprint' (amount of greenhouse gases produced) depends primarily upon the ways our built environment and our modes of transportation are designed, constructed, and used. Therefore, the following policies and actions concentrate on how best to approach these practices.

Policy EP 1.1

Greenhouse Gas Reduction

Promote best practices for reducing greenhouse gas emissions as documented through the U.S. Mayors' Climate Protection Agreement, the International Council for Local Environmental Initiatives (ICLEI), and the Sierra Club's Cool Cities Program. (3, 4, 5) *See the Community Inventory Report for additional information on these programs.*

Policy EP 1.2

Vehicle Electrification

Promote the electrification of transportation, both public and private. (5)

Policy EP 1.3

Total Cost of Ownership Analysis

Use Total Cost of Ownership (TCO), life-cycle analysis, and/or payback analysis on all energy saving proposals. (5)

Policy EP 1.4

Green Building

Advance green building practices in the public and private sectors by encouraging LEED Gold-level certification and LEED-ND, or their respective equivalents. (5)

Policy EP 1.5

LEED Certification for Public Buildings

All new or renovations of existing City of Raleigh buildings encompassing 10,000 gross square feet or more of building area should achieve a Silver level certification of the U.S. Green Building Council's LEED Green Building Rating System for New Construction (LEED-NC) and Existing Buildings (LEED-EB), or their respective equivalents. A higher equivalent rating (Gold or Platinum) should be sought where practical and as funding is available. (5) *See text box: LEED Certification for New and Existing Municipal Buildings*

Policy EP 1.6

LEED and Development Agreements

Require any public-private project that includes a development agreement to apply LEED (or the equivalent) certification standards as appropriate to the project and consistent with other Comprehensive Plan policies. (5)

Policy EP 1.7

Sustainable Development

Promote the adaptive use of existing buildings, infill development, and brownfield development as effective sustainability practices that take development pressure off undeveloped areas. (*See also Element J: 'Historic Preservation' for more on this topic*). (2, 3, 5, 6)

Policy EP 1.8

Sustainable Sites

Encourage the use of environmentally-friendly site planning and landscape design approaches and techniques such as those developed by the Sustainable Sites Initiative. (5)

Policy EP 1.9

Sustainable Public Realm

Incorporate sustainable technology and materials into public realm projects. (5, 6)

Policy EP 1.10

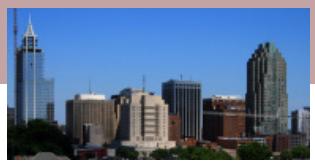
Alternative Energy Sources

Support the development and application of renewable energy technologies such as active, passive, and photovoltaic solar energy, fuel cells, and other sustainable sources. Such technology should be used to reduce the dependence on imported energy, provide opportunities for economic and community development, and benefit environmental quality. (5)

Policy EP 1.11

Renewable Energy

By 2030, increase the use of renewable energy to meet 20 percent of Raleigh's peak electric load, or maximum electric demand that is typically reached during normal business hours. This target will be re-evaluated as additional research and information becomes available. (5) *See text box: NC GreenPower*.



Policy EP 1.12

Air Quality Improvements

Reduce the number of air quality days categorized as 'unhealthy' or 'hazardous,' based on the Air Quality Index readings provided by the North Carolina Department of Environment and Natural Resources, Division of Air Quality. (5)

Policy EP 1.13

Evaluating Development Impacts On Air Quality

Evaluate potential air emissions from new and expanded development, including transportation improvements and municipal facilities, to ensure that measures are taken to mitigate any possible adverse impacts. These measures should include construction controls to reduce airborne dust and requirements for landscaping and tree planting to absorb carbon monoxide and other pollutants. (5)

NC GreenPower

To increase the use of electricity generated from renewable resources, such as solar, wind, biomass, and water, the City of Raleigh could lead by example by participating in the statewide program *NC GreenPower*. The program enables energy providers to sell blocks of energy from renewable resources, and is offered through most private utilities in North Carolina, including Progress Energy in Raleigh.

Adopted Fossil Fuel Reduction Goal

The City of Raleigh has established a goal, adopted by the City Council on April 17, 2007, of reducing fossil fuel consumption by 20 percent from 2006 levels by 2011. The goal assumes that a 20 percent reduction is made from a baseline year and does not include a growth variable. For example, if the City consumes 100 gallons of fossil fuels in 2006, the goal is to have fossil fuel consumption at 80 gallons by 2011 regardless of growth. This will require even higher reduction rates when normalized on a per capita basis. To achieve this goal, the City is targeting three initiatives:

- Establishing a citywide fossil fuel budget;
- Investing in the transformation of the City's vehicle fleet; and
- Broad changes in protocol and policy, ranging from encouraging telecommuting to shared service calls.

LEED Certification for New and Existing Municipal Buildings

On May 20, 2008 the City Council adopted as policy the Environmental Advisory Board's recommendations on LEED (or the equivalent) certification for municipal buildings, as follows:

New Construction

(1) All new City of Raleigh construction and additions encompassing 10,000 gross square feet or more of building area should achieve a Silver level certification of the US Green Building Council's LEED Green Building Rating System for New Construction (LEED—NC). A higher equivalent rating (Gold or Platinum) should be sought where practical and as funding is available.

(2) All City of Raleigh construction and additions encompassing less than 10,000 square feet of building area would not seek LEED

Silver level certification but would be designed and built to be eligible for Silver certification, plus meet requirements for energy and water efficiency as follows:

i. Energy
Achieve minimum energy efficiency of 30% better than code required by the American Society of Heating, Refrigeration and Air Conditioning Engineers(ASHRAE) 90.1-2004 (ASHRAE 90.1 version required in the 2006 NC Building Code).

ii. Water
Achieve a 30 percent water use reduction as quantified by LEED water efficiency standards.

Existing Buildings

(3) All existing City of Raleigh buildings and facilities should use the US Green Building Council's LEED Green Building Rating System for Existing Buildings (LEED—EB) as a guide. The application of these standards is intended to maximize sustainability benefits within existing resources and provide a means of benchmarking environmental and financial performance improvements in City practices.

Certification of existing buildings under LEED—EB should be evaluated for technical and economic feasibility and pursued at the highest feasible level of certification on a case by case basis as funding and resources are available.

Action EP 1.1

Green Purchasing

Establish and promote a "green purchasing" program that emphasizes the purchase and use of environmentally-friendly products and services by City agencies, ranging from biodiesel buses to 'green' catering.

Action EP 1.2

Public Facility Energy Audit

Conduct a "Public Facility Energy Audit" to determine how the City of Raleigh can improve energy efficiency and reduce costs related to energy consumption in public buildings and operations.

Action EP 1.3

Energy Retrofits

Implement a retrofitting program for public buildings based on the "Public Facility Energy Audit" to maximize sustainability benefits within existing resources.

Action EP 1.4

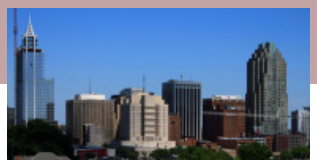
LEED-EB

Evaluate the certification of existing public buildings under LEED-Existing Buildings (EB) (or the equivalent) for technical and economic feasibility and pursue the highest feasible level of certification on a case-by-case basis as funding and resources are available.

Action EP 1.5

LEED-ND

Explore adopting the U.S. Green Building Council's Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND), or the equivalent, as a City standard.



Action EP 1.6

LEED Incentives

Encourage and provide incentives for buildings that would qualify for Gold or Platinum LEED certification, or the equivalent.

Action EP 1.7

Green Training

Partner with the North Carolina Cooperative Extension and other local institutions and agencies to develop a program that trains City of Raleigh residents in implementing green building practices and fostering on-site energy generation in their homes, neighborhoods, and businesses.

Action EP 1.8

Solar and Co-generation Incentives

Study and consider financial incentives to encourage homebuilders and home owners to install solar and other co-generation technologies.

Action EP 1.9

Energy Efficient Construction

Study and adopt LEED-like energy efficient construction standards that can be used when older buildings are renovated or adapted for new uses, since it may be difficult for older buildings to meet LEED standards.

Action EP 1.10

Community Supported Energy

Explore opportunities to develop Community Supported Energy (CSE) options which allow homeowners, landowners, farmers, co-operatives, schools, and others to install renewable energy projects up to 10 megawatts in size and to sell power to the grid for a fixed price.

Action EP 1.11

Rooftop Energy

Explore using the rooftops of public facilities and parking garages for renewable micro-power generation, such as solar and wind. Also explore the appropriateness and feasibility of instituting solar access regulations.

Action EP 1.12

Charging Stations

When viable, install charging stations for electric automobiles in public parking lots and garages.

C.2 Design with Nature

The State of North Carolina is known for its natural beauty. As the capital city of North Carolina, Raleigh should aspire to conserve and preserve the natural resources that define the City's "sense of place" and green infrastructure. The design of the City should reflect Raleigh's commitment to protecting and enhancing its environment. Design with nature is more than the development and stewardship of a first-class park and greenway

system. Rather, it is a commitment to understanding the ecological significance of place and to grow the community in a manner that both respects and takes advantage of natural resources. An "ecosystem" approach to growth should become the hallmark of how the City grows and flourishes. The focus of such an approach is not growth versus no growth, but rather on the type of growth and development that occurs and where it occurs. The following policies and actions help to guide growth and development, thereby conserving, protecting, and enhancing Raleigh's natural resources. *See also Element F: 'Parks, Recreation, and Open Space' for more on this topic.*

Policy EP 2.1

Green Infrastructure

Ensure protection of Raleigh's unique and significant green infrastructure – its natural resources, landscapes, and ecological systems – through best practices management, stewardship and land use regulations. (3, 5)

Policy EP 2.2

Environmentally Sensitive Development

Ensure Raleigh's growth and land development practices are compatible with the City's natural form, vegetation, topography, and water bodies and streams. This will decrease erosion, reduce stormwater run-off and flooding, improve water quality, protect wildlife habitat, and provide buffers and transitions between land uses. See **Map EP-1: Greenprint** for environmental resources. (3, 5)

Policy EP 2.3

Open Space Preservation

Seek to identify all opportunities to conserve open space networks, mature existing tree stands, steep slopes, floodplains, priority wildlife habitats,and significant natural features as part of public and private development plans and targeted acquisition. (3, 5, 6)

Policy EP 2.4

Scenic Vistas and Views

Explore options for protecting and creating scenic vistas and views of natural landscapes and features that are important in establishing, enhancing, and protecting the visual character of the City, mindful of other goals such as preserving and enhancing the City's tree canopy. (5)

Policy EP 2.5

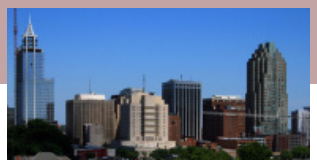
Protection of Water Features

Lakes, ponds, rivers, streams, and wetlands should be protected and preserved. These water bodies provide valuable stormwater management and ecological, visual, and recreational benefits. (3, 5)

Policy EP 2.6

Greenway System

Continue to build a park and greenway system that is: interconnected; protects native landscapes, water quality, and areas of ecological significance, such as priority wildlife



habitats; and serves the broad and diverse outdoor recreation needs of community residents. (1, 3, 4, 5, 6)

Policy EP 2.7

Road Design and Landscape Preservation

Encourage the preservation of natural features and systems when designing new roadways by separating in-bound and out-bound lanes as they pass through natural features such as large clusters of trees, rocky outcrops or water courses. (3, 5) *See also Element B: 'Transportation'.*

Action EP 2.1

Green Infrastructure Plan

Complete a Green Infrastructure Plan, that includes a natural heritage inventory, to define a program for protecting, conserving and stewarding Raleigh's natural resources,wetlands, waterbodies, urban forests, landscapes, priority wildlife habitats, and important natural features, emphasizing their value in terms of carbon sequestration. Work with the Environmental Advisory Board and similar citizen committees as appropriate. Incorporate the spatial principals of landscape ecology in the planning effort.

Action EP 2.2

Park Acquisition

Annually acquire a minimum of 250 acres of land for parks, greenway corridors, or open space to meet the Raleigh Parks Plan's goal of conserving 5,000 acres of land by 2030. *See also Element F: 'Parks, Recreation, and Open Space'.*

Action EP 2.3

Green Infrastructure Team

Establish a green infrastructure team within City government that is comprised of the City's Sustainability Coordinator and members from the City Manager's office, Planning, Parks and Recreation, Public Utilities, and Public Works departments. The purpose is to develop a program of action, built upon the recommendations of the green infrastructure plan, for day-to-day implementation of these recommendations.

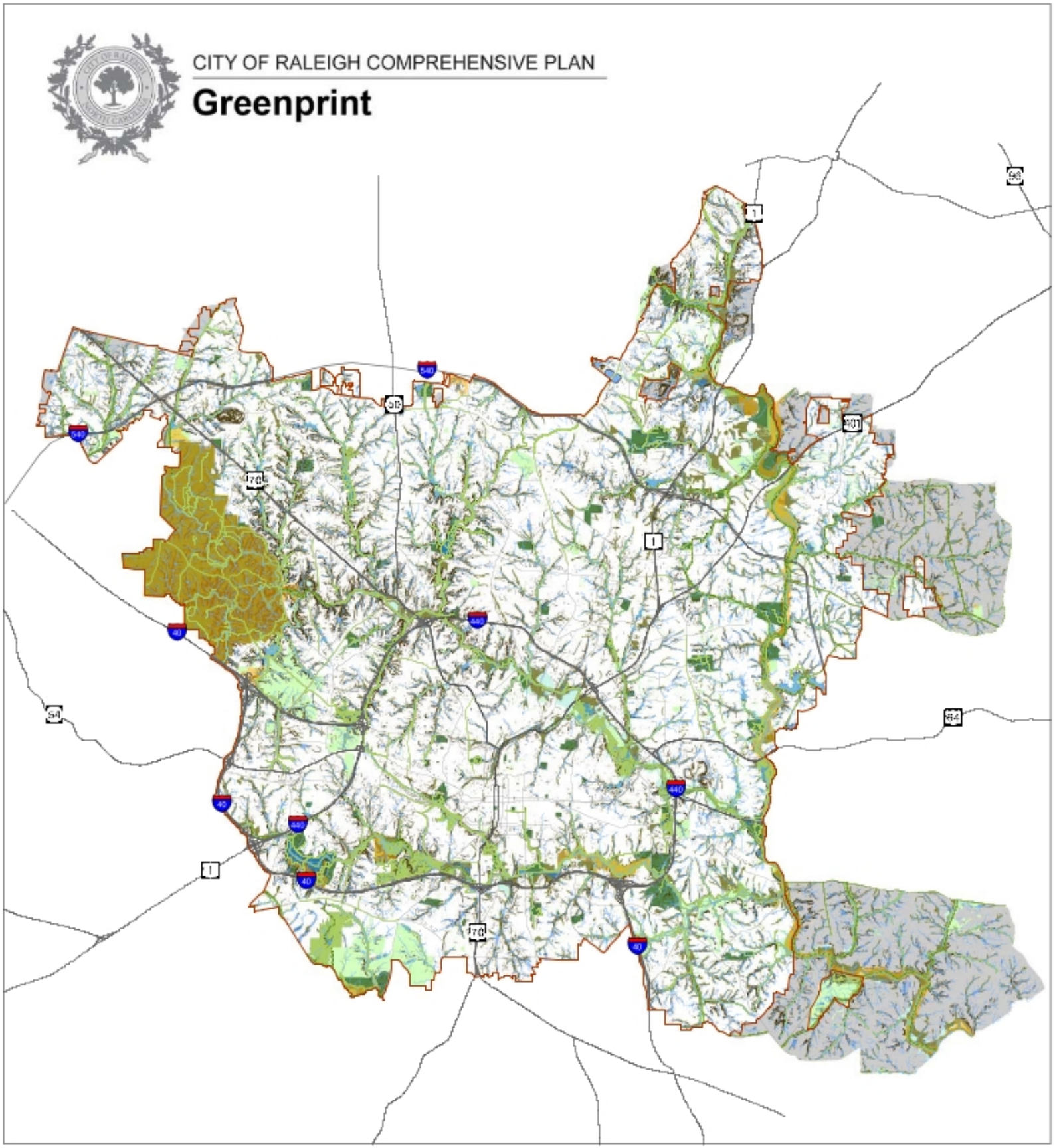
Action EP 2.4

Environmentally Sensitive Development Controls

As part of the City's update of its development regulations, revise the City's regulations to reduce excessive cut and fill grading and the destruction of significant trees, vegetation, and Priority Wildlife Habitats (as identified by programs and agencies such as the North Carolina Natural Heritage Program and North Carolina Wildlife Resources Commission).

CITY OF RALEIGH COMPREHENSIVE PLAN

Greenprint

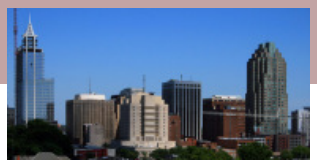


MAP EP-1

- Greenway Trail, Existing
- Greenway Trail, Planned
- Streams and Creeks
- Significant Natural Heritage Areas
- Slope>=15%
- Lakes and Ponds
- Public & Private Open Space
- Parks
- Greenway Corridors
- Hydric soils
- Floodplain
- Urban Service Area
- ETJ
- Highway
- Major Streets

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Action EP 2.5

Environmental Feature Protection

As part of the update to the City's development regulations, explore incentive mechanisms that encourage developers to preserve lakes, ponds, wetlands, and other sensitive natural features.

C.3 Water Quality and Conservation

The City of Raleigh has a responsibility to current residents and future generations to immediately improve the health of local rivers, creeks, floodplains, and wetlands, and to continue to protect these resources for the long term. These elements of the City's green infrastructure cannot continue to be compromised, as they represent a direct lifeline to the vitality of the City as a whole: without ample, clean water resources, the City of Raleigh cannot survive long-term droughts, much less thrive with current and projected levels of population.

The core goals to be fulfilled by these water quality and conservation policies include: keeping rainfall on-site as much as possible, thereby mimicking the flow of water in a natural setting and reducing non-point source pollution from stormwater run-off; increasing water conservation measures, and reducing overall demand for water; minimizing soil erosion and sedimentation; reducing flood damage; and reducing nutrient loads.

See also Element G: 'Public Utilities' for additional policies and actions.

Policy EP 3.1

Water Quality BMPs

Use non-structural Best Management Practices (BMPs) in an effort to improve water quality, such as public education programs, monitoring and control of illicit discharges, expansion of the greenway concept to include "receiving lands" that can absorb storm surge overflows, and update of the City's sediment control program with an orientation toward performance measures. (5)

Policy EP 3.2

Neuse River Protection

Protect and preserve the Neuse River watershed, primary channel, major tributaries, intermittent headwaters streams, floodplains, and topography to improve overall water quality for drinking, fish and wildlife habitat, and fishing, boating, and other recreational uses. (3, 5)

Policy EP 3.3

Water Supply Protection

Protect major water supply overlay districts through open space conservation, community programs that promote tree coverage, floodplain preservation, and limits to impervious surface cover. (3, 5)

Policy EP 3.4

Low Impact Systems for Parking

Well maintained pervious pavement or other low impact systems for parking areas should be encouraged throughout the City, especially in environmentally sensitive areas and floodplains, as appropriate. (5)

Policy EP 3.5

Watershed-Focused Planning

Water quality shall be managed using a watershed-focused approach. Such an approach uses performance-based strategies to enhance water quality and prevent or decrease downstream flooding in each watershed rather than applying citywide standards. (5)

Policy EP 3.6

Maintaining Drinking Water Quality

Improve the ecological integrity of the City's primary drinking water sources by further protecting streams from encroaching development and expanding the protection of buffers. (3, 5)

Policy EP 3.7

Preserving Watercourses

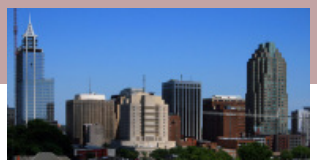
Preserve the natural character of watercourses through greenway acquisition, floodprone area regulation, purchase of properties in Neuse River Buffer and floodprone areas, drainage corridor and buffer protection, and improved public and private design and construction practices. (3, 5, 6)

Policy EP 3.8

Low Impact Development

Promote the use of Low Impact Development (LID) techniques to mitigate the impact of stormwater runoff. This includes the use of green roofs, rain gardens, cisterns, rain barrels, and on-site wastewater reuse systems in urban and suburban landscapes. (2, 5)

A rain garden



Policy EP 3.9

Water Conservation

Promote water conservation even during periods of adequate supply, not just during drought. Water conservation saves energy and normalizes practices, which will help the City cope with the ups and downs of rainfall patterns. (3, 5)

Policy EP 3.10

Groundwater Protection

Protect groundwater from the adverse effects of development. Land development and use should be managed to reduce the likelihood of groundwater contamination. (3, 5)

Policy EP 3.11

Watershed Protection and Open Space

Continue to support and develop programs that protect open space lands in Raleigh watershed protection areas such as the Upper Neuse Watershed and the Little River Watershed. (3, 5)

Policy EP 3.12

Mitigating Stormwater Impacts

Potential stormwater impacts from new development on adjoining properties should mimic pre-development conditions and control the rate of runoff so as to avoid erosion of stream banks, inundation of natural waterways and to allow the recharging of groundwater. The intent is to avoid environmental and economic damage to the adjacent properties and City infrastructure. (3, 5, 6)

Policy EP 3.13

Erosion BMPs

Best Management Practices (BMPs) should be used on all construction sites to control soil erosion and minimize sediment run-off. (3, 5)

Policy EP 3.14

Wastewater Reuse

Consider wastewater recycling/reuse systems at wastewater treatment facilities to further reduce the nitrogen and phosphorus load to the Neuse River system and to reduce potable water consumption for non-essential purposes. (3, 5)

Policy EP 3.15

Grading Controls

Pursue a risk-based analysis approach to prevent soil erosion by limiting the amount of disturbed areas allowed and restricting mass grading as much as practicable. (3, 5)

Policy EP 3.16

Stormwater Management

Pursue stormwater management initiatives by participating in countywide and regional partnerships to develop innovative and consistent practices. (1, 3, 5)

Policy EP 3.17

Graduated Water Rates

Use rate structures to encourage water conservation by providing incentives to customers for reduced water usage. (1, 3, 5)

Action EP 3.1

Demonstration Projects

Work with other City departments, regional partners, and the local development community to promote demonstration projects within the City of Raleigh that use multiple water conservation measures on single sites. Incorporate Best Management Practices (BMPs) such as green roofs, bioretention cells, permeable pavers, large- and small-scale rainwater harvesting, innovative wastewater treatment and re-use systems, and grey water. Offer incentives, such as grants, fee waivers, tax breaks, and/or density bonus or transfer provisions for participating in demonstration programs.

Action EP 3.2

Low Impact Development Ordinance

Develop and adopt an incentive-based Low Impact Development (LID) ordinance so that rainwater is retained and absorbed on-site as an alternative to traditional approaches that include piping, channelization, and regional detention.

Action EP 3.3

Permanent Conservation Measures

Develop and implement permanent water conservation measures to reduce overall water usage by residents, businesses, government, and institutions. Charge the City of Raleigh's Water Conservation Task Force with recommending specific measures.

Action EP 3.4

Water Quality Management Projects

Identify and retrofit specific sites in the City of Raleigh where water quality management projects can be installed in existing developments.

Action EP 3.5

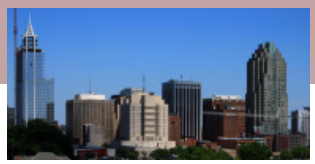
Illegal Discharges

Identify and eliminate illegal discharges into the City's sewer and stormwater systems and its waterways through inspections and enforcement.

Action EP 3.6

Land Acquisition for Stormwater Control

Consider a program of action for acquiring the necessary land and/or easements to provide for the maintenance of the stormwater system on private property.



Action EP 3.7

Stormwater Plan Review

Review all stormwater management plans for new development and redevelopment with a critical evaluation of approaches to nitrogen reduction as well as downstream flooding and erosion reductions.

Action EP 3.8

Erosion Control Inspections

Increase efforts and resources dedicated to sediment and erosion control inspections.

Action EP 3.9

Upper Neuse Initiative

Continue to provide both financial and political support for the conservation of land in key areas identified by the Upper Neuse Clean Water Initiative.

Action EP 3.10

Wastewater Treatment Demonstration Project

Develop or support the development of an innovative wastewater treatment and re-use system demonstration project to treat wastewater. An ideal location may be at Randleigh Farms, a planned model sustainable development on City-owned land.

Action EP 3.11

Zoning Amendment for Steep Slopes

Amend the zoning code to prohibit the regrading and development of steep slopes of 15 percent or greater to conserve the natural contours of the City and prevent soil erosion.

Action EP 3.12

Watercourse Restoration

Create a program for identifying and prioritizing degraded or channelized watercourses and seasonal streams for future daylighting and restoration, including incentives for undertaking such projects on private property.

C.4 Flood Reduction and Preparedness

Throughout its history, Raleigh has experienced damaging floods from a variety of rainfall events. The City's greenway system has acted as an effective buffer for floodwaters, limiting to some degree even more damaging losses. The City needs to adopt a watershed approach to stormwater management, flood reduction, and flood preparedness. This watershed approach needs to target drainage basins most susceptible to frequent flooding and should define facilities, programs, and policies necessary to improve preparedness and reduce the risks associated with flooding.

Floodplain areas and drainage basins within Raleigh's jurisdiction are illustrated on **Map EP-2**. The map shows that the largest floodplain areas are found along the Upper Neuse River and Crabtree and Walnut Creeks.

While this bridge permits land-based wildlife to cross underneath the street, the rip-rap destroys any aquatic ecosystem.

Policy EP 4.1

Daylighting Streams

Discourage further channelization and piping of streams and focus instead on projects that "daylight" or uncover buried streams. Install bridge systems instead of culverts for stream crossings where feasible in order to help maintain the natural ecosystem associated with the stream. (3, 5)

Policy EP 4.2

Floodplain Conservation

Development should be directed away from the 100-year floodplain. (3, 5) *See Text Box: Floodplains*.

Policy EP 4.3

Development in the Floodplain

Pursue regulatory approaches that avoid the future expansion of the floodplain. Floodplain development should not abridge the natural role of floodplains to absorb water, recharge the groundwater and avoid flooding downstream. (3, 5)

Policy EP 4.4

Acquisition of Flood-Prone Land

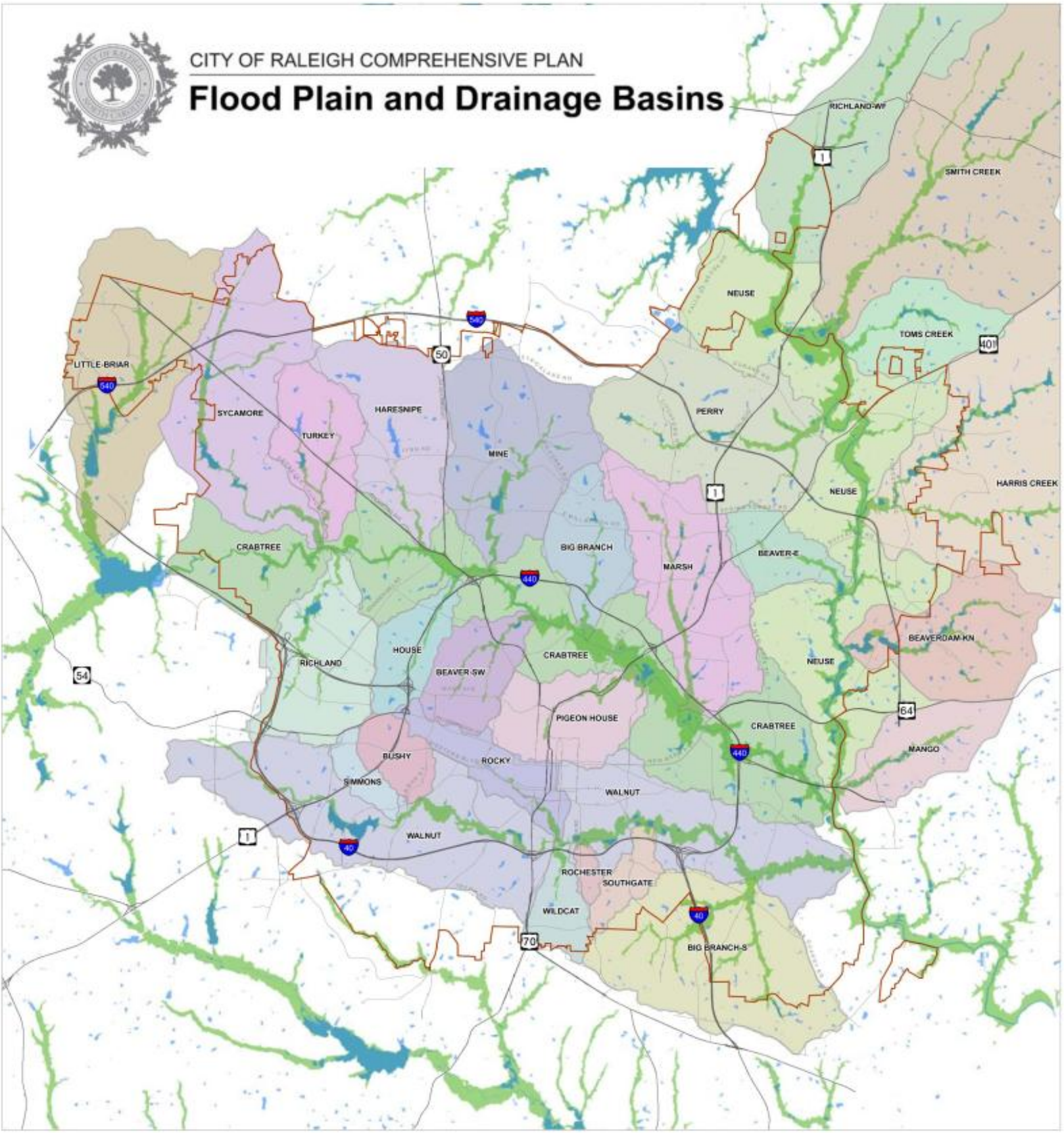
Pursue City acquisition of properties, easements and/or development rights located within the 100-year floodplain to protect and preserve sensitive natural areas. (1, 3, 5)

Floodplains

National studies clearly illustrate that the greatest loss of life and highest property damage in flood-prone areas occurs in the flood fringe, where land development continues to be permitted. There is economic justification for prohibiting development in the flood fringe. Additionally, an undisturbed floodplain helps preserve existing vegetation and wildlife habitats, decreases erosion, provides natural stormwater management, improves water quality, and provides land for aquifer recharge.

CITY OF RALEIGH COMPREHENSIVE PLAN

Flood Plain and Drainage Basins



MAP EP-2

Water Bodies

Flood Plain

ETJ

Highway

Major Streets

Miles

0 0.5 1 2

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

Policy EP 4.5

Watercourse Protection

Minimize encroachment into natural watercourse areas and preserve the natural character of watercourses to protect water quality and reduce the potential for flooding and erosion damage. (3, 5) *See also C.3 'Water Quality and Conservation'.*

Policy EP 4.6

Community Rating System

Continue to participate in the Community Rating System (CRS) to help monitor hazard mitigation efforts and to improve the affordability of flood insurance for residents. The CRS is part of the National Flood Insurance Program that provides flood insurance discounts for communities that go beyond the minimum standards for floodplain management. (3, 5, 6)

Policy EP 4.7

No Adverse Impact

The City shall adopt the principles of No Adverse Impact (NAI) as outlined by the Association of State Floodplain Managers; NAI floodplain management takes place when the actions of one property owner are not allowed to adversely affect the rights of other property owners. Adverse effects or impacts can be measured in terms of increased flood peaks, increased flood stages, higher flood velocities, increased erosion and sedimentation, or other impacts the community considers important. (3, 5)

Action EP 4.1

Flood Mitigation Funding

Develop a City flood mitigation funding program that may include City acquisition of structures subject to substantial flood damage, elevation of flooded structures, or floodproofing of non-residential structures. This program should include applying for state and federal grants to reduce flood damages.

Action EP 4.2

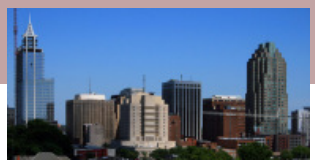
Flood Preparedness

Update the City's flood preparedness program so that it is watershed and drainage basin based and, utilizing technology, can provide the City with a better understanding of the real time impacts of flooding. Work with local institutions, agencies, and organizations to more accurately determine rainfall amounts for drainage basins based on Doppler technology or other appropriate technologies.

Action EP 4.3

Floodplain Management Best Practices

Study the floodplain management programs in other cities including Tulsa OK, Louisville KY, and Charlotte NC, and model a flood management program similar to what these communities have accomplished. This includes adopting an enhanced ordinance to both protect floodplains and also reward preservation efforts;



and implementing programs that reduce impacts from flooding and improve the City's CRS.

Action EP 4.4

Floodplain Regulations

Update City development regulations to prohibit fill and direct development away from the 100-year floodplain, and to ensure that any development and redevelopment in floodplain and flood fringe does not increase or decrease natural runoff and does not impede or direct natural water flow to adjacent properties.

Action EP 4.5

Watershed Studies

Complete all drainage basin studies to identify existing and future flooding and erosion damage stemming from drainage on private property.

C.5 Tree Canopy Conservation and Growth

Raleigh has historically been known as the "City of Oaks" and prides itself on its green image. Trees and forests are integral to Raleigh's identity and also contribute to quality of life and environmental health. Raleigh's trees and forests increase shading, absorb carbon dioxide, mitigate the effects of stormwater pollution, prevent soil erosion, and facilitate water infiltration into soil.

Raleigh has adopted a tree conservation ordinance as part of the zoning code. The ordinance requires the conservation of existing trees during the development of properties more than two acres in area. In low-density residential districts (R-6 and below), trees on 15 percent of the land area must be preserved. For all other zone districts, tree preservation requirements impact 10 percent of the land area.

As Raleigh grows, it will need to do more to protect its existing urban, suburban, and native trees and forests, and should implement an aggressive program for replanting the City with native trees, when appropriate, to restore the canopy that has been lost to land development.

Policy EP 5.1

Urban Forestry

Expand and strengthen urban forestry and tree preservation programs to protect the existing tree cover and add to it. (5)

Policy EP 5.2

Tree Canopy Standards

Maintain appropriate tree canopy coverage along 50 percent or more of all available sidewalk planting/landscape strips between the sidewalk and the curb. (5)

Policy EP 5.3

Canopy Restoration

Promote the reforestation of tree coverage that is typically lost during urban and suburban development through tree conservation, targeted tree plantings, urban forestry, and street tree plantings. (3, 5)

Policy EP 5.4

Tree Selection

Tree species should be selected for site suitability, superior form, disease resistance, regional performance, drought tolerance, urban tolerance, diversity, and mature size by an ISA Certified Arborist or a professional approved by the Parks and Recreation Department's Urban Forestry staff. (3, 5)

Policy EP 5.5

Forested Buffers

Conserve forested buffers along Raleigh's arterial highways through the use of Special Highway Overlay Districts and conditional use zoning. (3, 5)

Action EP 5.1

Tree and Landscape Ordinance Amendments

Amend existing regulations as needed to ensure that the urban forest is conserved during the development process, with priority given to preserving the most ecologically beneficial trees or grouping of trees. Review the criteria for allowing alternates to improve the effectiveness of the ordinance. Evaluate the appropriateness of locating primary tree save areas along the frontage of the property.

Action EP 5.2

Urban Forestry Plan

Work with local arboricultural institutions and agencies to prepare a detailed Urban Forest Plan that outlines how to implement treescape improvements and enhancements throughout the community. The Plan should divide the City into zones in order to accomplish implementation. The City should examine what other North Carolina communities have accomplished with their urban forestry plans.

Action EP 5.3

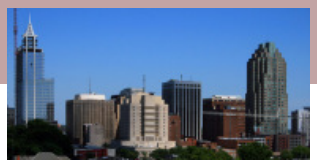
Planting Incentives and Standards

During the update of the City's development regulations, explore opportunities to develop reforestation standards and afforestation incentives.

Action EP 5.4

Utility Coordination

Coordinate with utility companies to plant, manage, and maintain healthy street trees that can establish mature and natural canopies without interfering with infrastructure operation.



Action EP 5.5

Tree Planting Guidelines

Develop new street tree planting guidelines that address appropriate root space, location of planting sites, viable soils, and other issues that support the growth and function of healthy trees.

Action EP 5.6

NeighborWoods

Explore expanding the NeighborWoods residential tree planting program beyond its current funding for 1,500 trees per year.

C.6 Wildlife and Habitat Protection and Preservation

Rapidly urbanizing communities such as Raleigh are in danger of losing their areas of wildlife habitat. Protecting the diversity of plant and animal species known as "biodiversity" is important. Raleigh still has the opportunity to protect and enhance its wildlife habitat and a wide range of "priority species" including songbirds that are indigenous to North Carolina. "Priority species" of fish and wildlife are identified in the North Carolina Wildlife Action Plan and provide a useful resource for Raleigh's wildlife conservation efforts. For example, the North Carolina Wildlife Action Plan identifies priority species that inhabit some City waterbodies such as Walnut Creek and the Neuse River corridor.

Policy EP 6.1

Aquatic Habitat

Seek to prevent further and/or potential aquatic degradation and impairment of biological communities by strengthening urban stream water quality measures. (5) *See also C.3 'Water Quality and Conservation'.*

Policy EP 6.2

Seasonal Pools and Streams

Protect and restore seasonal pools and intermittent streams, and their buffers that are home range/breeding habitat for water dependent species. (3, 5)

Policy EP 6.3

Special Status Species

Place a high priority on protecting rare, threatened, and endangered species habitats and migratory corridors, as defined by Federal and State agencies, from development and its impacts through methods such as land acquisition, park and greenway stewardship, improved development regulations, intergovernmental coordination, and mitigation. (3, 5)

Policy EP 6.4

Biodiversity and City Park Lands

Strive to maintain and improve species diversity and populations in the parks inventory through enhanced plantings and habitat management. (3, 5)

Action EP 6.1

Habitat Plan

Formulate a wildlife habitat plan to define, map, protect, and restore Raleigh's native and priority habitats, particularly those identified in the North Carolina Wildlife Action Plan. The plan should establish a program of action for protecting and enhancing wildlife habitats and preserving biodiversity through a range of strategies including land acquisition, park and greenway conservation and interpretation, augmented development regulations, and intergovernmental coordination. If priority habitats occur outside current City control, seek methods and partnership to conserve the ecological areas.

Action EP 6.2

Habitat Protection Regulations

During the update of the City's development regulations determine how to best address conservation, protection, and preservation of wildlife and habitats. Use the body of knowledge, designations and tools available through the NC Natural Heritage Program, NC Wildlife Resources Commission, and other conservation-oriented organizations and agencies. Explore the creation of a wildlife habitat overlay district modeled after that used by the City of Tampa, Florida.

Action EP 6.3

Invasive Species Control

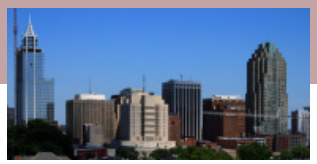
Develop a program to increase awareness of, contain, and possibly eradicate the problem of invasive plants and insects.

C.7 Material Resource Management

Comprehensive material resource management does not just include waste management, but also the management of inputs and consumption patterns. While recycling is a big step in the right direction, it is insufficient by itself as a means of achieving sustainability, as it merely deals with a fraction of the resources involved in the current linear system of extraction, production, distribution, consumption, and disposal. In order to be truly sustainable, Raleigh must take more steps toward a closed loop or "zero waste" system of production. Such a system requires that Raleigh maximize its existing recycling and re-use efforts, while ensuring that products used by both City staff and City residents are designed for the environment and have the potential to be repaired, re-used, or recycled.

The City is examining replacing the traditional approach to waste disposal with a new paradigm, exemplified by the Cradle-to-Cradle design credo "waste = food," that repositions waste streams as resources. Examples include the commonplace, such as recycling programs and re-use of water; to emerging practices, such as mining of FOG (fats, oils, grease) for biofuels, and producing usable methane from landfills and anaerobic digestion of sanitary wastes.

See also H.2 'Solid Waste' in Element H: 'Community Facilities and Services' for related policies and actions.



Policy EP 7.1

Waste BMPs

Promote waste Best Management Practices (BMPs) in all current and future development projects in an effort to reduce the amount of waste produced by development. Explore opportunities to develop standards to address the waste management hierarchy (avoidance, minimization, re-use, recycling, recovery, treatment, and disposal) in design, construction, and demolition stages. (3, 5)

Policy EP 7.2

Waste Minimization

Move away from high energy/high technology methods of waste *disposal* and more towards waste *minimization*. A system of incentives and penalties for both the public and private sectors should be created to increase community-level involvement and facilitate public/private partnerships. Zero waste will be the long-term goal of the City. (3, 5)

Policy EP 7.3

Incentives to Waste Reduction

Motivate residents, businesses, and institutions to reduce and recycle waste, including construction and demolition debris, through appropriate incentives and disincentives. (3, 5)

Policy EP 7.4

Public Awareness of Waste Impacts

Promote public awareness regarding the implications of solid-waste generation on the environment, and the consumption and disposal practices that result in less waste generation as well as more efficient, environmentally sound use of resources. (5)

Policy EP 7.5

Source Reduction

Reduce the sources of solid waste through increased education and outreach programs and through increased recycling and composting. (5)

Policy EP 7.6

Municipal Waste Reduction

Further increase waste reduction and conservation by City employees; increase product-substitution, recycling and the purchase and use of recycled goods, and ensure that less toxic and sustainable alternative products such as chlorine-free paper and PVC-free plastics are actively supported and used. (3, 5)

Policy EP 7.7

Community Participation in Recycling

Increase community (resident and business) participation in recycling programs through the use of communications, quantification, and competition. (3, 5) (*See also C.9 'Environmental Education, Awareness and Coordination' for more on this topic*).

Policy EP 7.8

Food Waste Composting

Investigate and pursue appropriate opportunities for food waste composting, ranging from individual household composting to regional organic waste composting. (5)

Policy EP 7.9

Construction and Demolition Recycling

Promote the re-use of waste from building demolition and construction, including the recycling of lumber and brick, and salvage of usable fittings and hardware. (5, 6)

Policy EP 7.10

Businesses Using Recycled Output

Support economic development efforts aimed at enhancing existing and developing businesses that can utilize local secondary materials as feedstocks. (5)

Policy EP 7.11

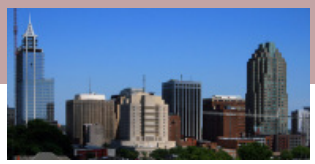
Waste-to-Energy

Continue to operate a methane gas recovery system, and promote further research into new and clean technologies for the conversion of organic waste into energy. (3, 5) *See also H.2 'Solid Waste' in Element H: 'Community Facilities and Services' for an additional Waste-to-Energy policy.*

Action EP 7.1

Pay-As-You-Throw

Create a "Pay-As-You-Throw" Program that utilizes a volume-based disposal fee system to encourage residents and contractors to reduce waste. Such action will require increased vigilance against illegal dumping.



Action EP 7.2

Composting

Partner with the North Carolina Cooperative Extension and related institutions, agencies, and organizations to promote backyard composting further. Explore the provision of community compost areas to residents who lack the necessary space for backyard composting.

Action EP 7.3

Waste-to-Energy Demonstration

Partner with the North Carolina Cooperative Extension and related institutions, agencies, and organizations to explore and develop a demonstration waste-to-energy project.

Action EP 7.4

Environmentally-Friendly Product Use

Work with regional agencies to explore options for assuring the use of compostable plastic, recyclable paper, and/or re-usable checkout bags by stores throughout the region, as well as a reduction in the use of polystyrene foam (styrofoam) food service containers, including those in the City of Raleigh (similar ordinances in other cities apply to grocery stores with gross annual sales exceeding two million dollars, and pharmacies with five or more City locations; penalties apply for organizations in violation).

Action EP 7.5

Recycled Material Purchasing

Expand the City's recycled products purchasing program. Purchase recycled materials for City supply needs wherever practical.

Action EP 7.6

Demolition Debris

Require a waste diversion statement to be submitted at the time of application for a demolition permit; the statement should include a list of material types and volumes anticipated from the demolition and the market or destination for those materials. Consider requiring the same for construction permits.

Action EP 7.7

Environmentally Preferable Purchasing

Enact a Sustainable Purchasing Policy for the City of Raleigh and its contractors. Expand on current policy by including specific goals for toxic pollution reduction, recycled content products, energy and water savings, green building construction and renovation, landscaping, forest conservation, and agricultural bio-based products.

C.8 Light and Noise Pollution Controls

Excessive, poorly designed outdoor lighting wastes electricity, disturbs natural habitats, and increasingly deprives many of us of a direct relationship with the night-time sky. The City of Raleigh seeks to minimize light pollution, glare, light trespass; conserve energy and resources while maintaining night time safety, utility, security, and productivity; and curtail the degradation of the night-time visual environment. Similarly, noise pollution from highway and airport traffic disturbs quality of life, and should be mitigated appropriately.

Policy EP 8.1

Light Pollution

Reduce light pollution and promote dark skies by limiting the brightness of exterior fixtures and shielding adjacent uses from light sources, provided safety is not compromised. Minimize flood lighting and maximize low level illumination. Promote the use of efficient, full cut-off lighting fixtures wherever practical. Full cut-off fixtures emit no light above the horizontal plane. (5, 6)

Policy EP 8.2

Light Screening

Prohibit unshielded exterior lamps and limit the lighting of trees and other vegetation through the use of shielded fixtures and footcandle limits. (5, 6)

Policy EP 8.3

Night-time Light Impacts

Uses that can turn off outdoor lighting during night hours are to be encouraged in areas with uses sensitive to night-time light impacts. Uses which require all-night illumination are to be discouraged in these areas, while ensuring that actual and perceived night-time safety is maintained. (5, 6)

Policy EP 8.4

Noise and Light Impacts

Mitigate potential noise and light pollution impacts from new development on adjoining residential properties. (3, 5, 6)

Policy EP 8.5

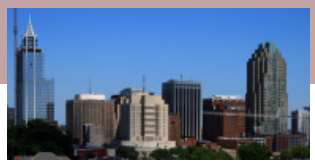
Airport Overlay Zone

Keep the boundaries of the Airport Overlay District zone current with the future expansion plans of Raleigh-Durham International Airport to protect residents from impacts of increased flight patterns and activity. (3, 5, 6)

Policy EP 8.6

Expressway Noise

Protect residents from excessive roadway noise by requiring appropriate mitigation measures, such as landscaped buffers or noise walls, for all new expressways that generate excessive levels of noise. (5, 6)



Policy EP 8.7

Noise Codes and Regulations

Maintain and enforce the building codes, regulations, and other applicable standards that mitigate noise impacts. (5, 6)

Policy EP 8.8

Noise and Environmental Justice

Ensure that residents of all income levels throughout the City of Raleigh are equally protected from excessive roadway noise. (1, 4, 6)

Policy EP 8.9

LED Lighting

Use high-efficiency Light-Emitting Diode (LED) lighting for outdoor illumination where feasible; newer technologies should be considered as they become available. (1, 5)

Action EP 8.1

Lighting Regulation

Consider revisions to the lighting ordinance to reduce night-time light pollution and spill-over lighting on adjacent properties, and to incorporate new lighting technologies such as LEDs.

Action EP 8.2

Dark Sky Incentives

Develop a package of incentives and/or credits to promote the utilization of energy-efficient, full cut-off lighting fixtures that minimize glare and light pollution.

C.9 Environmental Education, Awareness and Coordination

One of the most important efforts that the City of Raleigh should undertake to protect, conserve, and steward the environment is to offer residents access to comprehensive environmental education programs and activities. According to the North American Association for Environmental Education, "The goal of environmental education is to develop a world population that is aware of and concerned about the environment and its associated problems and which has the knowledge, skills, attitudes, motivations, and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones."

Policy EP 9.1

Environmental Education

Develop and promote permanent environmental education and interpretive facilities and programs to foster broad public awareness of environmental issues and consequences and to promote greater appreciation and stewardship of our natural resources both locally and globally. (3, 5)

Policy EP 9.2

Environmental Justice Education

Educate local decision-makers on the principles of environmental justice to promote equitable distributions of environmental burdens (pollution, industrial facilities, waste disposal, truck traffic, noise, etc.) and access to environmental goods (nutritious food, clean air and water, parks, recreation, health care, education, transportation, safe jobs, etc.). (1, 5, 6)

Policy EP 9.3

Environmental Stewardship

Optimize the appreciation, use, and stewardship of Raleigh's natural resources including its wildlife and habitats, flora and fauna, and waterways and floodplains to foster broad public awareness of the connection between humans and nature. Enlist the support of local colleges and universities in targeted research and other projects to meet regional environmental goals. (3, 5, 6)

Policy EP 9.4

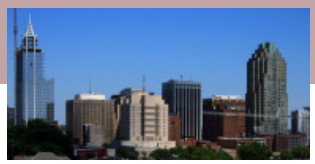
Environmental Oversight

Provide adequate oversight during the construction phase for all City capital projects to ensure applicable federal, state and local ordinances and environmental standards are met. (5)

Policy EP 9.5

Promoting Local Products

Promote the public health and environmental benefits of supporting locally-produced foods, goods, and services. (5)



Policy EP 9.6

Local Produce and Farmers Markets

Encourage the creation and maintenance of produce markets throughout Raleigh to provide outlets for healthful and locally-grown produce for residents. (5, 6)

Policy EP 9.7

Cooperation with Conservation Groups

Promote cooperation with conservation and land trust groups through the City's Upper Neuse Clean Water Initiative so City resources can be carefully coordinated with other land acquisition programs. (3, 5)

Policy EP 9.8

Landscaping and Gardening

Encourage environmentally responsible landscaping and gardening practices to reduce water use and water pollution, including increased use of drought-resistant plants and reduced use of pesticides. (3, 5)

Action EP 9.1

Environmental Education Programs

Expand environmental education offerings, (including master gardener programs) at City parks including, but not limited to, Annie Louise Wilkerson Nature Preserve, Horseshoe Farm Park, Lake Johnson Park, Anderson Point Park, Durant Nature Park, and the future Raleigh and Walnut Creek parks. Promote these offerings through web sites and other correspondence with residents.

Action EP 9.2

Public School Environmental Component

Encourage Wake County public schools to incorporate an environmental education component in the school curricula.

Action EP 9.3

Renewable Energy Education

In partnership with NC GreenPower, conduct a public education and outreach effort to encourage the purchase of renewable energy options from local providers.

Action EP 9.4

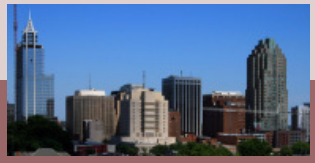
Community Gardening

Explore opportunities to develop and expand community garden programs that provide opportunities for residents to grow their own produce as well as learn and use organic gardening techniques. The City should identify publicly-owned sites that may be suitable for community gardens, work with advocacy groups to make these sites available, and manage them. Coordinate with yard waste collection and community composting.

Action EP 9.5

Environmental Indicators

Create and maintain an Environmental Indicators Report documenting environmental trends.



Economic Development

Element D: Economic Development

Economic Development, broadly defined, refers to the process of local wealth creation, manifested by growth in jobs, income and investment, and supported by improvements in the social, built and natural environment. The Economic Development Element addresses the future of Raleigh's economy, and includes policies and actions designed to enhance Raleigh competitive advantages and build on its culture of innovation. It includes as three co-equal goals the attraction of new business, retention and expansion of existing business, and creating the conditions for productive investment in areas of the City that have suffered from disinvestment or a lack of investment.

One of the nation's most rapidly growing regions, the Triangle is benefiting from long-term investments in major educational institutions and the Research Triangle Park. The Triangle economy has thrived, expanding rapidly over the last four decades. As with many successful economic regions, the Triangle benefits from a "virtuous circle." An initial wave of successful businesses spawns spin-offs. Complementary or linked firms are attracted to form clusters. The growth in good jobs attracts an influx of highly-educated workers. This in turn attracts even more businesses looking to tap into the growing pool of skilled labor.

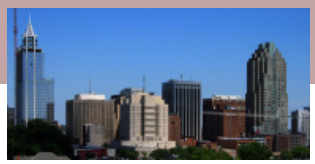
Continued economic vitality, however, is not automatic. Increased cost of living, traffic congestion, and/or a failure to maintain a high quality of place can undermine the Triangle's economic strength. Extending the region's prosperity and economic stability to all of its residents also is not automatic. Raleigh needs targeted action and investment to address these issues in collaboration with the business community.

The three points of the Triangle (Raleigh, Durham, and Chapel Hill) and the region's many other component jurisdictions are increasingly connected as employees cross-commute, new businesses develop to serve companies throughout the Triangle, and existing industry spins off new businesses.

Table ED-1 2005 – 2035 Employment Projections

Year	2005	2015	2025	2035	Average Annual Growth 2005 to 2035
Raleigh	259,835	322,365	390,244	429,436	2.2%
Cary	71,337	97,870	126,194	142,137	3.3%
Wake County	433,361	588,429	755,285	850,302	3.2%
Franklin County	7,242	10,333	13,637	15,604	3.7%
Granville County	11,381	14,715	17,542	19,272	2.3%
Harnett County	2,784	4,651	6,175	7,976	6.2%
Johnston County	15,877	22,667	27,692	31,193	3.2%
Raleigh/Cary Metropolitan Area	470,645	640,795	820,331	924,347	2.3%

Source: Capital Area Metropolitan Planning Organization; Bay Area Economics, 2007



From 1998 to 2006, Wake County's job base grew by more than 71,000 jobs to almost 424,000 jobs. Key economic sectors include government, educational services, professional and technical services, information, and health care. Within Raleigh, the state government, North Carolina State University and other educational institutions, and major health care centers provide significant job opportunities. Education, health, and social services account for the largest share of Raleigh's jobs followed by the professional, scientific, and management sector and retail trade.

Job growth projections point to a major expansion of jobs in the city by 2035 with even faster growth in the balance of the county. University research and technical expertise could support even greater business development in emerging technology. The Capital Area Metropolitan Planning Organization (CAMPO) employment projections indicate that employment in Raleigh is expected to increase by 65 percent (an average of 2.2 percent annually) and nearly double in Wake County (an average of 3.2 percent annually) by 2035.

With the region as a whole, Raleigh's economy has shifted to one that is more technology-based and less reliant on government and manufacturing. In 2004, the release of the acclaimed *Staying on Top: Winning Job Wars of the Future* report—an analysis inspired by Dr. Michael Porter's 'Clusters of Innovation'—organized efforts for the Triangle to further develop and nurture its economic competitiveness regionally, nationally, and globally. The report highlights ten industry clusters on which to focus for job growth and industry expansion, including pharmaceuticals, biological agents and infectious diseases, agricultural biotechnology, pervasive computing, advanced medical care, analytical instrumentation, nanoscale technologies, informatics, vehicle component parts, and logistics and distribution. While Raleigh does not have the capacity to cultivate all of these industry clusters, areas such as advanced medical care, pharmaceuticals, informatics, and agricultural biotechnology already have a presence within the City and/or have a support base provided by the City's universities. To align with the region's economic strategy and maintain its economic stability, Raleigh should capitalize on these strengths in the years ahead.

Raleigh shows promise in several new or emerging industries. The manufacturing of plastics is on the rise due to the ubiquitous need for new competitive medical devices and healthcare machinery. Veterinary medicine, pre-clinical trials for new drug research, and innovations in technologies and research are also growing industry nodes being fostered by strong university programs and biotech clusters in the Triangle. With phenomenal advancements in video game entertainment and global trends favoring digital and distance learning, virtual gaming and advanced learning technologies and simulators have quickly become competitive industries. Raleigh's existing and expanding network of small businesses focused on game and digital learning advancements and information technology will continue to create future jobs and employ locally-trained talent. Lastly, trends in recent years suggest noticeable growth in professional services and finance (banks, insurance companies, venture capitalists) within the city.

The Economic Development & Employment Trends chapter of the Community Inventory Report — the data and analysis companion volume of the Comprehensive Plan — provides background information on employment trends, the region's economic base, and forces impacting the City's older commercial districts and corridors. Policies and actions in this element address the following key economic development issues:

- The need to maintain Raleigh's competitive edge in attracting and nurturing key industries that provide much of the region's economic prosperity;
- A diffuse economic development organizational structure;
- Aging commercial corridors that are unable to compete effectively with new retail development;
- Declining neighborhood commercial centers that blight the community and no longer serve residents' retail needs, particularly in modest-income neighborhoods;

- A need to expand the City's base of small businesses, particularly minority-owned businesses, for further economic diversification;
- Young adults and other residents that lack the training and skills to compete for 21st century jobs;
- Inadequate employment opportunities for persons who currently have a weak attachment to the labor force;
- A desire to increase the amount of base employment;
- Pressure to convert competitive employment sites to residential and commercial uses;
- Opportunities to harness the benefits of culture, arts, entertainment, hospitality, and tourism to create jobs and enhance the City's quality of life;
- An important base of creative industries, including the arts, sciences, research and development, and architecture and engineering, that should be expanded and enhanced;
- A need to target the City's resources to areas of identified need that also provide opportunities for economic development; and
- The need for one City agency to be responsible for Economic Development. Currently, City economic development initiatives are conducted by a variety of City departments.

Raleigh's role in shaping macro-level city and regional economic development policy and strategy is somewhat limited as these functions are currently the responsibility of Wake County and of a number of non-governmental agencies. Thus, the Economic Development Element focuses on local initiatives that will advance the City's economic competitiveness through land use planning for employment and mixed-use centers and corridors; fostering entrepreneurship; augmenting workforce development; and enhancing the city's hospitality/tourism sectors. The City will continue to work with its local and regional partners on advancing the regional economy and its healthy economic growth and diversity, with an equal focus on recruiting new business, retaining and expanding existing business, and revitalizing lagging target areas.

Economic development encompasses and cuts across many of the topics covered by the Comprehensive Plan. Central to this Element is the theme of *Economic Prosperity and Equity*. All policies and actions within this portion of the Comprehensive Plan are integral to achieving this vision theme. Increasing the financial resources of Raleigh's residents, particularly low- and moderate-wealth households, is also a key step in achieving the Comprehensive Plan's themes of *Expanding Housing Choices* and *Growing Successful Neighborhoods and Communities.* Creating new jobs with good wages and helping low- and moderate-income residents develop the skills to compete for those jobs will help them increase their personal assets, buy houses, and better maintain and improve their homes. Developing new economic activity within the city limits will be critical to *Coordinating Land Use and Transportation.* Finally, expanding the city's economic base will generate fiscal resources to fund the infrastructure and programs essential to achieving all of the Plan's themes.

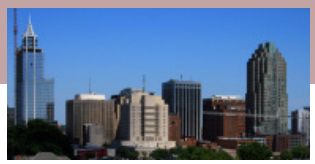
Additional guidance on neighborhood revitalization is addressed in the Housing Element. The Land Use and Urban Design elements address opportunities for mixed-use development. The Transportation Element provides further information on the transit and road network investments required to maintain business and employee access.

Policies and actions of this element appear below. Numbers indicate their relationship to the themes, as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

D.1 Commercial Corridor Reinvestment

Over time, needs change, standards and technologies progress, and consumer preferences evolve. Without reinvestment to help shopping centers and business districts stay current with these



changes, some commercial corridors will suffer the ill effects of obsolescent facilities with corresponding low rents, high vacancies, deteriorating building stock, and general decay. With the constant outward drive of sprawl, it is easy for private retailers to abandon these older commercial districts and move on to modern shopping centers further out from the center city. Facilities are left behind physically and economically, blighting otherwise healthy adjoining neighborhoods. Renewal and re-use can counter this trend, but they often require public investment. Long-term economic and environmental sustainability demands re-use and re-invention of the city's aging commercial corridors. This is particularly true along gateway corridors, which frame visitors' and residents' image of the city.

Policy ED 1.1

Corridor Revitalization

Stimulate the revitalization and redevelopment of Raleigh's aging commercial corridors and centers through the use of targeted economic development programs, zoning, land use regulations, public investments in infrastructure, and incentives. (1, 3, 5, 6)

Policy ED 1.2

Mixed-Use Redevelopment

Promote mixed-use redevelopment strategies as a means of enhancing economic development in commercial corridors and creating transit- and pedestrian-friendly environments. (1, 2, 3, 4, 5, 6)

Policy ED 1.3

Gateway Reinvestment

Focus reinvestment efforts on those commercial areas that also serve as key gateways to the city and downtown, such as Capital Boulevard, New Bern Avenue, and South Saunders Street. (1, 3, 6)

Policy ED 1.4

Focusing City Interventions

Emphasize and focus intervention efforts on those aspects of corridor improvements that are directly under City control, such as transportation enhancements and public realm improvements. (1, 3, 5, 6)

Action ED 1.1

Strategic Revitalization Plans

Undertake strategic revitalization plans for select retail corridors to identify appropriate zoning and the

infrastructure and public realm improvements necessary to catalyze economic development.

Action ED 1.2

Mixed-Use Zoning Incentives

Develop and adopt zoning mechanisms that reward and/or require mixed-use development, mindful of physical and economic feasibility considerations.

Action ED 1.3

Shopping Center Revitalization Incentives

Offer incentives in targeted areas to owners of aging shopping centers with consistently high vacancy rates or visible deteriorating physical conditions where the market indicates potential for effective revitalization.

Action ED 1.4

Retail Property Code Enforcement

Actively enforce City codes to assure that commercial centers contain well-maintained buildings, parking facilities, signage, lighting, landscaping, and pedestrian amenities.

D.2 Neighborhood Reinvestment

Raleigh's outstanding neighborhoods have allowed the City to attract and retain residents and workers. Successful neighborhoods can benefit from easy access to support retail and services. Quality retail in or near a residential neighborhood can provide a gathering place for residents while reducing the need to drive to meet basic needs. The increased "sense of place" and convenience of such neighborhoods can provide a competitive advantage when attracting "knowledge industry" workers. It can also help retain existing residents.

Sustainable economies need quality housing and neighborhoods in close proximity to jobs, including opportunities for residents at all income levels. Revitalization can be a long process, but it is most effective when efforts focus block-by-block rather than being spread thinly over many neighborhoods simultaneously.

Policy ED 2.1

Neighborhood Reinvestment

Encourage reinvestment to improve existing neighborhoods and to attract skilled workers to Raleigh. (1, 2, 3, 6)

Policy ED 2.2

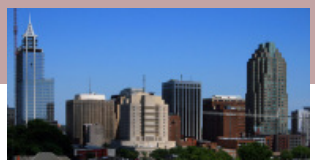
Resource Allocation

Provide resources through existing and new programs to revitalize targeted under-performing businesses and residential areas. (1, 3, 5, 6)

Policy ED 2.3

Focusing Redevelopment

Focus redevelopment efforts on a small number of neighborhoods each year. Continue public involvement until the economics shift and private investment can take over. (1, 3, 5, 6)



Policy ED 2.4

Attracting Investment to Emerging Neighborhoods

In neighborhoods with little private investment and low social and economic indicators, encourage additional development and density to enhance these neighborhoods and create a larger market base to support more and better goods and services for existing and new residents. (1, 3, 5, 6)

Policy ED 2.5

Blight Abatement

Reverse conditions of decline and deterioration that have affected some older areas of Raleigh. These conditions are detrimental to economic and equitable growth. (1, 3, 5, 6)

Policy ED 2.6

Targeting Infrastructure Investment

Invest in public infrastructure (e.g., parks, schools, sidewalks, streetscape) in a targeted manner in older neighborhoods and business districts to enhance residents' quality of life and improve the neighborhoods' ability to retain existing residents and attract new residents. (1, 3, 6)

Policy ED 2.7

Technical and Financial Assistance

Promote neighborhood reinvestment by providing technical and financial assistance to neighborhood businesses and merchant associations. (1, 6)

Action ED 2.1

Selecting Revitalization Focus Areas

Prioritize three to five revitalization areas within the City's urban centers, corridors, or neighborhoods for near-term focus of City redevelopment efforts, maintaining those priorities until the areas reach the "tipping point" at which the private sector is likely to take the investment lead. Within those areas focus resources on successive sub-areas of three to four blocks. Selection of target revitalization areas should be driven by objective criteria that measure need and potential. *See also Map ED-1: Target Areas for Economic Development,*

Action ED 2.2

Neighborhood Quality Teams

Expand the use of Neighborhood Quality Teams within Raleigh to increase coordination among the different City departments, as has been done in College Park and South Park. Neighborhood Quality Teams are interdepartmental teams assembled for a defined neighborhood in response to specific citizen concerns. This allows for a concentrated plan of action for social, environmental, and physical neighborhood improvement.

Action ED 2.3

Developing Funding Resources

Develop specific funding resources to encourage private reinvestment in targeted neighborhoods, including the

provision of infrastructure that will make private development of targeted areas economically feasible.

Action ED 2.4

Site Acquisition

Acquire property to package for redevelopment in priority revitalization areas.

Action ED 2.5

Neighborhood Grants for Community Benefits

Consider a small neighborhood grant program to fund small community-identified priority projects (e.g., play lot, community gardens, culture and arts initiatives) where the residents take responsibility for on-going operation and maintenance. Some grant funding is available through the Parks and Recreation and Community Services departments.

Action ED 2.6

Neighborhood Commercial Regulations

During the update of the City's development regulations, review provisions that prevent integration of small commercial establishments within neighborhoods to allow inclusion of cafes, restaurants, corner stores (that do not sell liquor), and other desirable local good and services.

D.3 Entrepreneurs and Business Development

Continuing to grow and develop Raleigh's business base to provide good jobs for City residents is critical to long-term economic vitality and sustainability. Business attraction efforts have helped the Triangle evolve into a technology powerhouse with a diverse research and development base. The region has reached the level where it generates many new businesses internally through spin-offs from existing businesses and start-ups by entrepreneurs, who may have gained deep industry knowledge and experience in local companies. All economies experience continual shifts as existing businesses close or move and new businesses are born. To be successful, more new businesses must be created than are lost, and a share of those new businesses must achieve good long-term growth.

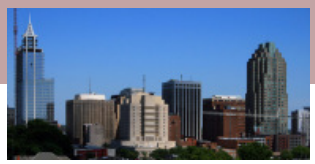
Recruitment should target businesses most likely to find Raleigh an attractive location with an appropriate workforce. Raleigh can be selective in the industries it seeks, emphasizing those compatible with the City's vision. These industries are the target of focused marketing and recruitment efforts, although all sectors are encouraged to grow and invest in Raleigh and the region.

Raleigh can draw upon State and Federal tax incentive programs as part of its recruitment efforts. The City has an approved Urban Progress Zone that incorporates Downtown, the Capital Boulevard Corridor, and significant portions of Southeast and Southwest Raleigh, where qualifying businesses (including headquarters) can receive breaks on State taxes. Moreover, several census tracts in Raleigh are eligible under the federal New Market Tax Credits program, which is locally administered by the Raleigh Area Development Authority (RADA).

Policy ED 3.1

Targeting Growth Sectors

Continue coordination with local economic development organizations and institutions to identify specific industry growth sectors on which Raleigh should focus local development



efforts, such as knowledge-based businesses, research and development, life sciences and biotechnology, green technology, and advanced learning industries. (1)

Policy ED 3.2

Green Industry Preference

Recruit and grow industries and businesses that are environmentally-conscious, promote sustainable practices, and reduce negative impacts on the environment. (1, 5)

Policy ED 3.3

Green Collar Job Opportunities

Encourage and support green-collar business development that is consistent with the City's goals, particularly those with potential for locating within easy access of unemployed or underemployed workers. (1, 5)
See also L.3 'Economic Development Initiatives' in Element L: 'Regional and Inter-Jurisdictional Coordination' for additional policies and actions.

Policy ED 3.4

Reducing Barriers to Core Sector Growth

Assist Raleigh's largest employment sectors, including the education, health care, social services, and public administration sectors, to resolve land use constraints so that they can continue to grow, expand job opportunities, and provide a stable economic base. (1)

Policy ED 3.5

Technology and Bioscience

Nurture technology and bioscience industries as a means to further diversify Raleigh's economy and maintain the City's competitive edge with this sector. (1)

Policy ED 3.6

Small, Minority, and Women-Owned Businesses

Provide training, technical assistance, and incentives to foster small, minority, and women-owned businesses to help create a diverse and sustainable local economy. Provide incubator facilities in targeted areas, as appropriate. (1)

Policy ED 3.7

Small Businesses and Underserved Areas

Encourage small businesses and entrepreneurs to locate in underserved communities. (1, 6)

Policy ED 3.8

Home-Based Businesses and Cottage Industries

Support low-impact home based businesses and "cottage industries" in mixed use districts, on appropriate industrial lands, and in residential areas, while ensuring those proposed for residential areas do not negatively impact residential neighborhoods.

Policy ED 3.9

Venture Capital for Tech

Encourage private sources to increase the availability of venture capital to support the creation and growth of innovative, high technology business as a keystone for the City's economic future. (1)

Policy ED 3.10

Research-Based Start-ups

Work with Raleigh's many higher education institutions to encourage commercialization of research innovations to fuel growth of start-up businesses. (1)

Policy ED 3.11

Growth Industries

Support the needs of growth and budding niche industries and pro-actively provide the programs, space, and infrastructure necessary to support these industries. (1)

Policy ED 3.12

Business Attraction

Focus business attraction efforts on those sectors and industries for which Raleigh has ample trained workers. (1)

Policy ED 3.13

Transit and Economic Growth

Provide high-quality transit service as a basic and necessary component of the region's transportation system in an increasingly competitive arena for attracting employers, linking businesses to workers, and maintaining a high quality of life. (1, 4, 5)
See also B.4 'Public Transportation'.

Policy ED 3.14

Corporate Headquarters

Target Raleigh as a location for corporate headquarters, with a particular emphasis on downtown locations where Urban Progress Zone tax credits are available. (1, 3, 4)

Action ED 3.1

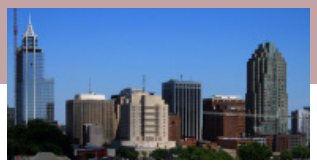
Business Assistance Program

Maintain the Business Assistance Program for minority- and women-owned businesses.

Action ED 3.2

Entrepreneurial Education

Work with North Carolina State University and other institutions of higher education to offer practical entrepreneurial education for students in business, engineering, science, and other majors.



Action ED 3.3

Wake Tech Green-Collar Program

Work with Wake Tech to provide training support to emerging "green-collar" industries to support green industry innovation in the region.

Action ED 3.4

Home-Based and Cottage Industry Regulation

During the update to the City's development regulations, review regulations on home-based business to maintain appropriate regulations but also accommodate the growing trend of low-impact, home-based businesses.

D.4 Workforce Training and Access to Employment

Increasingly, a region's greatest economic asset is its workforce. The Triangle thrives in large part because of its educated workforce and the area's many fine universities and colleges. As the national and regional economies shift to depend on knowledge-based industries, a skilled and trained workforce is essential in competing successfully for new businesses. Providing all residents with good jobs depends on helping them prepare themselves with the full range of necessary skills, starting with basic literacy and life skills and extending through college and post-graduate training. Participation in the region's booming economy by the city's low- and moderate-income residents would reduce income inequalities and associated social issues. Many of the residents' housing and other economic needs are best addressed by providing them with the training and opportunities for jobs that will improve their economic status. Reducing barriers to employment by providing public transit access to job centers is an important strategy as well.

Policy ED 4.1

Diversified Business Recruitment

Provide a broad range of employment opportunities for all residents by recruiting a range of business types. (1)

Policy ED 4.2

Education and Employment

Work with the Wake County Public School System, training providers, and the private sector to ensure that Raleigh's workforce has the basic skills, literacy, and job-specific training necessary to gain employment. Provide basic skills and literacy training to residents in need. (1)

Policy ED 4.3

Partnerships for Workforce Development

Encourage partnerships with existing organizations that provide training in "soft-skills," vocational skills, daycare, and other services that enable people to enter the workforce and earn a living wage. Ensure that training and services are accessible to and located near those with the greatest need. (1)

Policy ED 4.4

Training for Workforce Transitions

Develop job training and supportive programs to allow Raleigh's workers to transition from manufacturing to other sectors of work as the economy continues to shift, including strategies to transition from blue- to green-collar jobs. (1, 5)

Policy ED 4.5

Targeted Workforce Training

Provide targeted workforce training and job placement programs to improve access to employment for Raleigh's low- to moderate-income workers. (1)

Policy ED 4.6

Academic Sector Partnerships

Encourage cooperative efforts between local employers and universities, colleges, and technical colleges to develop education, workforce training, and research programs. Foster collaborations that provide employment options for Raleigh's youth. (1)

Policy ED 4.7

Supporting Colleges and Universities

Promote economic stability and prosperity by supporting the area universities and colleges that contribute to developing Raleigh's educated and creative workforce. (1)

Policy ED 4.8

Workforce Training in Expanding Industries

Expand workforce training options for the City's expanding industries, such as tourism, arts/entertainment, medical device manufacturing, clinical research, and environmental technology. (1)

Policy ED 4.9

Workforce Transit Improvements

Increase access to job opportunities by providing improved transit to all of Raleigh's major job centers, as well as regional employment clusters. (1, 4, 5)

Policy ED 4.10

Human Capital

Emphasize investments in human capital (e.g., job training and recruitment of Raleigh residents) when providing economic development incentives to attract new businesses to Raleigh. (1)

Policy ED 4.11

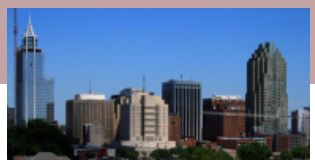
Internships

Encourage the Chamber of Commerce and other private-sector organizations to develop and support internship programs to connect with local university students and retain them in the area. (1)

Action ED 4.1

Education and Emerging Sectors

Work with the business community, the Wake County Public School System, and higher education institutions to assure that students are receiving training for jobs in emerging sectors.



Action ED 4.2

Summer Job Programs

Work with the local business community to offer summer job opportunities for Raleigh youth.

Action ED 4.3

Wake County Retraining Coordination

Work with Wake County to provide job training and education for those who need to re-train for new industry jobs.

D.5 Economic Development and Land Use

Land use policy shapes the urban form, creating memorable places and amenities that help Raleigh compete for businesses and residents. Mixed-use environments that allow residents to walk, bike, or use transit to reach their jobs, shops, services, restaurants, and entertainment can help Raleigh attract and retain its skilled workforce. Reducing residents' and employees' dependence on single-occupant automobiles will help reduce their costs of transportation and traffic congestion – one of the biggest threats to the region's quality of life. Protecting prime sites for industrial and office use from competing demands for residential and commercial development will help to ensure that Raleigh can continue to offer competitive locations for new and expanding businesses.

See A.4 'Land Use and Transportation Coordination' in Element A: 'Land Use' for related policies and actions.

Policy ED 5.1

Economic Development Amenities

Invest in and leverage parks, leisure, and cultural amenities as key economic development assets and part of the City's economic development infrastructure. (1)

Policy ED 5.2

Creating Investment Opportunities

In areas needing reinvestment and revitalization, create investment opportunities for new housing and employment through land assemblage incentives, site preparation, and public infrastructure improvements. (1, 2, 5, 6)

Policy ED 5.3

Creating Attractive Development Sites

Create attractive and functional sites for new and growing businesses through streetscape improvements and other public realm investments. (1, 6)

Policy ED 5.4

Niche Office Development

Encourage office space development in mixed-use and urban centers to create a competitive advantage for Raleigh by providing a product type lacking in the regional marketplace. (1, 3, 5)

Policy ED 5.5

Retrofitting Older Office Environments

Encourage the intensification and retrofitting of existing office clusters with new pedestrian-friendly residential and retail uses to provide attractive and competitive live-work destinations that reduce dependence on auto travel. (1, 2, 3, 4, 5)

Policy ED 5.6

Designing Knowledge Industry Workplaces

Encourage the development of high-quality environments that combine office/lab space, housing, and support retail and services, such as Centennial Campus or North Hills, to compete effectively for and attract knowledge workers to Raleigh. (1, 2, 4)

Policy ED 5.7

Workplace Investment in Underserved Areas

Use capital investments and incentives to create competitive environments for new employment centers and retail development in underserved areas of the city, such as Southeast Raleigh. (1, 6)

Policy ED 5.8

Supporting Retail Infill and Reinvestment

Ensure that land use patterns and zoning regulations support retail infill and do not push new retail to edge locations or promote the abandonment of existing retail centers. (1, 3, 5)

Policy ED 5.9

Defining New Retail Niches

Encourage re-emerging retail districts, such as downtown, to identify and capitalize on those specific characteristics and niches that make them distinctive and desirable to patronize. (1, 3, 5, 6)

Policy ED 5.10

Jobs-Housing Balance

Target a jobs-housing ratio for Raleigh based on the ratio of resident workforce to households (currently about 1.3) and implement land use and zoning policies to achieve this target. (1, 2, 3, 4, 5, 6)

Policy ED 5.11

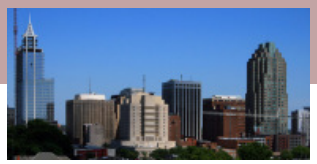
Targeting Investment

Target incentives and programs for public and private investments in residential, commercial, and industrial areas based on criteria evaluating need and effectiveness. Need is demonstrated by socio-economic indicators and evidence of physical disinvestment. Effectiveness means that the target area is appropriate and ready for economic development. (1, 3, 5, 6)

Action ED 5.1

Certification of Industrial Sites

Assist owners in preparing and certifying their industrially-zoned sites to become more competitive (a certified



site has water, sewer, and roadway access and has undergone a Phase 1 environmental assessment).

Action ED 5.2

Targeted Economic Development Plans

Facilitate economic development plans and projects for targeted areas that have not participated in the City's economic expansion. *For more information about areas targeted for economic development, see Text box: Areas of Intervention: A Geographic Focus for Economic Development.*

Action ED 5.3

Infrastructure Investments in Underperforming Areas

Identify the infrastructure investments required to make sites in under-performing areas more competitive for economic development.

Action ED 5.4

Capital Improvement Funding

Identify funding sources and mechanisms for undertaking and maintaining public realm and capital improvements to support economic development.

Action ED 5.5

Mixed-Use Zoning Incentives

Provide zoning incentives for residential development in and near targeted business districts with mixed-use potential due to pedestrian and/or transit accessibility.

Action ED 5.6

Disposal of City-Owned Land

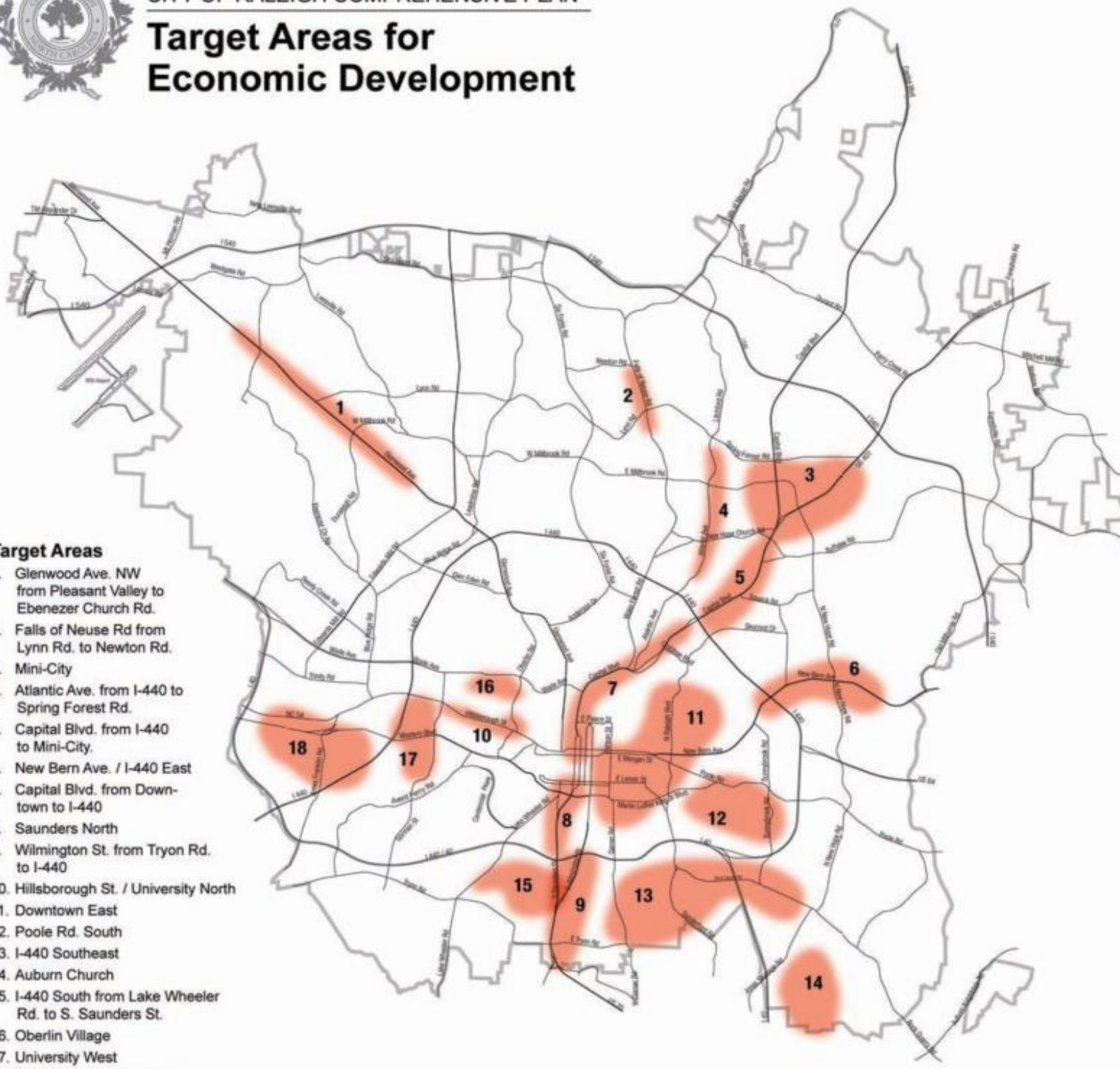
Develop criteria and a strategy for disposing of City-owned lands. Explore the formation of partnerships between multiple public entities to master develop and maximize the utility of publicly-controlled land.

Areas of Intervention: A Geographic Focus for Economic Development

An analysis of Raleigh was conducted to identify areas that demonstrate a need for economic development intervention and that also present opportunities for economic development. Areas were scored according to a number of variables. Each of these areas appears on **Map ED-1: Target Areas for Economic Development**. Areas shaded in red correspond to geographies with both an abundance of housing code violations and instances of tax arrears (need), as well as concentrations of underutilized land (opportunity). The map is an illustrative tool based upon quantitative analysis and is intended to provide the City with an identification of under-performing areas that can benefit from economic development activities. *See Section 4.7 of the Community Inventory (Volume II) for more details about this analysis.*

CITY OF RALEIGH COMPREHENSIVE PLAN

Target Areas for Economic Development



Target Areas

1. Glenwood Ave. NW from Pleasant Valley to Ebenezer Church Rd.
2. Falls of Neuse Rd from Lynn Rd. to Newton Rd.
3. Mini-City
4. Atlantic Ave. from I-440 to Spring Forest Rd.
5. Capital Blvd. from I-440 to Mini-City.
6. New Bern Ave. / I-440 East
7. Capital Blvd. from Downtown to I-440
8. Saunders North
9. Wilmington St. from Tryon Rd. to I-440
10. Hillsborough St. / University North
11. Downtown East
12. Poole Rd. South
13. I-440 Southeast
14. Auburn Church
15. I-440 South from Lake Wheeler Rd. to S. Saunders St.
16. Oberlin Village
17. University West
18. NC 54 / Jones Franklin Rd.

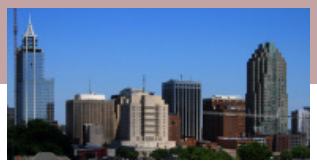
MAP ED-1

N

1M .5M

1 in=2.5 Miles

Map created 10/7/2009 by City of Raleigh Department of City Planning & GIS Division



D.6 Hospitality and Tourism

The City has recently invested in a new Convention Center and convention hotel to expand its hospitality industry. As the state capital, Raleigh has long benefited from interest from statewide organizations. It now has the facilities it needs to compete for more national events as well. Tourism provides important support for local-serving retail and restaurants as well as many entry-level jobs for residents with more limited skills and experience. The City's many cultural, historic, open space and recreation resources offer valuable opportunities to enhance tourism and expand the local economy. *See also K.4 'Economic Development Through the Arts' in Element K: 'Arts and Culture' for additional policies and actions.*

Policy ED 6.1

Cultural and Entertainment Hub

Position the City generally, and downtown specifically, as a regional and super-regional destination for conventions, the performing arts, sports, and special events. (1)

Policy ED 6.2

Hospitality Support Services

Provide programs and services to support the City's expanding hospitality and tourism sector. (1)

Policy ED 6.3

Special Events and Attractions

Promote recreation, events, and attractions that extend and enhance existing strengths of Raleigh's tourism sector. (1)

Policy ED 6.4

Cultural Resource Promotion

Work with local historic preservation and arts groups to identify and promote Raleigh's cultural resources. (1)

Policy ED 6.5

Lodging

Work with developers, investors, and other local organizations to plan and provide diverse and accessible lodging and accommodations to support tourism growth. (1)

Policy ED 6.6

Downtown Marketing

Coordinate with the Greater Raleigh Convention and Visitors Bureau to ensure downtown Raleigh attractions are marketed effectively. (1)

Action ED 6.1

Downtown Cultural Investments

Target downtown locations for major public investments in culture, arts, and entertainment venues and facilities.

Action ED 6.2

Downtown Tourism Itineraries

Develop heritage and cultural tourism itineraries that package multiple destinations and activities.

Action ED 6.3

Cultural Resource Preservation

Provide development or financial incentives for preservation of cultural resources.

D.7 Creative Industries

Recent research linking the "creative class" (broadly defined to include a large swath of the workforce including knowledge workers, creative professionals, researchers, artists, educators, and others) with a region's economic vitality confirms the value of supporting creative industries.

Increasingly, the line between science and art is becoming blurred. Collaboration across disciplines is now the source of much innovation and many new discoveries. With thriving educational and cultural institutions as well as an extensive technology sector, Raleigh has the opportunity to expand and enhance its base of creative industries.

Policy ED 7.1

Creative Industry Growth

Promote job creation and growth in creative industry sectors through economic development programs and incentives. (1)

Policy ED 7.2

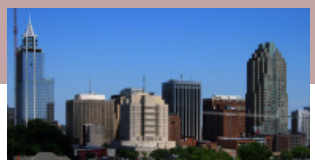
Technology-Intensive Industries

Pursue technology-intensive industries—such as computer system design, graphic and multi-media design, and broadcasting—creating environments suited to them. (1)

Policy ED 7.3

Coordinating Technology Growth Through Other Initiatives

Encourage the growth of technology industries by coordinating sector-specific economic development initiatives with technology infrastructure development, public utilities, and capital improvement planning. (1, 3, 4)



Policy ED 7.4

Creative Workforce Retention

Attract and retain creative individuals by promoting educational opportunities, diverse and affordable neighborhoods, and flexible low-cost commercial space and creation of attractive and affordable environments. (1)

Policy ED 7.5

University Partnerships

Partner with area universities to develop strategies to support creative industries. (1)

Action ED 7.1

Adaptive Reuse for the Arts

Explore opportunities to re-use obsolete industrial and commercial buildings for artists and other creative industries.

Action ED 7.2

Downtown Arts Development

Target resources for arts-related development within a downtown sub-area or near-downtown neighborhood with an appropriate building stock that can be adapted to the needs of creative industries and transit access.

See also Element K: 'Arts and Culture' for additional policy guidance and implementing actions related to the arts.

D.8 Organizational Structure and Functions

Economic development cuts across disciplines and organizations. Effective attraction and retention of businesses, workforce development, and neighborhood/corridor redevelopment depend on joint efforts by the City, County, State, and regional economic development organizations, the private sector, and non-profit institutions. Currently, the City's economic development initiatives are conducted by several different departments and coordinated within the Office of the City Manager.

Economic development efforts must be as efficient and effective as possible in supporting and expanding the City's tax base, particularly in times of limited fiscal resources. Coordinated efforts can capitalize on and leverage the activities of the County, State, region, and the private sector. The following policies and actions focus on the recommended economic development functions for Raleigh and the administrative structure necessary to implement them.

Policy ED 8.1

Economic Development Capacity

Increase the City's economic development capacity and ability to coordinate economic development activities and performance measures. (1, 2, 3, 6)

Policy ED 8.2

Internal Coordination

Coordinate the many economic development entities and City departments to allow Raleigh to better capitalize on local economic development opportunities. (1, 3, 6)

Policy ED 8.3

Economic Development Equity

Undertake economic development efforts, funding, and planning equitably throughout the City. (1, 3, 6)

Policy ED 8.4

Leveraging Academic Institutions

Work closely with the State of North Carolina, local colleges, universities, research institutions, and the Chamber of Commerce to maximize their contributions in shaping the City's economic future. (1, 3, 5)

Policy ED 8.5

External Coordination

Coordinate with other local, regional, State, and non-profit agencies to address economic and community development issues in a cost-effective manner. (1, 6)

Policy ED 8.6

Limiting Economic Burdens

Obtain revenue in a manner that does not place an undue burden on either businesses or residents, or on any single economic sector. (1)

Action ED 8.1

Economic Development Vision and Strategic Plan

In cooperation with local and regional economic development organizations, institutions, and other stakeholders, develop an economic development vision and strategic plan that includes definition and scope, policies and procedures, goals and objectives, a work program, and performance measures.

Action ED 8.2

Economic Development Annual Report

Prepare an annual report on economic development and progress achieved toward the strategic plan's goals and objectives.

Action ED 8.3

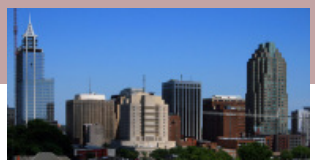
Economic Development Administration

Create and maintain an administrative structure to increase the City's economic development capacity and to coordinate economic development activities and performance measures.

Action ED 8.4

Economic Development Communication

Convene regular meetings of economic development stakeholders within City departments, economic development organizations, partner organizations,



and the private sector to coordinate and focus their economic development activities.

Action ED 8.5

Reinvestment Partnerships

Partner with health care centers, universities, and colleges in cooperative redevelopment/reinvestment programs and ventures, focusing first on identified revitalization and redevelopment areas adjacent to these institutional uses.

Action ED 8.6

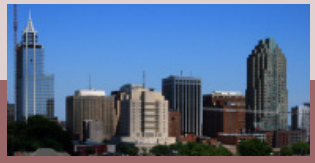
Economic Development Website

Create an economic development-focused web page hosted by the City. This page would consolidate data analysis and reports, economic development plans and studies, links to internal and external economic development resources, and other relevant information.

Action ED 8.7

Prioritization Methodology

Develop a prioritization methodology to evaluate opportunity areas and to determine how redevelopment investments would best be made.



Housing

Element E: Housing

The quality of housing in Raleigh is fundamental to the quality of life for all City residents. Raleigh enjoys a large and diverse base of well-maintained housing. With ample land available and zoned for the production of a variety of housing types, housing prices relative to incomes in Raleigh and the Triangle Region are consistent with national averages. The Wells Fargo/National Association of Home Builders "Housing Opportunity Index" indicates that 74.4 percent of homes for sale in the Raleigh-Cary MSA during the first quarter of 2009 were affordable to a median income household, slightly above the national figure of 72.2 percent. According to the American Community Survey, the median value of owner-occupied housing units was about five percent higher in 2005 – 7 than the national average ($190,500 versus 181,800) and median gross rents were the same ($780 versus 781). By comparison, median household incomes were three percent higher ($51,647 versus 50,007). With a housing stock almost evenly split between ownership and rental, and single-family and other types, Raleigh offers housing that meets the needs of diverse households at different stages of life.

Yet, affordability constraints place good housing beyond the reach of many residents. According to the 2006 American Community Survey, Raleigh had 28,882 renter and 11,292 homeowner households with annual incomes below $50,000 paying more than 30 percent of their income for housing; many paid more than one-half of their income on housing, leaving little money for food, health care, transportation or other basics. Many of these households will require assistance in order to afford decent housing.

Affordable housing provides stability for families, improves opportunities for education and career advancement, and reduces the risk of homelessness for households that are dependent on low wages or fixed incomes. Affordable housing is a key factor for community vitality and continued economic growth.

The City has been able to use federal, state, and local resources to produce and preserve affordable housing. Collaborations with Wake County, the Raleigh Housing Authority, the North Carolina Housing Finance Agency, and private and non-profit housing developers have helped to create new homeownership and rental units. The City's housing bond has been a significant resource for the development of affordable housing.

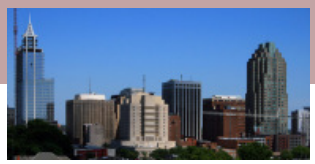
There are 7,564 units of publicly-supported affordable housing within the City, including traditional public housing units and apartments developed by for-profit and non-profit housing developers with federal low-income housing tax credits. Including housing choice vouchers managed by the Raleigh Housing Authority, the most current estimate of assisted affordable housing units totals nearly 11,150 units in the City, less than 5 percent of Raleigh's total housing supply.

The supply of assisted affordable housing is spread unevenly across the City. The Central Planning District includes one-quarter of all assisted units, while the Umstead Planning District in Northwest Raleigh contains less than four percent of affordable housing units. The City's Scattered Site Housing Policy encourages the development of affordable housing throughout all areas of the City and rehabilitation of substandard housing in older neighborhoods.

Although the City has demolished a significant portion of the substandard housing stock in redevelopment areas, there are still many areas where housing has deteriorated. In these instances, deteriorated or abandoned housing acts to discourage new investment in the surrounding neighborhood. The City uses code enforcement to require property owners to improve their properties but also provides financial assistance to help homeowners rehabilitate their homes.

The federal Fair Housing Act exists to prevent housing discrimination against minorities, persons with disabilities, and families. The City is committed to enforcing the Fair Housing Act using all the tools that are legally available.

The need for accessible housing is growing steadily with the aging of the population. While most households would prefer to "age in place," many are forced out of their homes when a physical disability makes it impossible for them to manage



stairs. New universal design approaches incorporated into new housing will allow individuals to stay in their homes for a longer period by making modifications simpler and less expensive.

Other types of housing are needed to meet residents' special requirements for shelter and support services. Supportive housing includes emergency housing, transitional housing that provides structured programming for up to two years, and permanent supportive housing for persons with disabilities, including individuals with chronic mental illness, developmental disabilities, substance abuse, and HIV/AIDS.

Ending Homelessness: The 10-Year Action Plan prepared by Wake County, City of Raleigh, Wake Continuum of Care, and Triangle United Way in 2005 has established a strategy for preventing and ending homelessness through provision of affordable housing and intensive case management.

The Housing and Neighborhoods chapter of the City of Raleigh Community Inventory Report, the data and analysis companion volume of the Comprehensive Plan, provides background information and analysis of the City's housing stock and housing needs.

Defining Affordable Housing

The terms "affordable housing" and "workforce housing" mean different things to different people, and a variety of definitions have been advanced by various groups. For the purposes of this plan, housing is "affordable" if the cost of occupying it does not consume more 30 percent of household income—the definition promulgated by the U.S. Department of Housing and Urban Development (HUD). HUD defines housing costs as contract rent plus utilities for renters, and monthly payment (mortgage plus taxes and insurance) for owners. Affordable housing refers to housing affordable to households with incomes at or below 80 percent of the HUD-estimated Area Median Income (AMI) for owners, and 60 percent for renters. Workforce housing is generally thought of as housing affordable to essential public- and service-sector employees such as teachers, fire fighters and nurses. It is defined here as housing affordable to households with incomes up to 120 percent of AMI. As of December 2008, the HUD-determined AMI for a family of four in Raleigh is $74,900.

The Housing Element of the Comprehensive Plan provides policy guidance on the City's housing stock and the future location and mix of housing within the City's planning jurisdiction. It emphasizes the importance of providing a range of housing types throughout Raleigh and the importance of providing housing opportunities for all segments of the City's population. The critical housing issues addressed here include:

- Raleigh has a shortage of affordable housing for low- and moderate-income households-particularly for households with incomes less than 50/60 percent of the Area Median Income, who remain the focus for public-sector support—underscored by the Raleigh Housing Authority's long waiting list;
- The City has seen a loss of private-market affordable rental and ownership units in recent years, resulting in lagging homeownership rates among low- and moderate-income households;
- There is an abundance of vacant and closed houses in the areas near downtown which discourages investment in neighborhoods;
- Affordable housing is heavily concentrated in the areas near downtown and is not distributed across the City. Incentives and strategies are needed to provide affordable housing options throughout Raleigh;
- There is a need for incorporating affordable housing units in projects involving City-owned or other publicly-owned properties; and
- There is an insufficient supply of housing for residents with special needs.

These issues affect every facet of the Comprehensive Plan. They influence land use and density decisions, shape infrastructure and community service needs, and determine transportation demand.

As described in the Framework chapter, Raleigh's Vision for 2030 is structured to address local housing issues through six vision themes or citywide goals. New housing choices will allow much closer *Coordination of Land Use and Transportation* with creation of diverse and affordable housing opportunities near transit stations and corridors. *Managing Our Growth* requires a move away from the monoculture of large-lot, single-family subdivisions to a more land-efficient model that accommodates a variety of housing styles, including smaller infill units. Achieving *Economic Prosperity and Equity* cannot occur without equal access to housing and new affordable housing opportunities. Providing affordable and workforce housing will ensure that Raleigh employers have access to a vibrant and diverse workforce into the future. *Growing Successful Neighborhoods and Communities* is largely based on the provision of quality housing for all residents. Finally, abundant affordable housing dispersed throughout the City will have a positive impact on air quality as more people will be able to live close to work and will not need to drive as much, helping to achieve the vision theme, *Greenprint Raleigh—Sustainable Development*.

The Economic Development Element provides additional policies and actions for neighborhood revitalization and developing jobs and workforce skills that will help residents meet their housing needs. Mixed-use development is discussed in the Land Use and Urban Design Elements. The Transportation Element addresses issues of mobility and access to public transit.

Policies and actions of this Element appear below. Numbers indicate their relationship to the Vision Themes. The availability of safe, decent, affordable housing will largely determine the success of the City's vision themes:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

E.1 Quality and Diversity of Housing

Fundamental to residents' quality of life is the quality of their home. Raleigh enjoys a large supply of attractive, quality housing. Much of this supply consists of single-family detached houses at relatively high prices. Choices are more limited for young and smaller households, those with lower incomes, and those with special housing needs. Few neighborhoods accommodate households with a range of incomes, limiting opportunities for families to stay in the neighborhood as their situations and housing needs change. Affordable assisted housing is disproportionately concentrated in the Central, East, and Southeast planning districts with more than 42 percent of all assisted units in just three of the City's ten planning districts.

Policy H 1.1

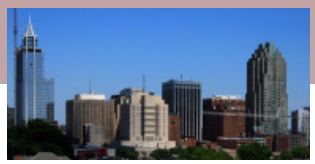
Mixed-Income Neighborhoods

Promote mixed-income neighborhoods throughout the City, particularly within high-density development at employment centers, downtown, and along transit corridors. (1, 2, 3, 4, 6)

Policy H 1.2

Geographic Dispersal of Affordable Units

Promote dispersal and production of affordable and workforce housing units throughout all areas of the City. (1, 2, 3, 6)



Policy H 1.3

Energy Efficiency

Ensure that all new publicly-supported housing construction and rehabilitation meet energy efficiency standards, such as those set by the current SystemVision Energy Guarantee Program. (2, 5)

Policy H 1.4

Assisted Housing Design

All housing, including assisted and market rate housing, should be designed so that it blends with the context of the neighborhood in which it is located, emphasizing quality design and appearance. (1, 2, 6)

Policy H 1.5

Scattered Site Infill

Support small, scattered-site rental developments on infill lots where appropriate and where design respects the neighborhood scale and context. (1,2, 4, 5, 6) *See also Policy LU 8.12 'Infill Compatibility' and Action LU 8.4 'Infill Standards'.*

Policy H 1.6

Housing Preservation

Encourage the preservation of existing housing units whenever feasible, especially structures of historic or architectural significance. (2, 5)

Policy H 1.7

Public Housing Alteration

The Raleigh Housing Authority (RHA) should jointly plan with City departments, and City departments should take the initiative in assisting the RHA, in the early stages of major renovations, large new developments, and redevelopments, such as projects undertaken under the HOPE VI program, so as to facilitate a smooth land development process. (6)

Policy H 1.8

Zoning for Housing

Ensure that zoning policy continues to provide ample opportunity for developers to build a variety of housing types, ranging from single-family to dense multi-family. Keeping the market well supplied with housing will moderate the costs of owning and renting, lessening affordability problems, and lowering the level of subsidy necessary to produce affordable housing. (2)

Action H 1.1

Affordable Rental Program Expansion

Acquire and maintain, through the City of Raleigh's Affordable Rental Program, additional affordable rental units for households below 50 percent of median income throughout all areas of the city.

Action H 1.2

Zoning for Mixed Income

As part of the update of the City's development ordinances, include zoning provisions such as the creation of an inclusionary housing program that encourages mixed-income developments throughout the City.

Action H 1.3

Zoning for Housing Diversity

As part of the update of the City's development ordinances, develop zoning provisions for transit-oriented development that promote housing diversity and affordable housing choices for households at 50 percent of AMI or below in the immediate area around transit corridors.

Action H 1.4

Consistency Between Plans

Review RHA annual action plans to ensure consistency with Raleigh's Consolidated Plan, neighborhood plans, and Raleigh's Redevelopment Area Plans.

Action H 1.5

City and RHA Meetings

Institute regular meetings between City departments and the RHA to review on-going or future construction / redevelopment projects.

E.2 Affordable and Workforce Housing

As of 2000, more than 26,500 low-income households experienced a housing cost burden, spending more than 30 percent of their gross income on housing costs, up 32 percent from 1990. Among low-income renter households with incomes less than $20,000, 89 percent experienced a cost burden. These cost-burdened households comprised 62 percent of households in this income bracket and 30 percent of all households in Raleigh. A total of almost 8,000 families are on the waiting list for public housing or Housing Choice Vouchers. Even at somewhat higher incomes, many public sector employees and service providers find themselves priced out of the local housing market. Without an adequate base of workforce housing, Raleigh employers will experience a shortage of potential workers in important segments of the economy. In these times of high gasoline prices, transportation costs are absorbing a larger and larger share of household budgets, reducing the opportunities to move farther out to find lower-cost housing. Within rental housing, the greatest affordable housing need is for households with incomes below 60 percent of the area median family income (AMI). For ownership housing, affordable housing typically responds to the needs of households with incomes up to 80 percent of AMI, while workforce housing addresses the needs of households earning up to 120 percent of AMI. Raleigh is facing two challenges: creating new affordable and workforce housing, and preserving existing affordable housing.

Map H-1: Affordable Assisted Housing, identifies and illustrates housing in Raleigh by affordable rental units, low income housing tax credit units, joint venture units, housing authority, and other rental units.

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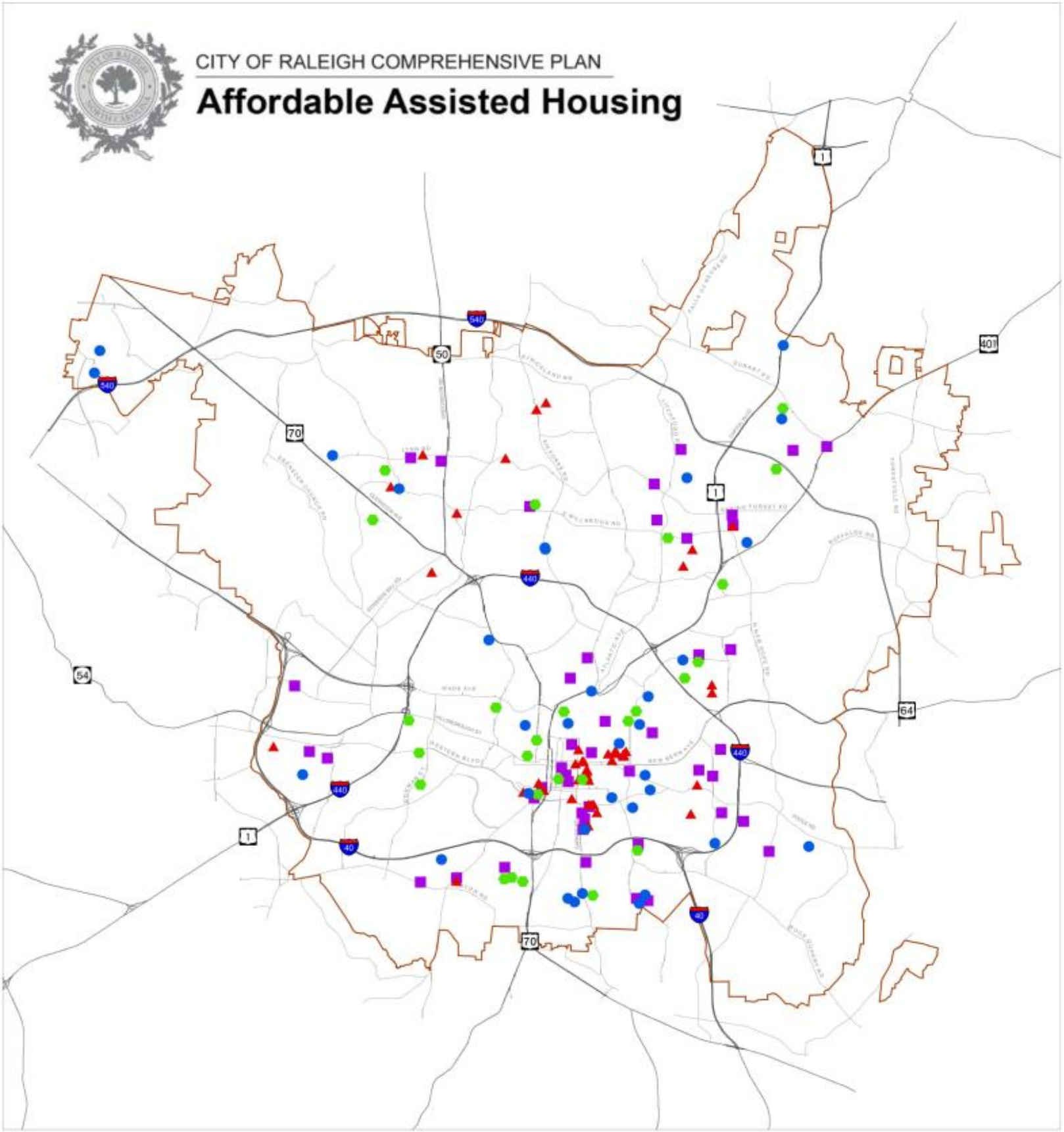
Affordable Assisted Housing



MAP H-1

Rental Units

- Affordable City Rentals
- Joint Venture Rentals
- NCHFA Tax Credits
- RHA Public Housing

ETJ

Highway

Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

Figures H-1 and **H-2** illustrate the increase in cost-burdened renter and owner households between 1990 and 2000, and the proportion of households with incomes below $50,000 per year who have a housing cost burden.

Figure H-1

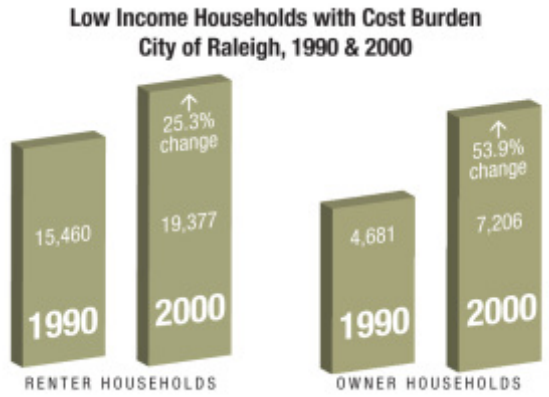
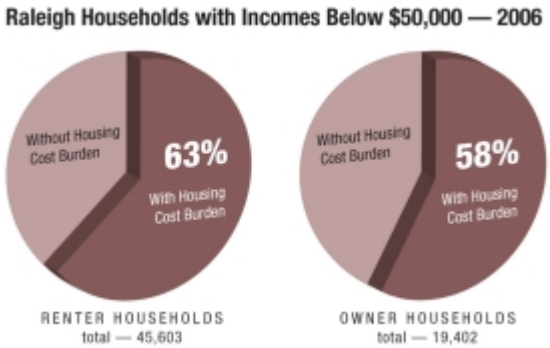


Figure H-2



Source: U.S. Census Bureau, Decennial Census, American Community Survey (2006)

Policy H 2.1

Permanent Funding Source for Housing

Provide permanent local funding to help produce and preserve affordable housing units. (1, 2, 6)

Policy H 2.2

Expanded Housing Assistance

Expand the City's range of housing assistance programs benefiting low- and moderate-income persons by supplementing existing federal and state programs. (1, 2, 6)

Policy H 2.3

Non-Profit Capacity Building

Work with non-profit housing providers to expand their capacity to develop affordable housing. (1, 2, 6)

Policy H 2.4

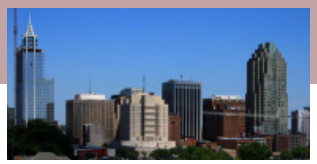
Housing Preservation

Encourage reinvestment, preservation, and maintenance of the existing housing stock to prevent the conversion of existing affordable housing units to market-rate units, including funding the City's housing rehabilitation programs. (1, 2, 6)

Policy H 2.5

Removing Housing Barriers

Address regulatory and policy barriers to affordable housing development while still maintaining Raleigh's high-quality development standards. (1, 2, 3, 6)



Policy H 2.6

Long-Term Affordability

Ensure that newly created for-sale and rental affordable housing units developed with City financial assistance remain affordable for more than 20 years through a Community Land Trust, developer agreements with 40- to 60-year affordability periods, or similar mechanisms. (1, 2, 6)

Policy H 2.7

Affordable Set-Asides in Projects

Include a set-aside of affordable housing units in housing or mixed-use projects involving City-owned or other publicly-owned properties. For City-owned properties, the set-aside should be 15 to 20 percent. (1, 2, 3, 4, 6)

Policy H 2.8

Accessory Dwelling Units

Promote the construction of accessory dwelling units above garages, or "granny flats," and cottage/small lot ordinances, to provide affordable and workforce housing options and help accommodate future citywide residential demand. (1, 2, 3, 6)

Policy H 2.9

Housing on Public Sites

Use available City-owned sites for affordable housing. (1, 2, 6)

Policy H 2.10

Incentives on Private Sites

Provide incentives for the development of new affordable housing on privately-owned vacant sites. (1, 2, 6)

Policy H 2.11

Site Assembly for Housing

Continue to acquire vacant and substandard residential lots and assemble into standard lots for new affordable or mixed-income housing. (1, 2, 5, 6)

Policy H 2.12

Avoiding Displacement

Support programs that minimize residential displacement by redevelopment activity and provide replacement housing in the general area of the original housing. (1, 2, 6)

Policy H 2.13

Transit Accessibility

Preferentially locate affordable housing in areas with good access to transit services. (1, 2, 3, 4, 5, 6)

Policy H 2.14

Transit Availability

Expand public transit to serve housing in all parts of the City. (1, 2, 3, 4, 5, 6)

Policy H 2.15

Affordable Units in TODs

Provide zoning and financial incentives for inclusion of affordable and middle-income housing near transit stations, particularly for persons with disabilities. (1, 2, 3, 4, 5, 6)

Action H 2.1

Housing Trust Fund

Create a local dedicated source of funding for affordable housing which is recurring and included in the 5 year capital budget.

Action H 2.2

Community Land Trust

Create affordable housing using vehicles (such as a Community Land Trust, deed restrictions and shared equity appreciation mechanism) to assure long-term affordability of housing.

Action H 2.3

Inclusionary Housing Ordinance

Develop an inclusionary housing ordinance that provides bonuses for affordable housing as part of all larger developments throughout the city, and create a program, entity, or partnership to oversee its compliance.

Action H 2.4

Bundling Public Sites

Bundle prime City-owned development sites, such as downtown sites, with sites located in neighborhoods in need of reinvestment and affordable housing and in High Priority Areas, as defined in Raleigh's Scattered Site Policy. Developers bidding to develop the prime sites would also have to make plans for the redevelopment of the bundled sites.

Action H 2.5

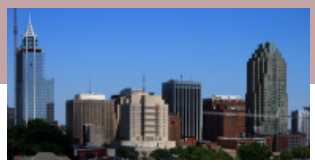
Scattered Site Policy Change

Modify the City's Scattered Site Policy to provide greater flexibility to developers to create more mixed-income communities by indexing local requirements to the requirements of the state low-income housing tax credit program so as to enable larger mixed-income developments and increase the number of affordable units produced, while ensuring that affordable units are distributed throughout the development.

Action H 2.6

Review of Housing Loan Policies

Review City housing loan policies to ensure that requirements for return on investment do not override goals of affordable and middle income housing.



Action H 2.7

Fast-Tracking Affordable Units

Provide an expedited or fast-tracking development review process for housing developments that include at least 10 percent affordable units or 20 percent workforce units.

Action H 2.8

Review of Potential Barriers

Review existing regulations and development processes (including the city's Scattered Site Policy) to determine what modifications could remove barriers and provide incentives for affordable housing production.

Action H 2.9

Accessory Dwelling Unit Standards

During the update of the City's development regulations, examine and then expand the number of zoning districts where accessory dwelling units are permitted.

Action H 2.10

Educational Material for Removing Barriers

Develop educational material promoting the benefits of having a balanced distribution of affordable units in Raleigh.

Action H 2.11

Parking Reductions

Reduce off-street parking requirements for developments containing affordable housing units, and maximize the availability of on-street parking in the vicinity of such developments.

Action H 2.12

Monitoring of Expiring Subsidies

Track existing rental housing units with federal expiring use subsidy contracts or affordable rents to mitigate the loss of these units.

Action H 2.13

Foreclosure Acquisition

Consider establishing a program to advance funds for the acquisition foreclosed or other existing properties for the purposes of providing long term affordable housing.

Action H 2.14

Impact Fee Waivers

Develop a funding mechanism to pay impact fees imposed on affordable housing units and provide capital grants to reduce land acquisition and site development costs in developments that serve very low-income households, particularly in downtown.

Action H 2.15

Affordable Property Assessments

Review County property assessment practices to assure that real estate assessments of publicly-supported affordable housing reflect the value impacts of contractual limitations on rents or re-sale prices.

Action H 2.16

Housing Program Capacity

Determine and implement the appropriate level of staffing to implement the Comprehensive Plan's housing policies and actions.

Action H 2.17

Land for Affordable Housing

Create a program to purchase and "bank" vacant land or land that can be redeveloped to support affordable housing.

Action H 2.18

Sustainability Incentives

Provide financial incentives to developers of affordable housing to ensure that homes are designed to minimize energy costs and meet sustainable design principles.

Action H 2.19

Create Partnership Program

Develop and implement a partnership program to increase local nonprofit housing providers' administrative and programmatic capacity.

Action H 2.20

Projects Involving City-Owned Land

Establish a procedure in the land development process to ensure that residential or mixed-use projects involving City-owned land, as defined in Raleigh's Scattered Site Policy, include 15 to 20 percent of all residential units as affordable to households below 80 percent of AMI.

Action H 2.21

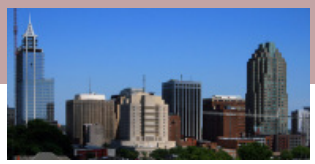
Affordable Housing Production Goal

Develop a mechanism for establishing a measurable affordable housing production goal.

Action H 2.22

Non-Profit Support

Financially support the activities of non-profits to provide transitional, emergency housing services, and permanent housing for the homeless.



E.3 Supportive and Special Needs Housing

Wake County, the City of Raleigh, Wake Continuum of Care, and Triangle United Way developed *Ending Homelessness: The 10-Year Action Plan* in 2005, a comprehensive strategy for ending homelessness. That strategy focuses on providing "housing first" and then addressing other needs through intensive case management. It draws together the efforts of a range of government and non-profit organizations to address this deep-seated social problem. One of the keys is increasing the supply of affordable housing, particularly for persons working in minimum- and other low-wage jobs. (Refer to **Map H-2: Supportive Housing** for supportive housing locations in Raleigh.)

Supportive housing is housing accompanied by direct services designed to help individuals and families overcome the health, social, financial, and employment problems that contributed to their homelessness. Many units are designed as transitional housing available to individuals and families for a limited period of time as they prepare to move into long-term housing.

Policy H 3.1

Homelessness Prevention

Address the root causes of homelessness resulting from re-entry, deinstitutionalization, and poverty by supporting workforce training, access to transportation, access to affordable child care, counseling and other strategies to help low-income residents reach self-sufficiency and afford housing. (1, 2, 4, 5, 6)

Policy H 3.2

Supportive Services

Continue and strengthen linkages and coordination between all public agencies and Public Housing Authorities (PHAs) that provide affordable housing and supportive services and businesses. (1, 2)

Policy H 3.3

Assistance to Homeless Service Providers

Promote the efforts of governmental, non-profit organizations, and the private sector such as, the Continuum of Care Collaborative, Wake County Supportive Housing, Wake County Housing and Community Development to increase the supply of transitional, emergency housing services and permanent housing for the homeless. (1, 2, 6)

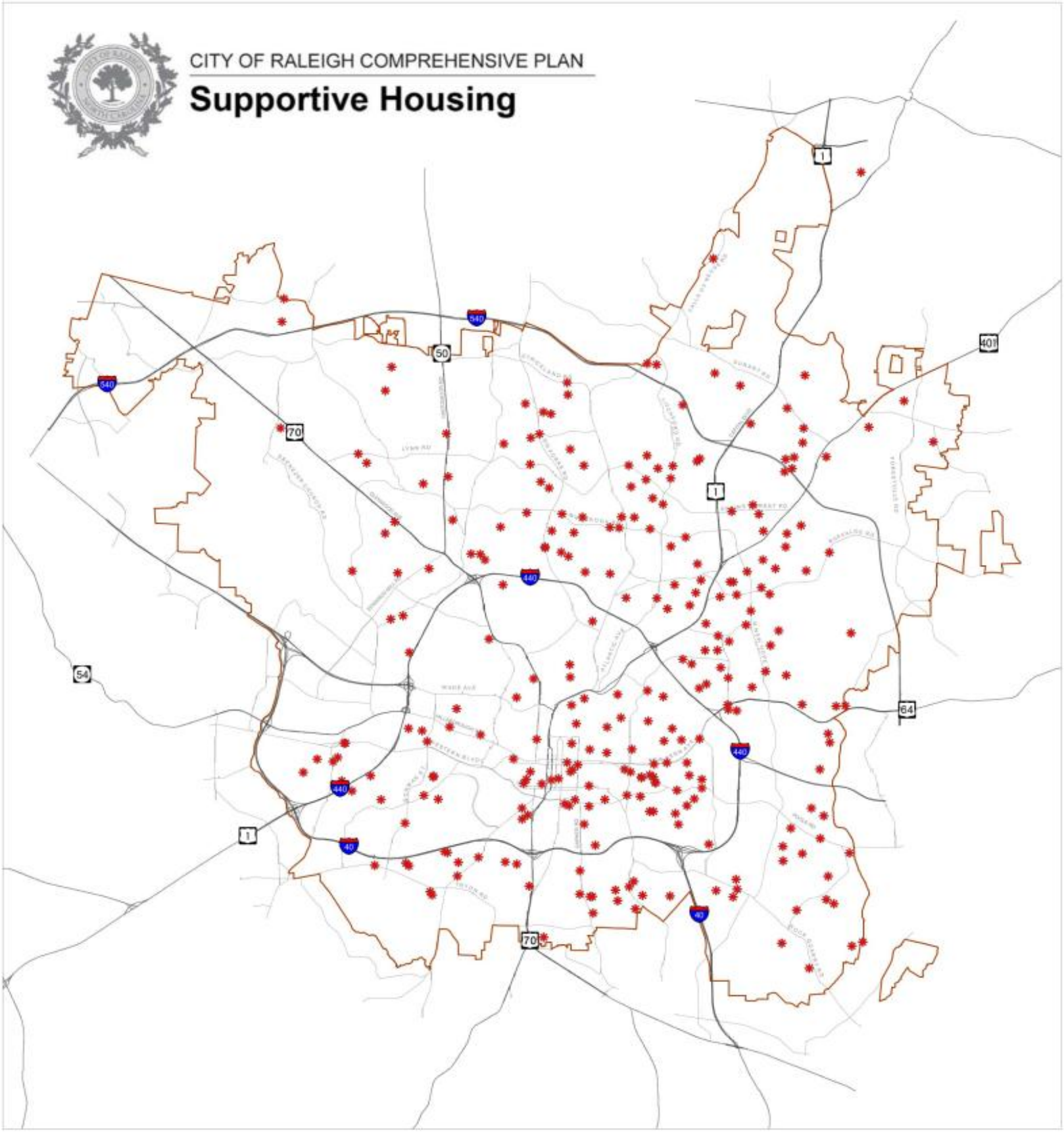
Policy H 3.4

Integrated Core Programs

Support Wake County in creating an integrated, comprehensive system of care to provide health and behavioral health care, housing, and social services. (1, 2)

CITY OF RALEIGH COMPREHENSIVE PLAN

Supportive Housing



MAP H-2

Supportive Housing

- Housing Locations

ETJ

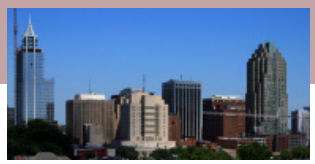
Highway

Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Action H 3.1

Ending Homelessness Action Plan

Implement prevention, housing, and service strategies outlined in the 2005 document *Ending Homelessness: The Ten-Year Action Plan (see text box).*

Action H 3.2

Very Low Income Rentals

Continue to develop and preserve additional homeownership and rental units that are affordable to households below 50 percent of median income.

Action H 3.3

Transitional and Emergency Housing

Financially support the activities of non-profits to provide transitional and emergency housing services for the homeless.

Ending Homelessness: The Ten-Year Action Plan

The following is a summary of the strategies outlined in the 2005 Council-adopted document *Ending Homelessness: The Ten-Year Action Plan.* The strategies below address three of the Plan's objectives: Prevention, Housing, and Services and Support.

Objective: Prevention

Prevent individuals and families from becoming homeless through comprehensive discharge planning and targeted resources.

A. Create and execute comprehensive discharge plans for people leaving institutions.
B. Design and implement an integrated prevention effort.
C. Pursue prevention activities within the public school system.

Objective: Housing

Expand the availability and choices of permanent housing that are affordable to individuals and families with extremely low incomes.

A. Increase the supply of permanent affordable housing.
B. Develop resources for supportive services available to those in housing.
C. Educate funders, developers, and citizens.
D. Establish a Housing First model (permanent housing provided immediately to persons who are homeless, along with voluntary supportive services).

Objective: Services and Support

Enhance services and support for people who are homeless, at-risk of homelessness, or recently homeless to help them achieve maximum independence and self-sufficiency.

A. Expand the capacity to serve people with mental illnesses and/or substance use disorders.
B. Expand current multi-service centers to serve as "one stop shops."
C. Implement targeted services for those with special needs.
D. Promote an integrated, comprehensive system of care.

Action H 3.4

Eliminating Barriers to Supportive Housing

Review zoning regulations controlling location of housing serving persons with disabilities and rooming houses to eliminate any undue barriers and facilitate development of additional units.

Action H 3.5

Rooming Houses and Transitional Housing

Update the regulations for the spacing, density, licensing, and upkeep of rooming houses and transitional housing.

E.4 Fair Housing, Universal Design, and Aging in Place

The federal Fair Housing Act prohibits discrimination by landlords, real estate companies, banks or other lending institutions, and homeowner insurance companies that makes housing unavailable to persons because of race or color, religion, sex, national origin, familial status, or disability. While progress has been made, discrimination still impacts Raleigh families, closing them out of the market and preventing access to quality housing. The 2007 *Analysis of Impediments to Fair Housing Choice* identified significant disparities in local area mortgage lending and real estate transactions between minority and non-minority households that affect the ability of minority households to obtain mortgage financing and buy homes. The Analysis also identified the lack of effective and consistent fair housing enforcement to be a barrier. The City does not have a fair housing department or agency to receive complaints, conduct testing, and promote education and outreach and does not have the legislative authority to undertake such programs.

With the rapidly growing number of aging households, Raleigh will face increasing needs for housing suited to the needs of the elderly and other persons with disabilities and housing that can evolve to meet the residents' changing needs over their lifetime. Incorporated at the time the home is built, universal design includes wider doorframes, structural accommodations for adding grab bars at a later date, counters that can be accessed by persons in wheelchairs, and other features that would allow persons with disabilities to function. Beyond the housing unit itself, access to transit is very important for the elderly and persons with disabilities.

Policy H 4.1

Fair Housing Act Enforcement

Ensure enforcement of the federal Fair Housing Act to provide equal access to housing and prevent unfair lending practices. (1, 2)

Policy H 4.2

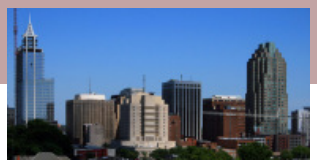
Universal Design

Facilitate the ability of homeowners to age in place. (1, 2, 6)

Policy H 4.3

Housing for the Disabled

Support development of accessible housing for residents with disabilities, particularly near transit stations and corridors. (1, 2, 4, 6)



Policy H 4.4

Housing for Seniors

Provide and fund housing rehabilitation programs that assist elderly homeowners to repair, modernize and improve the energy efficiency of their homes, and remove barriers to age in place. (2, 3)

Action H 4.1

Tax Relief for Seniors

Explore additional property tax relief mechanisms for elderly and low-income households facing rising tax cost burdens.

Action H 4.2

Fair Housing Ordinance Review

Make any changes needed in the City's Fair Housing Ordinance to become substantially equivalent with the federal Fair Housing Act as amended and actively pursue enforcement.

Action H 4.3

Aging in Place

Incorporate the principle of "aging in place" in the City's revised development regulations for residential construction in new subdivisions and multifamily communities. Such regulations should address accessibility, visitibility, and the ability to access goods, services and amenities without a car.

Action H 4.4

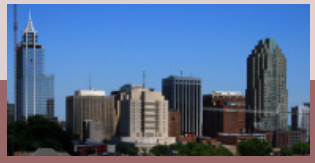
City Sponsored Residential Construction and Rehabilitation

Expand Community Development's use of universal design and visitability in City-sponsored residential construction and rehabilitation, including infill developments in Redevelopment Areas.

Action H 4.5

Focus on the Housing Needs of the Physically Challenged

Include an enhanced focus on the housing needs of the physically challenged in the City's revised development regulations; in particular ensure that housing accessible to residents with physical challenges is included along transit corridors and near transit stations.



Parks, Recreation, and Open Space

Element F: Parks, Recreation, and Open Space

From the time of Raleigh's founding, parks, recreation, and open space have played a central role in City life, and in the City's urban form. Through more than two centuries of growth, these green spaces have enriched the quality of life of Raleigh's citizens. The nature and uses of park lands have evolved to meet community needs. From the City's five original civic squares, to today's athletic fields and nature preserves, green space remains a vital part of the City's infrastructure.

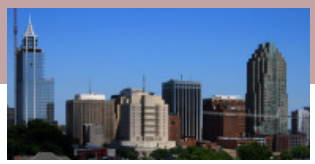
The City of Raleigh has now entered the 21st century as a vibrant community that serves as the nucleus for a growing region. In its current system, Raleigh has over 5,500 acres of park land making up 200 parks and more than 5,800 acres of greenway property including 61 miles of trails (see **Map PR-1**). As the City continues to develop at a rapid pace, it will need to provide for new parks and to conserve additional open spaces, special landscapes, and natural resource areas for its expanding population. With undeveloped land rapidly disappearing and environmental concerns on the rise, the people of Raleigh must become stewards of the land in order to ensure that future generations will have both recreational opportunities and healthy city parks and natural areas.

The purpose of the Parks, Recreation, and Open Space Element of the Comprehensive Plan is to set a framework of policies and action steps to guide the programming, management, and development of the parks, recreation, and open space system in Raleigh over the coming two decades. Included within this plan are recommendations for new park development, management, continued renovation of existing parks and facilities, preservation of open space and significant natural resources, and expansion of greenways. Also included are strategies to provide ample recreational opportunities for all citizens, while adapting to recreational trends, significant development opportunities, and Raleigh's growing population. These policies and actions will guide decision-makers to work towards providing parks and recreational facilities that would create a balanced system across the community and that respond to the varied needs of its residents.

This Element addresses the following major issues:

- Maintaining existing passive and active parks and recreation facilities;
- Addressing the need for walkable, neighborhood parks in existing and newer parts of the City;
- Acquiring adequate land for future park development;
- Developing recreational facilities in close proximity to all residents, equitably distributed throughout the City;
- Enhancing access to and awareness of Raleigh's recreation and natural resource opportunities;
- Providing better interconnectivity between the parks, greenways, and open space system locally and regionally;
- Providing best practice management and stewardship of Raleigh's natural resources; and
- Integrating the parks and recreation system into a broader context of green infrastructure to maximize ecosystem conservation.

These issues impact not only this element of the Comprehensive Plan, but have larger impacts on the community's overall growth and development prospects. Park amenities influence the economic prosperity and quality of neighborhoods, land use decisions, growth management efforts, and the health and livability of residents. Therefore, it is vital to realize that addressing these issues in an effective manner will dictate the wellness and welfare of future residents.



For a more in-depth analysis of the City's parks, recreation, and open space inventory and future needs assessment, see the Parks, Recreation, and Open Space chapter of the Community Inventory, the data and analysis companion volume of the Comprehensive Plan. In addition there are several other well-defined and up-to-date documents that offer the City excellent guidance on meeting future park and recreation needs. These include: The Raleigh Parks Plan (2004); The City of Raleigh Aquatic Study (2008); The Senior Center Study (2007); and many other documents that are available for public review through the City's web site. Additional information can be found on the Park and Greenway Planning and Development web site.

This element does not repeal or replace adopted Parks planning documents; rather, it provides a forum for coordinating park and open space policies across multiple City departments. The policies and actions in this element are generally consistent with prior Parks plans, but where differences exist, this element provides more up to date guidance. Any Parks plans adopted or revised subsequent to the adoption of this element should be reflected, where appropriate, by future amendments to this element. The 2004 Parks Plan, including subsequent revisions, will be used as a detailed working supplement to the Comprehensive Plan, and the Comprehensive Plan serves to implement the 2004 Parks Plan.

This element also addresses all six of the vision themes that serve as the overarching goals of the 2030 Comprehensive Plan. High-quality parks, recreation facilities, and open spaces will provide added value and amenities to the community, which in turn will attract jobs, workers, and greater *economic prosperity* to the area. Evenly distributed park and recreation facilities, accessible to residents throughout the City, further promotes the goal of *equity*.

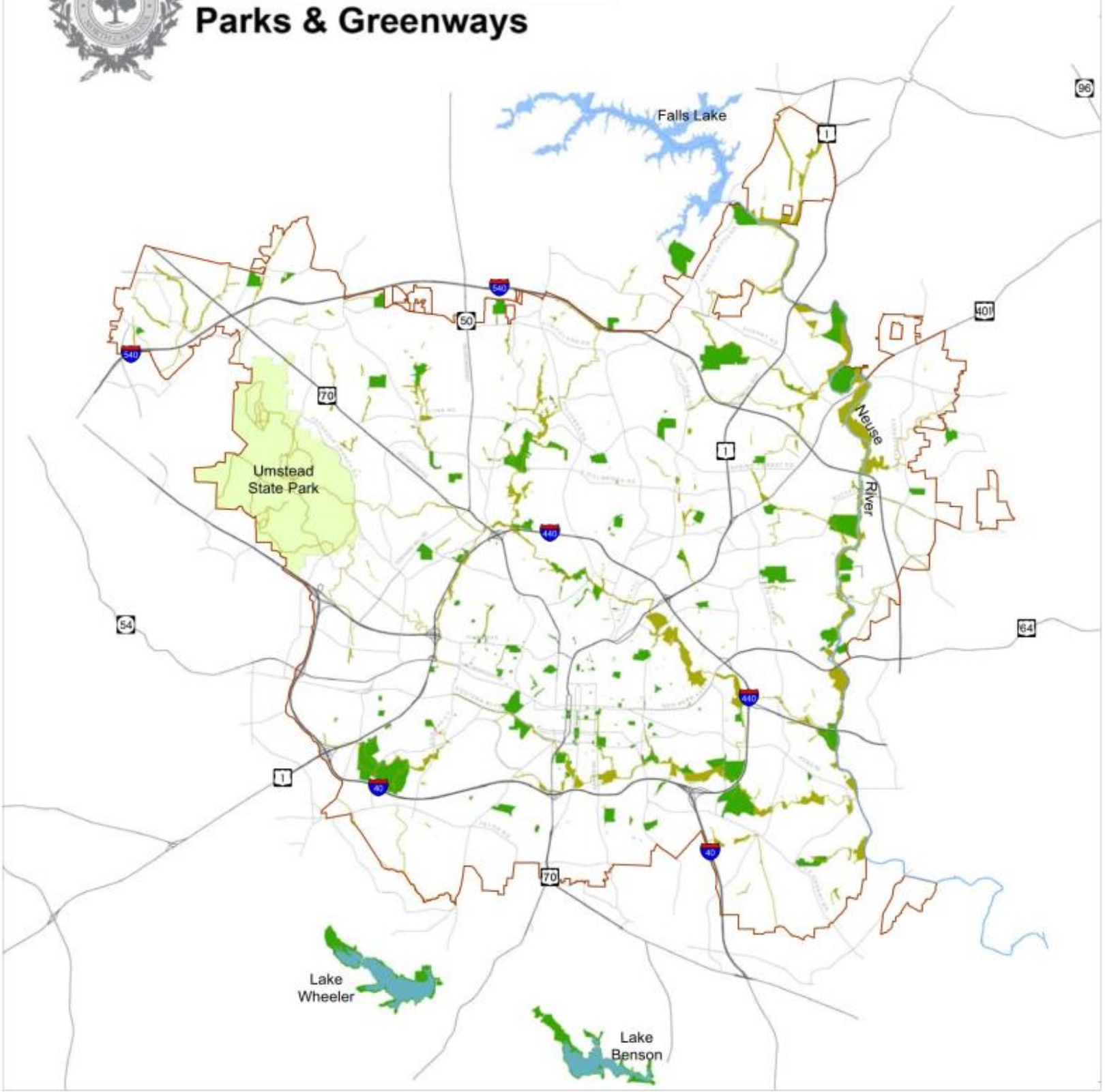
Consistent with the theme of *Expanding Housing Choices*, Raleigh needs to provide for a variety of housing types at a range of price points to meet the needs of its current and future residents. Parks, recreation and open space opportunities must be developed in tandem with new housing. The issue is particularly important for affordable housing, as many lower-income residents have reduced access to private vehicles, limiting their ability to travel to distant parks, and making pedestrian, bike, and transit access all the more critical.

The need for new parks and recreational facilities in the coming decades will require that substantial acreage be acquired by the City for park development. This is part of an overall strategy of *Managing Our Growth*. By planning and identifying future park areas, land can be acquired in advance of development, at lower cost and in appropriate locations, to develop the parks and recreational opportunities that the future residents will require. Further, parks are a significant land use and a source of travel demand, and their location, siting, and design should be coordinated with the City's transportation infrastructure to maximize access by multiple modes and to mitigate impacts on congestion, consistent with *Coordinating Land Use and Transportation*.

Sustainable design and green building is increasingly becoming a part of parks and recreation facilities design. Networks of interconnected parks, greenways, and open spaces (green infrastructure) can direct urban form and guide conservation efforts. Green infrastructure ensures that preserved open spaces and greenways provide greater environmental benefits by maximizing ecosystem conservation, promoting the theme of *Greenprint Raleigh*.

CITY OF RALEIGH COMPREHENSIVE PLAN

Parks & Greenways



MAP PR-1

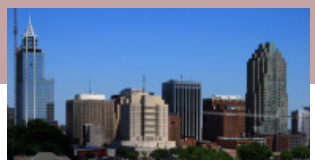
- Lakes/Neuse River
- Raleigh Greenways
- Parks
- State Park

- ETJ
- Highway
- Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



The park and open spaces within Raleigh serve the daily leisure needs of the community, promote the social, cultural, mental, and physical well-being of the community, and are important amenities to achieving better places to live. In a broader sense, they promote a more livable community, a higher quality of life and lend a sense of place and belonging to the community and its residents. They are fundamental to *Growing Successful Neighborhoods and Communities*.

Polices and actions of this element appear below. Numbers indicate their relationship to the Vision Themes, as follows:

1. Economic Property and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

F.1 Planning for Parks

Planning is fundamental to every step of the process by which new parks are created, starting with the determination of parks and recreation needs, to the identification and analysis of potential sites for acquisition, to the development of detailed park master plans for specific park sites. Accordingly, the City has developed a variety of park planning tools, methodologies, and processes; and has prepared many planning documents addressing both the entire Parks system as well as specific components. These include the Raleigh Parks Plan, adopted in 2004 and incorporated into this Element by reference, as well as special plans addressing aquatic facilities, City cemeteries, senior centers, and other topics. Each of these documents has been the result of a thorough process of data collection, analysis, and civic engagement.

As public needs and priorities change, plans and the processes used to create them must also evolve to remain current. The 2004 Raleigh Parks Plan contains a recommendation that it be updated every five years, and an update is recommended as Action PR 1.1. The Parks and Recreation Department also recently commissioned a study that recommends enhancements to the adopted Parks Master Planning Process, with City Council action on these recommendations expected later in 2009. The City intends to keep all park-related planning documents fully current, in the same manner that the Comprehensive Plan and other planning documents will be continually reviewed and updated for currency and consistency.

Policy PR 1.1

Plan Consistency

Maintain consistency among the Comprehensive Plan, the Raleigh Parks Plan, and special purpose plans undertaken to address specific components of the Parks system. (3, 5, 6)
See also Relation to Capital Improvement Planning and Other City Plans in Implementation.

Policy PR 1.2

Plan Currency

Keep the Raleigh Parks Plan and other special purpose park plans current through a regular schedule of updates and re-examinations, including five-year updates to the Park Plan. (6)

Policy PR 1.3

Coordinated Park Planning

Work with interdepartmental and external partners to align siting, land acquisition, co-location, programming design, and construction opportunities with growth projections and demographic information. (3, 5)

Policy PR 1.4

Community Involvement in Special Programs

Where specific or special programs are desired, such as aquatics, skate parks, and off-leash dog areas, involve stakeholders across the entire City to achieve a broad and long range system-wide approach for capital development and replacement. (6)

Policy PR 1.5

Program and Facility Evaluations

Evaluate programs and facilities through community and city-wide surveys, focus groups, evaluations, data regarding programmed and non-programmed usage, and demographic analysis in addition to participation at public meetings. (6)

Action PR 1.1

Parks Plan Update

Update and streamline the Parks Plan every five years to provide the Parks and Recreation Department with current and more detailed guidelines necessary to plan, finance, develop, and manage open space and buildings for both active and passive life pursuits. Data should include, but not be limited to, CAMPO, Park Planning efforts, City and Department programs, and a random scientific survey. Include the updated Park Master Plan and System Integration Plan processes, as well as the recommendations contained in the text box "Natural Areas" in F.2 'Park System and Land Acquisition', as part of this update. Coordinate with Wake County to identify, acquire and manage natural areas, including Nature Parks and Preserves, countywide.

Action PR 1.2

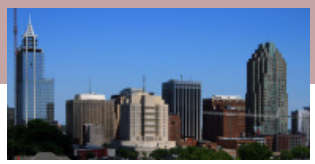
Greenway Plan Update

As part of the update to the Park Plan, update and incorporate the 1976 Capital Area Greenway Master Plan, consolidating the principles and corridor designations into a single document. Inventory and map which parts of the greenway system are owned by the City versus those where less than fee-simple interest is available, and address the means by which the proper stewardship of the latter can be promoted.

F.2 Park System and Land Acquisition

In order to provide recreation lands and facilities, the City of Raleigh must acquire the rights to develop park property through fee simple ownership, easements providing access, and/or partnerships with agencies or organizations that may share common green space goals, department philosophy, and strategies. In addition to acquiring land as the City continues to expand into unincorporated areas, the City must continue to evaluate property that is undeveloped, suitable for redevelopment, or worthy of maintaining as open space through a systematic evaluation utilizing the latest data and technologies available.

Areas of the City where parks are needed are identified as Search Areas in **Map PR-2**. The Level of Service (LOS) guidelines, established in the Parks Plan and the Aquatic Study, help predict the need for park land and aquatic facilities in particular areas throughout the City. Opportunities to acquire land outside the City of Raleigh's current jurisdiction should also be pursued to ensure adequate park and recreation facilities for the future. The LOS



guidelines for Neighborhood and Community Parks are used to evaluate where existing park services are not available with reasonable access. Impedances or barriers to citizen access such as major roads and railroads as well as population projections and jurisdictional boundaries are used to determine broad areas to look for available park lands. Search areas guide real estate acquisition efforts and assist the City in evaluation of development proposals.

Table PR-1 is the result of evaluating citywide existing park lands versus the LOS guidelines to meet future population projections. It is intended to be a broad picture of future needs and is dynamic in that acquisitions and growth require the table and search areas to be updated on a regular basis.

- The LOS for Neighborhood Parks is 2.6 acres per 1,000 population. Neighborhood Parks are typically 5 to 25 acres in size and usually include at least basic elements such as playgrounds, a picnic area, and some open space. Additional elements such as tennis, multipurpose or ball fields or small neighborhood center buildings can be included if the site allows. The general service area of a Neighborhood Park is approximately one-half mile; this distance can vary depending on size of the park, population density, barriers to access, and availability of complementary recreation services. The service area is a planning tool for acquisition and development of parks and does not limit access or use of the facility.
- The LOS for Community Parks is 3.1 acres per 1,000 population. Community Parks are typically 30 to 75 acres and usually contain similar basic elements found in Neighborhood Parks. Most Community Parks should also contain facilities that provide opportunities for active recreation programs, both outdoors and indoors, such as a Community Center building. The general service area of a Community Park is approximately 2 miles; this distance can vary depending on size of the park, population density, barriers to access, and availability of complementary recreation services. The service area is a planning tool for acquisition and development of parks and does not limit access or use of the facility.
- Metro Parks with a regional or thematic focus have a LOS of 4.2 acres per 1,000 population. Metro Parks may include natural areas, athletic complexes, as well as parks centered on lakes and incorporating greenways and boat rental facilities.
- Special Parks with a single or unique aspect, such as significant natural features or athletic or performance venues, do not have a LOS guideline. Acquisition and/or development of these parks depend on availability of land, funds and opportunities that may arise. Greenway Corridors, as depicted on **Map PR-2**, are defined by the corridors of the Neuse River, Walnut Creek and Crabtree Creek and have no LOS. Overland greenway connectors are also depicted where necessary to join with parks, schools, residential or commerce centers. Since the corridors are based on natural stream systems, the opportunity exists to connect to greenway lands and trails provided by other municipal and Wake County jurisdictions. Greenway Corridors are the basis for the City of Raleigh's mandatory dedication of easement on residential properties or reservation of commercial properties.
- Nature Parks and Preserves are a new category of park introduced in this Comprehensive Plan, and no parks are so classified at present. As existing and new parks are assigned this designation, Table PR-1 will be updated accordingly. A description of this park category is provided in the text box "Natural Areas."
- Contemporary aquatic planning standards no longer rely on general calculations of pool or pool area-per-resident as a tool in assessing need. Rather, individual needs are evaluated and measured with user-specific aquatic design elements in mind. Such an evaluation is provided in Raleigh's 2008 Aquatic Study.

Some variations in size and elements are expected and this presents opportunities to vary the facilities offered across the City's park system.

Table PR-1 Citywide Current and Proposed LOS Goals and Needs

Park Classification	Existing Acres	Existing Number of Parks	LOS Standard (Acres/1000 Population)	Additional Needed Acres by 2025	Projected Park Size (acres)	New Parks Needed to Meet 2025 LOS	Total Parks Needed by 2025
Neighborhood Parks	652**	48(5)*	2.6	833**	15	56	104*
Community Parks	1,097	22	3.1	673	60	11	33
Metro Parks	2,271	9	4.2	127	300	1	10
Special Parks	1,518	126	N/A	N/A	N/A	N/A	N/A
Nature Parks and Preserves	0	0	N/A	N/A	N/A	N/A	N/A
Greenway Corridors	3,452	N/A	N/A	2,351	N/A	N/A	N/A
Total	**8,990**	**205(5)**	**9.9**	**3,984**	**N/A**	**68**	**147**

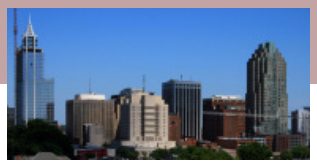
* Includes five School Parks that are recognized as currently serving community needs as Neighborhood Parks

** Presumes six acres equivalent for each of five school parks currently functioning as Neighborhood Parks

Natural Areas

The Comprehensive Plan recommends changing the parkland overlay concept Natural Areas from the adopted 2004 Parks Plan to include the classifications "Nature Parks and Preserves," and "Greenway Corridor," and the delineation of "Natural Areas." These classifications could apply to entire park units (Nature Parks and Preserves) or portions of parks (Natural Area) meeting the criteria recommended below. A specific level of service is not contemplated for the classification of Natural Areas. The acquisition and designation of these areas is based on the available natural resource and the public and political resolve to conserve them.

- Nature Parks and Preserves are intended to be used for environmental education, scientific research, and public enjoyment in ways that do not degrade the natural resources on site. Nature Preserves contain and highlight examples of high-quality plant and animal populations, natural communities, landscapes or ecosystems that contribute to biodiversity and environmental health. Efforts are made to protect and manage significant natural resources in these areas through best practice management and stewardship. Opportunities for passive, natural resource based recreation may be provided that are compatible with the protection and enhancement of the natural area and the nature experience.
- Natural Areas can include portions of other park units or entire parks, and as such should be identified during the System Integration or Master Planning phase of park acquisition and planning. In the case of existing parks, Natural Areas should be identified as part of an inventory process



based on the natural resource, buffers, education opportunities, and consistency with adopted master plans.

- Greenway Corridors are a land use described in more detail in F.3 'Greenway System Land and Trails' and are typically outlined specifically by river, stream, and tributary designations in the Park Plan. Widths of the corridors are recommended to be sufficient to protect the floodplain, consistent with Element C: 'Environmental Protection'.

Policy PR 2.1

System Integration Plan

Undeveloped parks should be the subject of a System Integration Plan that verifies the park's classification in the overall park system, identifies features of special interest on the site, and suggests interim management strategies until the new site can be part of a master plan effort. (3, 5)

Policy PR 2.2

Park Accessibility

Seek to provide reasonable access to a public park or recreational open space to all city residents by 2030, by using the Level of Service and service area guidelines provided in this Plan. (5, 6)

Policy PR 2.3

Level of Service Achievement

Continue to actively acquire land to meet the appropriate Level of Service (LOS) for additional Neighborhood Parks, Community Parks, Metro Parks, and aquatic facilities. (1, 3, 5)

Policy PR 2.4

Acquisition Methodology

Pursue a pattern of acquisition consistent with a search area methodology that analyzes current and projected population and demographic data. (3, 6)

Policy PR 2.5

Acquisition Opportunities

Pursue land acquisition when opportunities arise if the site is suitable for meeting the mission of the Parks and Recreation Department. This is especially pertinent for parks with special environmental or cultural significance or thematic metro parks. (3, 5, 6)

Policy PR 2.6

Acquisition Grants and Partnerships

Seek grants and partnerships with agencies, communities, and/or organizations for land acquisition to maximize the public benefit. (3, 5, 6)

Policy PR 2.7

Acquisition Coordination

Coordinate park land needs assessments, current land acquisition costs, and the City's Capital Improvement Program (CIP) in order to ensure adequate funding is on hand to react to opportunities and market patterns. (3, 5, 6)

Policy PR 2.8

Creating Recreational Facilities Through Adaptive Reuse

Consideration should be given to opportunities for providing Neighborhood and Community Park elements through innovative and adaptive reuse of underutilized or vacant properties. (3, 5, 6)

Action PR 2.1

Innovative Strategies for Acquisition

Explore innovative strategies such as donations by developers and philanthropists, inter-agency transfer, park improvement districts, partnerships with other government and non-government agencies and tax-defaulted properties to acquire parkland and open space. If acquired properties are not well suited for public recreation use and are not of significant environmental or ecological value, revenue from disposition should revert to the Parks and Recreation acquisition program.

Action PR 2.2

Grant Requests and Partnerships

Submit grant requests and pursue partnerships for land acquisition, especially to agencies that share missions with City of Raleigh Parks and Recreation Department. Reasonable economic justification and equity of access should be strong considerations in these actions.

Action PR 2.3

Parkland Search Methodologies

Continue to refine and update search area methodologies to include census data, forecasts, trends, and technology.

Action PR 2.4

Facility Fee for Acquiring and Developing New Parks

Monitor the effectiveness of the City Facility Fee Program and propose updates if appropriate.

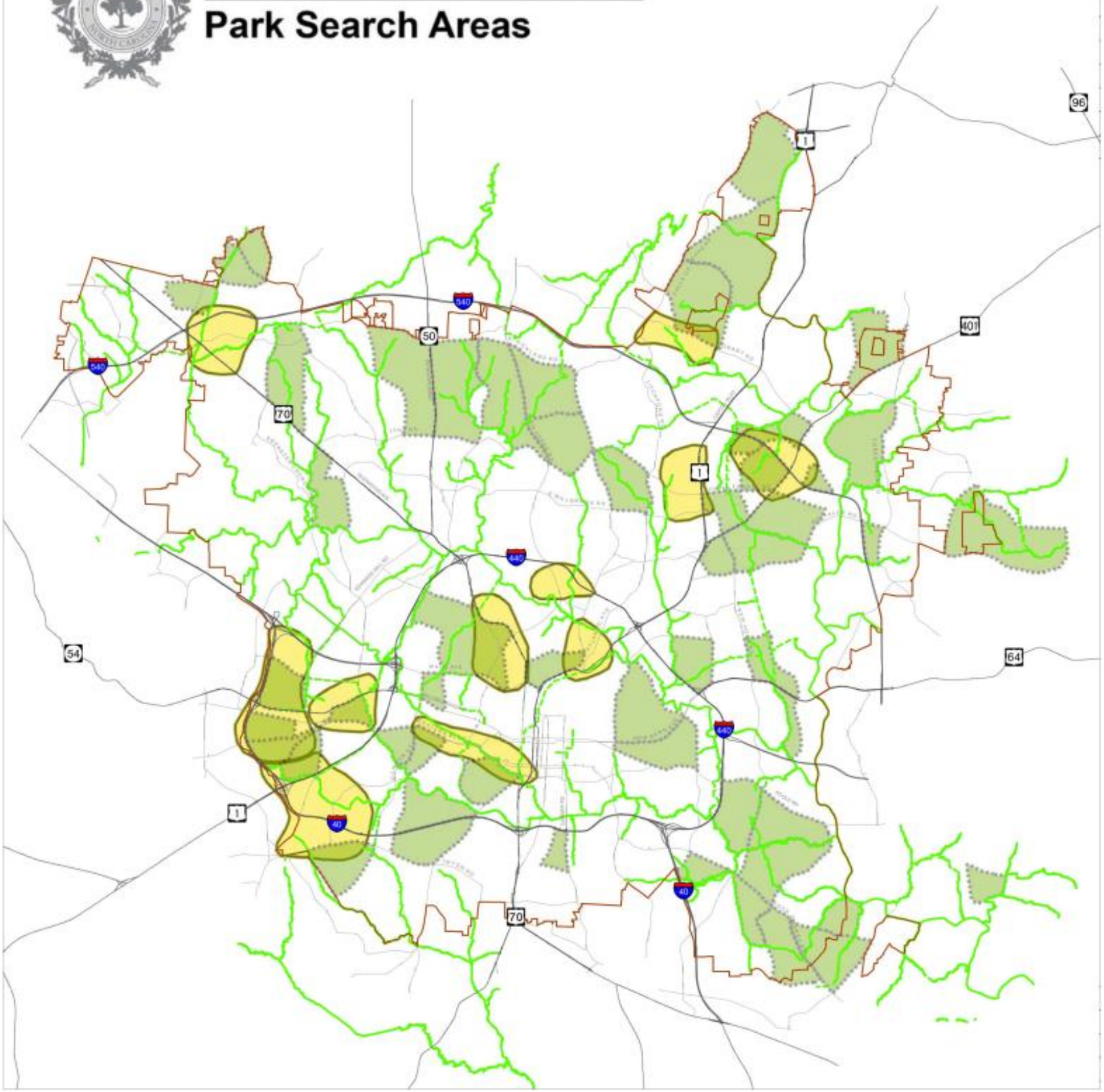
Action PR 2.5

Zoning Incentives for Recreation

Explore zoning incentives for developers and land owners to increase recreational amenities and tie-ins to municipal recreational projects on their property or as part of new developments.

CITY OF RALEIGH COMPREHENSIVE PLAN

Park Search Areas



MAP PR-2

- Greenway Corridors
- Future Greenway Connectors
- Neighborhood Park Search Areas
- Community Park Search Areas
- ETJ
- Highway
- Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

F.3 Greenway System Land and Trails

The City of Raleigh is blessed with a Capital Area Greenway program that has preserved over 3,300 acres along steam corridors and tributaries of Walnut Creek, Crabtree Creek, and the Neuse River. These lands are primarily in the floodplain, and as such are managed for conservation of the natural resources found there. These protected lands also provide the opportunity for a nationally known greenway trail system of over 60 miles. Pedestrian and bicycle access to these areas offers a unique opportunity to experience nature in the midst of a city of over 380,000 people. The goals of the Capital Area Greenway program are:

1. Preserve natural characteristics of the land;
2. Preserve wildlife corridors;
3. Preserve riparian buffers as a means of protecting water quality;
4. Preserve stream corridors to manage storm water runoff;
5. Provide buffers for multiple land uses;
6. Provide opportunities for passive recreation; and
7. Provide multi-use trails for recreation and safe transportation routes.

Policy PR 3.1

Greenway Trail Expansion

Continue to expand Raleigh's greenway trail network by providing minimum ten-foot wide multi-use paths that follow corridors and connect other greenways, parks, and schools, and that also provide safe integration into on-road facilities. (4, 5, 6)

Policy PR 3.2

Greenway Awareness

Increase public awareness of and facilitate access to links provided by the Capital Area Greenway to nearby communities. (6)

Policy PR 3.3

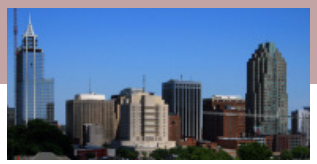
Riparian Greenways

Acquire parkland along important riparian corridors including the Neuse River and Crabtree and Walnut creeks to create green "fingers" that provide natural and recreational amenities. (3, 5)

Policy PR 3.4

Neuse River Access

Pursue opportunities to provide recreational access to the Neuse River, including both trail and paddling access. (5, 6)



Policy PR 3.5

Stream Open Space Networks

Provide a continuous system of open spaces along designated stream corridors that link neighborhoods and park lands and, where possible, provide links to employment centers, schools, shopping areas, and transit rider facilities. (4, 5, 6)

Policy PR 3.6

Greenway Connectivity

Expand the greenway system by connecting existing routes. Provide additional connections between the greenway trails and destinations throughout the City using designated upland routes where necessary. (4, 5)

Policy PR 3.7

Flood Plain and Upland Protection

Protect floodplain property or upland connections for greenways or public open space through the site development process of residential and non-residential sites. (1, 5)
See also C.4 'Flood Reduction and Preparedness' in Element C: 'Environmental Protection'.

Policy PR 3.8

Pedestrian Links to Greenways

Improve pedestrian linkages to existing and proposed greenway corridors. Development adjacent to a greenway trail should link their internal pedestrian network to the greenway trail where appropriate. (4, 5, 6)

Policy PR 3.9

Infrastructure Projects and Greenways

Involve the City's greenway planning staff in the planning and design of all infrastructure projects that impact a corridor identified in the Capital Area Greenway Master Plan. (4, 5, 6)

Action PR 3.1

Capital Area Greenway

Implement the completion of the Capital Area Greenway system with connections to surrounding greenway corridors that are elements of a regional network.

Action PR 3.2

Neuse River Land Acquisition

Pursue the acquisition of environmentally sensitive and significant property along the Neuse River corridor to protect important natural resources and regional open space.

Action PR 3.3

Neuse River Trail

Pursue the construction of the Neuse River Trail as a component of the Capital Area Greenways and the North Carolina Mountains to Sea Trail.

Action PR 3.4

Stream Buffer Acquisition

Accelerate greenway acquisition to incorporate at least 100-foot wide vegetative buffers or the entire 100-year floodplain, whichever is greater, along designated streams.
See also C.4 'Flood Reduction and Preparedness' in Element C: 'Environmental Protection'.

F.4 Recreational Facilities and Programs

In order to maintain itself as a center of wise growth and prosperity, the City of Raleigh must continue to provide a balance of opportunities for citizens to choose both active and passive living pursuits in their daily lives. Facilities for their well-being and physical health include trails, tracks, playgrounds and play fields, as well as a variety of courts, gymnasiums, and activity spaces. The indoor and outdoor facilities that support the programs and informal non-programmed uses available to Raleigh residents and visitors must be available in sufficient quantity, quality, size, design, and geographic distribution to allow full participation for people of all ages and the opportunity for growth. Providing these facilities through a site-specific master plan process should take into account a system-wide approach as well as consideration for individual neighborhoods, adjoining public facilities, and future opportunities. The City's parks and recreation facilities support a broad range of skills and experiences, and exposure to opportunities and programs in aquatics, arts, athletics, nature study, summer and track-out camps, and tennis. Programs serve all ages from youth to senior adults, and special populations. Amusement areas and several lakes also offer contact with nature and relief from the stress of everyday life for all generations. To meet these needs, both sufficient indoor buildings and outdoor shelters, open spaces, and high quality natural areas are required. Planning for flexible facilities with opportunities for future expansion is of utmost importance in accommodating future growth.

Raleigh's Parks and Recreation Mission Statement

The mission of the Parks, Recreation, and Greenway program of the City of Raleigh is to actively encourage, provide, promote and protect quality leisure, recreation, and cultural opportunities, facilities, and environments that are essential for the enhancement of the lives of our citizens.

Policy PR 4.1

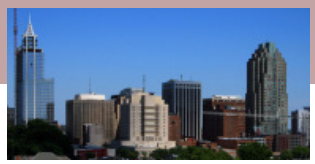
Flexible Park Facilities

Continue to plan, develop, and operate a variety of flexible indoor and outdoor facilities to support programs, multiple activities, and active and passive lifestyle pursuits across the entire City with respect to sufficient quality, quantity, size, and geographic distribution, and to reserve space for future trends and services. (3, 6)

Policy PR 4.2

Sustainable Park Design

Incorporate sustainable design in the development and management of park sites and recreational facilities. (3, 5, 6)



Policy PR 4.3

Recreational Facility Adequacy

Collaborate with partners in the public and private sectors to develop innovative park arrangements and spaces that help provide a diversity of needed recreational facilities. (3, 6)

Policy PR 4.4

Park Visibility

Enhance access to and awareness of Raleigh's recreational opportunities by locating and developing some active recreational facilities along major thoroughfares near other commercial development and in highly visible areas. (5, 6)

Policy PR 4.5

Child-Friendly Parks

Provide child-friendly parks and open spaces across the City, including downtown. (6)

Policy PR 4.6

Universal Access

Develop recreational facilities that are universally accessible to all residents. Update existing facilities when new construction is planned, or when renovations are undertaken to, be compliant with new City and federal regulations as they come into effect. (6)

Policy PR 4.7

Joint Use of Schools

Seek and work collaboratively, when feasible, with other municipal, county, and state entities on the joint use of school properties for public recreation. (3)

Policy PR 4.8

Private Parks

Encourage the provision of tot lots, pocket parks, and other privately-held and -maintained park spaces within residential developments to complement public park facilities. (6)

Policy PR 4.9

Adequate Indoor Facilities

Seek to provide adequate indoor and all-weather facilities for a wide variety of active living choices for all generations. (6)

Policy PR 4.10

Indoor Facility Construction

When in keeping with a System Integration Plan and/or adopted Master Plan, Community Parks, Neighborhood Parks, or Special Parks should be considered for the construction of indoor facilities for recreation, community meetings, social activities, and/or special uses such as arts, aquatics, or environmental education. (6)

Action PR 4.1

ADA Accessibility Plan

Develop and implement an accessibility plan for all park facilities that meets the requirements outlined in the Americans with Disabilities Act (ADA).

Action PR 4.2

Sustainable Practice Development

Use nationally accepted sustainable design principles and best management practices in park design.

Action PR 4.3

Open Space in New Development

As part of the update to the City's development regulations, require the private sector to provide usable, publicly-accessible open spaces and paths in new developments, and ensure that they are connected to the public sidewalks and/or the greenway system.

Action PR 4.4

Creating Opportunities for Active Living Choices

Acquire and develop new multi-use fields, trails, and courts as often as practical to support formal and informal opportunities for active living choices by all generations.

Action PR 4.5

Performance Standards for Recreation Facilities

Revise the private development process to include performance standards and incentives for integrating public recreation facilities, such as neighborhood and community center buildings, into development site plans.

Action PR 4.6

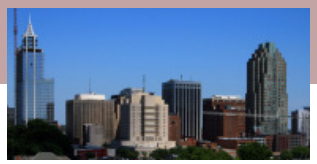
Comprehensive Aquatics Plan

Implement the City Council-adopted Comprehensive Aquatics Plan by phasing in an equitable geographic distribution of improvements over time. Re-evaluate the plan in 2018.

Action PR 4.7

Senior Center Feasibility Study

Implement the Senior Center Feasibility Study and review the potential for additional centers in the future, including satellite centers.



F.5 Open Space and Special Landscapes

Park lands and open spaces provide the opportunities for organized programs, informal or unprogrammed activities, and the conservation of special spaces for the long-term benefit of the public. A variety of public open spaces contributes to the health and well-being of citizens and visitors, the conservation of wildlife and wild land, and the mitigation of environmental impacts from development. These spaces may include transportation rights-of-way and entrance gateways, stream corridors, public areas of downtown, and a variety of park lands specifically managed to provide flexible and diverse opportunities. Policies should remain flexible to balance the need for investment in spaces with the need for long term flexibility.

The City is in the midst of major developments in the downtown area. This places special pressure on public urban spaces, especially historic Moore Square and Nash Square parks. It also creates opportunities for innovative landscapes currently unavailable in Raleigh, such as rooftop plazas and gardens.

See also C.2 'Design with Nature' in Element C: 'Environmental Protection' for additional policies related to the preservation and use of open spaces and landscapes.

Policy PR 5.1

Protecting Heritage Sites

In addition to acquiring land suitable for park facility development, work with local land trusts to acquire and conserve sites with significant natural heritage that are currently unprotected from development (as defined by the North Carolina Natural Heritage Program). (5)

Policy PR 5.2

Unique or Endangered Public Landscapes

Ensure that park planning, facilities, and management respect and conserve resources and landscapes such as Significant Natural Heritage Areas and N.C. Wildlife Action Plan priority habitat areas. (5)

Policy PR 5.3

Interpretive Conservation Activities

Maximize ecosystem conservation and promote interpretive and educational activities in unique ecological areas and habitats in partnership with other governmental and non-governmental agencies. (5)
See also C.9 'Environmental Education, Awareness and Coordination' in Element C: 'Environmental Protection'.

Policy PR 5.4

Improving Park Access

Public spaces should be included in private developments that can connect to and benefit from their proximity to public infrastructure and spaces such as greenway trails, public sidewalks, and plazas. (3, 5, 6)

Action PR 5.1

Mandatory Greenway Dedication

Continue the program of mandatory greenway land dedication from residential development to further the goals of the Capital Area Greenway program, and explore expanding it to non-residential development.

Action PR 5.2

Code Requirements for Accessible Open Space

Ensure public access to open space in projects with public financial partnerships, such as downtown parking garages, plazas, and squares.

Action PR 5.3

Streetscape, Gateway, and Public Space Improvements

Continue to pursue development of, and maintain a link to, the City's Capital Improvement Program and annual budget process for streetscape, gateway, and other special projects that improve neighborhoods, transportation corridors, and other public spaces.
See also I.3 'Appearance and Function of Raleigh's Corridors' in Element I: 'Urban Design'.

Action PR 5.4

Identifying Conservation Lands

Identify lands that can be conserved and managed for their outstanding natural features, landscapes and assets, and cultural heritage values as part of a system of open spaces and green infrastructure.

F.6 Management and Stewardship

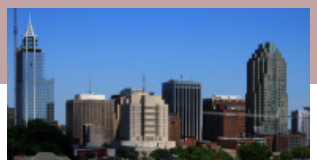
As a steward of public land, recreational facilities, and natural resources, the City must manage with a goal of efficiency, equitable quality and access, and long term public benefit. Management and stewardship of parklands and facilities includes maintenance of existing developed parks as well as proper stewardship and management of undeveloped parklands and natural areas. This requires a commitment from City employees, the public and their elected representatives to plan for the operating funds necessary to maintain sites, structures, and systems for their expected life cycle. Additionally, new capital development, renovation of existing facilities, and replacement of facilities when life-cycles are over should be planned and fully funded.

Promoting citizen involvement in stewardship activities such as clean-ups, minor construction, and landscaping will continue to build community knowledge and support of the parks and greenway system. Numerous partner organizations and agencies exist in the area that can further the mission of the City of Raleigh Parks and Recreation Department.

Policy PR 6.1

Budget Adequacy

Ensure that capital and operating budget support of the park system keeps pace with growth as envisioned in the Comprehensive Plan to provide the quantity and quality of programs, facilities, and facilities maintenance expected by citizens. (1, 3)



Policy PR 6.2

Volunteerism

Encourage citizens to volunteer within the parks and recreation system by offering opportunities to be involved in recreational programming, youth athletic coaching, park clean-up efforts, habitat restoration, special event support, and other supportive activities. (5, 6)

Policy PR 6.3

Park Stewardship

Strive to improve safety, awareness, cleanliness, and neighborhood support at existing parks in part by involving residents in these efforts, partnering with other City Departments such as Public Works, Police, Community Development, and other partner agencies and Park Watch programs that may have a presence on the site. (6)

Policy PR 6.4

Access to Natural Resources

Evaluate the public awareness and knowledge of access to natural resource areas within the Raleigh park system and neighboring communities. (5, 6)

Action PR 6.1

Innovative Maintenance Strategies

Implement and support innovative methods and initiatives such as park conservancies, Friends of the Parks groups, and trust funds to help supplement funding and encourage stewardship of public parks.

Action PR 6.2

Adopt-A-Park/Adopt-A-Trail

Expand the Adopt-A-Park and Adopt-A-Trail programs to encourage individual citizens, neighborhoods, organized groups, partner agencies, non-profits, and Park Watch programs to participate in the establishment and maintenance of facilities and delivery of programs.

Action PR 6.3

System Integration Plan Implementation

Implement System Integration Plans for all newly-acquired properties and for undeveloped park sites and key areas of underdeveloped sites as staff and agency resources allow.

Action PR 6.4

Historic Cemeteries

Implement the *Strategic Plan for the Inventory and Conservation of Raleigh's Historic Cemeteries* and evaluate the plan in 2019.

Action PR 6.5

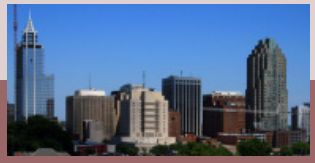
Awareness of Natural Resource Areas

Implement strategies through traditional methods and emerging technologies to increase public awareness of natural resource areas within the Raleigh Park park system and adjoining communities.

Action PR 6.6

Stewardship Capacity

Provide an assessment of additional staffing and related resources necessary to provide for the appropriate level of management and stewardship of the City's growing inventory of parks and open spaces. Incorporate this assessment into the budget process.



Public Utilities

Element G: Public Utilities

The Public Utilities Element addresses the City's four publicly-provided utility systems:

- The water system that provides potable water to City residents, businesses, and institutions;
- The wastewater system that collects, conveys, and treats wastewater;
- The stormwater system that collects, manages, conveys, and treats stormwater runoff from buildings and impervious areas; and
- The reuse water system, a relatively new utility system for the City, that provides treated water for certain uses such as irrigation.

In addition to the above City systems, this Element also addresses private utility systems such as electric and gas utilities.

The City's water and wastewater utilities are regional in nature, and include the nearby communities of Garner, Rolesville, Wake Forest, Knightdale, Wendell, and Zebulon in addition to Raleigh (see **Map PU-1**, which shows the utility service area). Serving these communities has required new utility infrastructure to be extended into eastern Wake County, including sewer trunk lines and a new pump station. While intended to serve customers in eastern Wake municipalities, these improvements also potentially open intervening lands for development on public water and sewer.

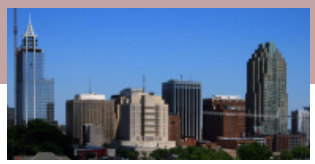
Driven by population growth, demand for water and sewer has been growing. Between 2000 and 2007, average daily demand at the E.M. Johnson Water Treatment Plant at Falls Lake rose from 44.4 to 50.7 millions of gallons per day (MGD). However, this rise was not linear—in 2003, a drought year, demand actually dropped to 43.4 MGD, down from 47.4 MGD in 2001. The vast majority of wastewater is delivered for treatment to the Neuse River Wastewater Treatment Plant, where volumes have grown from 36.2 to 42.0 MGD between 2000 and 2007. The peak volume during this period occurred in 2005 with an average daily throughput of 46.2 MGD.

Significant growth is anticipated in the future. Water treatment plants must be sized for peak daily demand, which is expected to grow from 80 MGD in 2006 to 130 MGD in 2030. Current plans to meet this demand include the new Dempsey Benton plant on Lake Benson, rated at 20 MGD; an expansion at E.M. Johnson to add 34 MGD of capacity; and the Little River Plant, to be built on a future reservoir, and rated at 20 MGD. Expansions at existing wastewater treatment plants will increase total treatment capacity to a little over 84 MGD, mostly coming from a 15 MGD expansion at the Neuse River plant.

Collectively, these proposed investments in utility infrastructure, including the extensions serving the nearby towns where Raleigh has formal utility merger agreements, comprise the largest single share of the City's next five years of capital spending. Water and wastewater projects total $545 million in the latest Capital Improvement Program (CIP). This is 37 percent of the City's CIP total, compared with 15 percent for transportation projects. As an enterprise within the City, the bulk of this spending is funded with Revenue Bonds backed by future utility billing receipts.

Beyond these major fixed investments, the City's utility systems require continual investment to keep pace with demand, replace aging facilities, and keep systems in a state of good repair. Financing of these systems depends upon future revenue streams. The water and sewer utilities are funded through water bills as well as one-time connection fees. Utility acreage fees, one-time fees assessed on new development, help fund the cost of constructing major water and sewer lines serving an area. Stormwater is funded through a monthly fee on all development with impervious surfaces in excess of 400 square feet. Debt service on major new stormwater investments is supported by recurring fees levied across all development, existing and new.

These vital infrastructure systems are critical to the City's continued growth and development, and their proper functioning has major environmental implications. Water, wastewater, and stormwater systems are embedded in the region's hydrology, and the quality of our lakes, rivers, and other surface waters is heavily influenced by the operation of these systems.



This Element addresses the following major issues:

- Making more efficient use of available water, matching source characteristics with intended uses, and establishing conservation as an ongoing process rather than a tool reserved only for crises. Not all uses of water, including irrigation, require pristine, potable water sources. Irrigation uses may also rely on reclaimed water or cistern-stored rainwater;
- Planning for water in the face of a changing and uncertain climate that may result in greater extremes of rainfall and drought. While Falls Lake has an estimated safe yield of 86 MGD, emergency conservation measures had to be implemented in both 2003 and 2007/2008 even though average withdrawals were under 50 MGD. This issue may become more prominent in a changing climate;
- Providing utility services in the face of rising fossil fuel costs. The secular upwards trend in the oil markets between 2002 and 2008 reflected the new fundamentals of growing world demand colliding with stagnant global production, as new sources of supply become more expensive and difficult to produce. As major users of energy, all utility systems will need to respond by looking for efficiencies and alternative energy sources throughout their operations;
- Planning for the future in an ever-evolving regulatory environment at the state and federal level;
- Planning for future water demands in a competitive resource allocation environment—significant competition for water is to be expected among utility systems, regions, and classes of users (residential versus commercial versus agricultural);
- Providing the utility capacity necessary to accommodate the City's future growth, including the expansion of systems as well as the rebuilding and enhancement of systems in older parts of the City;
- Better matching the expansion of utility infrastructure with the City's preferred growth patterns and strategies, to minimize costs and maintain each system's financial health; and
- Fully educating and involving the public as informed customers and responsible users of vital natural resources.

More information on these issues can be found in the Public Utilities Chapter of the 2008 Community Inventory Report.

As described in the Framework chapter, Raleigh's Vision for 2030 is structured to address these public utility issues through six vision themes or citywide goals. The Public Utilities Element will allow the City to meet these goals in numerous ways.

Relative to *Economic Prosperity and Equity*, the City's economy depends on the availability of water and sewer infrastructure to support development. Efficient utility planning serves to sustain system adequacy, manage costs, and keep the City's utility rates competitive. The proper management of stormwater serves the goal of equity by protecting downstream properties from the impacts of upstream development.

For *Expanding Housing Choice*, the wide availability of water and sewer throughout the City's jurisdiction permits a variety of housing types at different densities to be developed at appropriate locations.

For *Managing our Growth*, decisions regarding when and where to extend utility service significantly impact growth patterns by enabling higher intensity development than could be achieved using well and septic systems. Utility infrastructure must also be adequately sized to meet both present and future needs, requiring coordination with future growth planning.

For *Coordinating Land Use and Transportation*, buildings, roads, and parking lots are significant sources of stormwater runoff; therefore, land use and transportation policies that result in low impact development will also serve to reduce the stormwater impacts of development. Utilities, along with roads, are the major shapers of development patterns.

For *Greenprint Raleigh*, stormwater policies have a significant impact on water quality, as urban runoff is the primary pollutant in the region's surface waters. Ensuring infiltration and recharge of stormwater can help maintain the region's sub-surface aquifers and feed streams during times of low rainfall. The City's water and wastewater treatment facilities are now a significant part of the upper Neuse River's hydrology, at times accounting for up to 40 percent of the river's flow downstream of the wastewater treatment plant. The City's re-use water system is a key piece of infrastructure intended to make more efficient use of water resources.

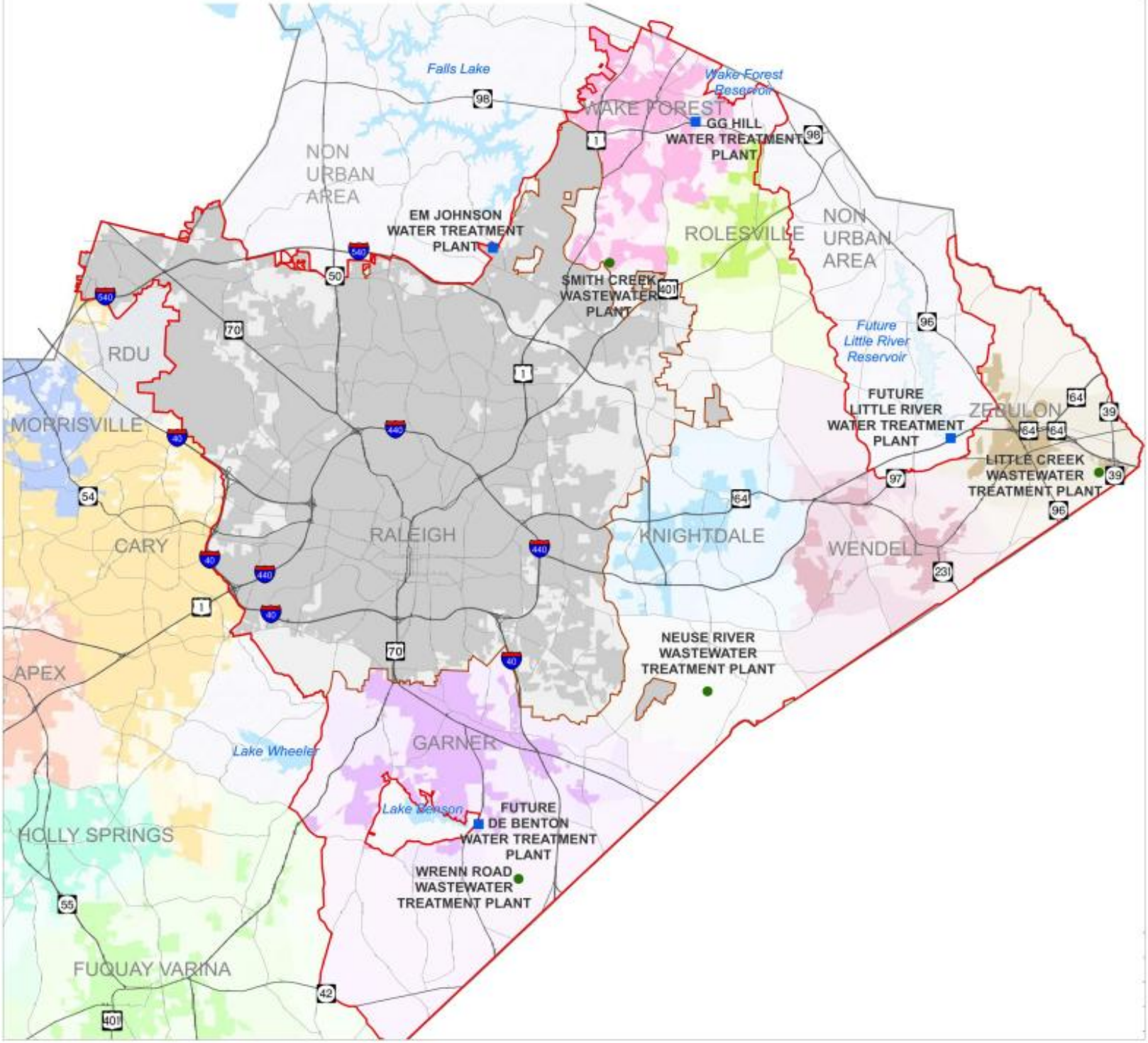
For *Growing Successful Neighborhoods and Communities*, the extension of utilities to formerly undeveloped areas and sites and the growing prominence of infill development and downtown redevelopment may require that additional infrastructure be provided in already built-up parts of the City.

Policies and actions of the Public Utilities Element appear in the next section. To track the efficiency of the City's policies, numbers that relate to the City's six vision themes are used throughout the policy section as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

CITY OF RALEIGH COMPREHENSIVE PLAN

Water and Wastewater Systems



MAP PU-1

Facility Type

- Wastewater Treatment
- Water Treatment
- Long Range Service Area

ETJ
Highway
Major Streets

Miles
0 1 2 4

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division

G.1 Systems and Adequacy

While Raleigh's continued growth necessarily focuses attention on new infrastructure, it is the primary job of any utility system to keep the existing infrastructure in good repair, and to maximize the utilization of those infrastructure investments already made. Portions of the City's water and sewer infrastructure, especially inside the Beltline, are aging and will need reconstruction, replacement, and/or augmentation. A proposed force main paralleling the two existing interceptors along Crabtree Creek is an example, as this project will both address limited capacity as well as provide the redundancy necessary to carry out repairs on the the existing interceptors.

Adequate funding is essential to maintaining utility systems. For publicly-owned utilities, political imperatives push for the lowest possible rates even as maintenance and investment backlogs accrue. Raleigh's utility rate structure should include all costs to fully operate, maintain, rehabilitate, replace, and expand its utility infrastructure in order to build in incentives to make wise use of resources while fully funding all utility system needs.

The following policies address maintaining the adequacy of the systems serving already developed areas, as well as addressing the capacity needs of the future.

Policy PU 1.1

Linking Growth and Infrastructure

Focus growth in areas adequately served by existing or planned utility infrastructure. (1, 3, 5, 6)

Policy PU 1.2

Infrastructure Maintenance

Rehabilitate and maintain in good condition existing public utility facilities to accommodate infill and to allow for the most efficient use of existing infrastructure. (1, 3, 5, 6)

Policy PU 1.3

Infrastructure Standards for Development

Provide standards and programs that relate development to the adequate provision of infrastructure and public services. (3)

Policy PU 1.4

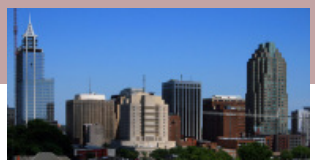
Addressing Insufficient Utilities

Address insufficiencies in water and sewer lines that threaten health, safety, and overall quality of life. (1, 3, 5, 6)

Policy PU 1.5

Sizing of Water and Sewer Lines

Size water and sewer lines with capacity adequate to serve projected future growth. (1, 3)



Policy PU 1.6

Full Cost Pricing

Encourage full-cost pricing to recognize the real long-term cost of service, which includes maintaining infrastructure in a state of good repair, and to promote environmentally sound decisions by customers. (1, 3)

Action PU 1.1

Infrastructure Plans and the Future Land Use Map

Using the Future Land Use Map as an input, develop a single spatial growth projection for the City's current and future jurisdictional boundaries, as well as for the other communities with utility merger agreements with the City of Raleigh, to be used to plan for new water, wastewater, and transportation infrastructure.

Action PU 1.2

Enterprise Resource Planning and Utility Rates

As part of the ongoing Enterprise Resource Planning (ERP) project, build into the next utility billing system the flexibility to implement a variety of pricing strategies, including tiered water rates, consistent with the goals of full cost pricing and using price as a demand management tool. (The ERP project is a major overhaul of the City's IT infrastructure as relates to finance, billing, human resources, and other core business functions.)

G.2 Utility Extensions

As Raleigh continues to develop, the City's growth must proceed hand-in-hand with the expansion of the City's utility systems. Leapfrog development patterns and unplanned extensions undermine the goal of system efficiency by increasing the quantity of piping and pumping necessary to serve a given amount of development. Under current pricing schemes, higher costs are borne equally by all customers regardless of location, resulting in inefficient cross-subsidies.

The City's current Capital Improvement Program includes new utility extensions to other towns including Wendell and Zebulon where Raleigh has formal utility merger agreements. These new water and sewer mains will cut across eastern Wake County, including through Raleigh's short- and long-range Urban Service Areas. No physical barrier will exist to prevent connections to these mains from adjoining properties—only strongly-written and -enforced policies can forestall the premature spread of urban growth into these urban reserves.

The policies below address these issues through the coordination of system expansion and new development, and ensuring that developers benefiting from public infrastructure participate in the financing of that infrastructure. Another key objective is that land use planning, through the orderly extension of the City's Extraterritorial Jurisdiction, should precede rather than follow annexation and the extension of utility infrastructure.

Policy PU 2.1

Utility Service Extension Outside the City

Ensure that proposals to extend utility service outside the City are:

- Consistent with service expansion plans;
- Not into current or future water supply watersheds except in accordance with Falls Lake and Swift Creek small area plan policies;

- Sufficient in capacity to accommodate the extension;
- Meet City standards; and
- Enhance the contiguous development of the City (1, 3, 5)

See also Area Plan 7: 'Falls Lake' and Area Plan 19: 'Swift Creek' for City of Raleigh policies on annexations and utility extensions in specific areas of these water supply watersheds.

Policy PU 2.2

Utility Extension Beyond Raleigh's Jurisdiction

Limit the extension of public utilities outside of Raleigh's jurisdiction to cases in which:

- there is a threat to public health, safety and welfare and to Raleigh's drinking water supply,
- such extensions are necessary to serve merger communities, or
- such extensions provide the ability to provide interconnects with other utility systems for use in times of drought or extreme weather. (3)

See also A.3 'Annexation, ETJ and USA' for additional City of Raleigh policies on annexations outside the existing Raleigh Extraterritorial Jurisdiction (ETJ).

Policy PU 2.3

Emergency Utility Extension

Allow only existing development posing a specific threat to public health, safety, and welfare and to Raleigh's drinking water supply to connect to emergency utility extensions. (3)

Policy PU 2.4

Water and Sanitary Sewer Installation

Require that water and sanitary sewer lines installed by property owners are constructed along the entire adjacent right-of-way or through the entire property as appropriate to permit further extension to adjacent properties. (1, 3, 6)

Policy PU 2.5

Water and Sanitary Sewer Access

Require that developers provide water and sanitary sewer service to all lots within a subdivision. (3, 5, 6)

Policy PU 2.6

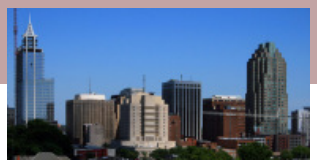
Re-use Water Infrastructure

Consider requiring that residential developers provide "purple pipe" re-use water infrastructure to all lots in a subdivision, as the availability of re-use water expands. Consider restricting the use of potable water for irrigation when re-use water is available. (3, 5)

Action PU 2.1

Update of Municipal Code

Update Part 8, Chapter 2, Article B of the City's municipal code governing utility extensions as needed for consistency with the utility extension policies of this Plan and innovations such as re-use water.



Action PU 2.2

Utility Plan Updates

Routinely update utility plans based on the latest data and population projections to keep plans for capital projects up-to-date.

Action PU 2.3

Re-use Pipe Ordinance

Prepare ordinance text regarding the provision of re-use pipes for irrigation in subdivisions or other allowable uses of reclaimed water.

Action PU 2.4

Dual Plumbing Incentives

Study the option of encouraging dual plumbing in houses by offsetting the cost through reduced fees.

Action PU 2.5

Merger Town Development Policies Regarding Utilities

Work with towns with which Raleigh has merger agreements to ensure that development-related policies are followed.

G.3 Drinking Water

The capacity of the City's drinking water system is defined by two variables: (1) quantity of water available to be extracted from Falls Lake and other reservoirs, operationalized as a "safe yield" factor based on historical rainfall data; and (2) the rated capacities of the City's water treatment plants, which are usually sized by applying a peaking factor to the safe yield of the reservoir. The latter is under human control, while the former depends in part on factors beyond human control, including the size of the reservoir and its watersheds and the quantity of rainfall. Recent droughts have stoked concerns regarding Raleigh's physical water resources. Measures to manage demand and increase system efficiency will be important adjuncts to expanding treatment capacity. Over the longer term, new water sources will be needed to meet the projected growth in water demand of about 43 millions gallons per day (average) between 2006 and 2030. These sources will include drinking water reservoirs such as the Little River Reservoir, as well as alternative but impaired water supplies such as re-use water and grey water that can be allocated for uses tolerant of the lower quality. However, a major element in the overall water strategy will be slowing the growth in demand through increased efficiency and conservation.

Policy PU 3.1

Potable Water Delivery

Provide for the safe and efficient delivery of high quality potable water. (1, 3, 5, 6)

Policy PU 3.2

Planning for Drought

Enhance the City's water system planning to take changes in climate and precipitation patterns into account when projecting future water supply availability. (3, 5, 6)

Policy PU 3.3

Water Supply as a Planning Consideration

Factor water supply issues into planning for the City's growth, including assessing the impacts from the rezoning process, as well as incorporating demand management considerations into the City's development standards. (3, 5, 6)

Policy PU 3.4

Matching Water Supply with Water Use Requirements

Increase efficiency by putting all forms of water to its most appropriate use by better matching actual water use requirements with available potable and non-potable sources. (3, 5)

Policy PU 3.5

Alternative Water Sources

Increase the use of reclaimed water and other non-potable sources such as rainwater to relieve pressures on the potable water treatment system. (3, 5)

Policy PU 3.6

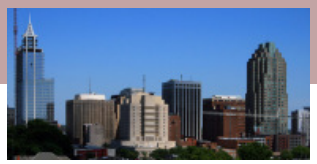
Reclaimed Water Priorities

Prioritize the implementation of reclaimed water infrastructure to serve the largest potential users and concentrations of users. (3)

Policy PU 3.7

Water Conservation

Increase the use of water conservation measures and minimization techniques. Examples include drought-resistant landscaping standards and financial incentive programs. (3, 5, 6)



Policy PU 3.8

Water System Performance Management

Apply current Best Management Practices (BMPs) to Raleigh's drinking water systems. Ensure that management strategies shift the focus from compliance to sustainability and improved performance. (1,3, 5)

Policy PU 3.9

Watershed-Based Planning

Adopt watershed-based approaches to water supply planning to promote decisions based on a holistic view of the entire water system (See Text Box: *A Holistic Approach to Watersheds*). (3, 5)

Policy PU 3.10

Water Quality Improvements

Improve potable water quality through the preservation and restoration of natural landscape features such as lakes, floodplains, wetlands, and their buffers. (3, 5)
See also Element C: 'Environmental Protection' for related policies.

Policy PU 3.11

Protection of Water Supply

Protect the water supply from incompatible uses and activities that could compromise drinking water quality and safety. (1, 5)

Policy PU 3.12

Water Service Adequacy

Provide adequate water service to all currently unserved lots within the City. (1, 3, 6)

Policy PU 3.13

Conservation Education

Engage the public to promote an understanding of the need for water conservation and reuse. (3, 5, 6)

Policy PU 3.14

Calibration of Safe Yield

Consult with Army Corp of Engineers as necessary to maintain an accurate calibration of safe yield factor for Falls Lake, so that recent climate and stream flow data are reflected in the City's water supply planning models. (3, 5)

Action PU 3.1

Falls Lake Water Supply Study

Request that the Army Corps of Engineers perform what is known as a 219 study to look at any modifications to the current allocation configuration, including reallocating water in the conservation and flood pools to match changing climate conditions.

Action PU 3.2

Water-Saving Devices

Change appropriate regulations to mandate water-saving devices in new construction.

Action PU 3.3

"Slow the Flow"

Continue the City's "Slow the Flow" public education campaign to promote water awareness and an ethic of water conservation.

Action PU 3.4

Drought-Tolerant Landscaping

Adopt landscaping ordinances that mandate or incentivize the use of drought-resistant plant species to minimize the need for irrigation.

Action PU 3.5

Water-Saving Incentives

Determine the feasibility of using incentives to encourage existing users to switch to water-saving devices and appliances.

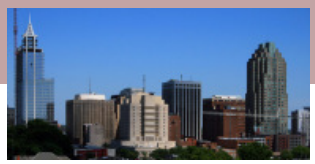
A Holistic Approach to Watersheds

A holistic view of the water system recognizes that any decision made regarding withdrawal, discharge, or modification has impacts that ripple through the entire watershed. Urban uses are now an integral part of overall hydrology, making a complete return to a "state of nature" not only infeasible but also problematic. For example, if rainwater harvesting were to become pervasive, it would dramatically alter flow patterns in small streams, probably decreasing base flows in dry weather, and impacting what may be a fragile aquatic habitat accustomed to current flow patterns. An alternative would be to extend the re-use system, but that might require increased releases from Falls Lake to maintain downstream minimum flows. These examples illustrate how decisions increasingly involve complex interactions with a broad range of issues, requiring a more holistic approach than in the past.

G.4 Wastewater Collection and Dispersal

With the growth in the City's water demand will come a corresponding increase in wastewater generated. Additional investments will be needed to increase capacity at Raleigh's wastewater treatment plants as well as the sewer pipes and pump stations that convey wastewater to these plants. Wherever possible, gravity systems are preferred over pressure collection systems for reasons of reliability and lower operating and maintenance costs. Also, private wastewater treatment systems are discouraged because inadequately-maintained and -monitored systems can lead to poor quality in nearby streams and rivers. Wastewater flows are expected to increase by about 41 million gallons per day between 2006 and 2030 (based on projected system-wide average annual flows).

While wastewater has traditionally been viewed as a by-product to be disposed of, it will increasingly be viewed as a resource from which to wring extended value. Reclaimed water will be dispersed into a variety of receiving environments, moving beyond irrigation to include wetland and stream augmentation and even groundwater recharge. Mining re-use water from the wastewater stream can forestall the need to increase the capacity of



sewer trunk lines by reducing total downstream flows. The City already has an award-winning program that uses bio-solids to complete the nutrient cycle on City-owned farmland. In the future, bio-solids may be utilized as a source of energy through combustion or as a source of methane.

The following policies are intended to address wastewater in the context of promoting long-term resource efficiency and sustainability.

Policy PU 4.1

Wastewater Treatment

Provide sufficient wastewater treatment in the most efficient manner to eliminate any potential for health hazards. (3, 6)

Policy PU 4.2

Wastewater Service Adequacy

Provide adequate wastewater service to all currently-unserved lots within the City. (1, 3, 6)

Policy PU 4.3

Sewer Line Replacement

Provide for the replacement of aging sanitary sewer collection systems to prevent overflow and backups. (3, 5)

Policy PU 4.4

Wastewater Collection System Expansion

Expand the wastewater collection system to serve potential annexation areas, urbanizing areas, and long-term growth areas with gravity sewer extensions and minimal use of pump stations. (3, 5)

Policy PU 4.5

Reclaimed water

Expand the re-use programs for wastewater treatment plant effluent and expand the use of reclaimed water for non-potable water uses. (3, 5)

Policy PU 4.6

Package Treatment Plants

Allow no privately-owned or -operated package wastewater treatment plants in City service and jurisdictional areas. (3, 5)

Policy PU 4.7

Pump Stations and Force Mains

Ensure that pump stations and force mains are environmentally sound and operationally efficient. They should be provided with on-site emergency electric generators and wireless communication equipment to monitor their status. They are preferably temporary facilities that can be replaced by gravity sewers. (3, 5)

Policy PU 4.8

Pressure Collection

Allow no new pressure collection sewer systems in City service and jurisdictional areas. (3, 5)

Policy PU 4.9

Sewer Overflows

Maintain the sewer collection system with the goal to eliminate sanitary sewer system overflows. (3, 5)

Policy PU 4.10

Fats, Oils, and Grease Disposal

Promote the proper disposal of Fats, Oils, and Grease (FOG) for households to help prevent sewer line clogging. (3, 5)

Policy PU 4.11

Bio-solids and Methane Gas Reuse

Provide for the beneficial re-use of 100 percent of bio-solids and methane gas production from all wastewater treatment plants, unless impractical. (3, 5)

Action PU 4.1

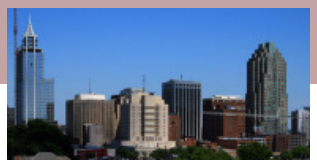
Residential FOG Collection and Re-use Program

Design and implement a residential FOG (fats, oils, and grease) collection program, similar in concept to curbside recycling. The key is to provide households with a convenient alternative to dumping FOG down the drain, coupled with a public education campaign highlighting both the benefits to the sewer infrastructure and to water quality, as well as the opportunity to capture and utilize the FOG to create bio-fuels.

Action PU 4.2

Pigeon House Branch Demonstration Project

Construct a demonstration project for Pigeon House Branch, Raleigh's most impaired stream, that utilizes re-use water to augment stream flow and improve water quality.



Action PU 4.3

Bio-solids Target

Set and achieve a target of treating 100 percent of bio-solids to the Class A level, a level where bio-solids are pasteurized to eliminate all pathogens making them safe for public uses such as composting.

Action PU 4.4

Methane Capture at Neuse River Plant

Investigate and develop a program for capture and use of methane at the Neuse River Wastewater Treatment Plant site.

Action PU 4.5

Solar Arrays at Neuse River Plant

Investigate and implement solar arrays at the Neuse River Wastewater Treatment Plant farm fields as the fields reach the end of their useful life for bio-solid application.

G.5 Stormwater

Urban runoff is the primary pollutant source for the region's lakes, streams, and other surface waters. Poorly controlled runoff contributes to increased rates of stream bank erosion and lake sedimentation. Stormwater also contains numerous pollutants such as rubber, oil and antifreeze from automobiles, chemicals from lawns, and excess sediment associated with carelessly conducted land-disturbing activity. Runoff not only degrades the environment but also imposes costs on downstream neighborhoods and communities, as well as the public sector. Ongoing improvements to the City's stormwater infrastructure, programs, and regulations will be directed to improving the overall health of urban watersheds. Through sustainable practices that protect water quality, enhance fish and wildlife habitat, and provide for urban green spaces an improved quality of life will be realized.

Raleigh's Stormwater Division has completed 15 drainage basin studies to date, identifying over $140 million in needed improvements to alleviate existing stormwater problems and to preserve existing lakes. As more such studies are completed, it can be anticipated that more problems will be identified. Flood damage is currently the primary concern but water quality improvements will have to be implemented in order to meet federal and state regulations.

The following policies address the stormwater impacts of new development and redevelopment, stream quality improvements, and existing stormwater problems.

See also C.3 'Water Quality and Conservation' in Element C: 'Environmental Protection' for related policies.

Policy PU 5.1

Sustainable Stormwater Management

Reduce run-off velocity and improve water quality from existing and new development using sustainable infrastructure techniques that use soils and vegetation to capture, cleanse, and re-use stormwater runoff. (5, 6)

Policy PU 5.2

Drainage Basin Approach to Stormwater Planning

Use drainage basin-focused studies to determine the locations of future and additional stormwater facilities. (5)

Policy PU 5.3

Stormwater Financing

Provide an equitable system of stormwater financing based on relative contributions to the stormwater problem. (1, 3, 5, 6)

Policy PU 5.4

Discharge Control Methods

Apply discharge control methods that control both peak and volume and that are economically, aesthetically, and environmentally acceptable as well as effective in stormwater management. (5)

Policy PU 5.5

Stormwater Education

Educate and involve the public in stormwater management. (5)

Policy PU 5.6

Rainwater Collection and Storage

Where adjacent waters are not vulnerable to even minor reductions in base flow, encourage the deployment and use of rainwater collection and storage systems such as rain barrels and cisterns and rain gardens by residential and commercial property owners and managers. (5, 6)

Action PU 5.1

System Inventory and Illicit Discharge Protocol

Develop a stormwater system inventory and a system-wide illicit discharge detection protocol.

Action PU 5.2

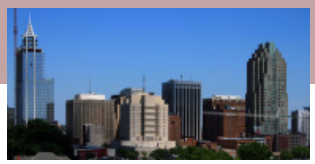
Stormwater Fee Review

Revisit the stormwater fee structure as necessary to provide adequate program funding.

Action PU 5.3

Drainage Basin Studies

Continue to complete additional drainage basin studies until Raleigh's entire jurisdiction and Urban Service Areas have been covered by such studies.



Action PU 5.4

Green Infrastructure Study

Undertake a green infrastructure study that identifies landscapes where stormwater can be absorbed naturally. Model both watersheds and sub-watersheds for the amount of green infrastructure that is present to perform this function.

Action PU 5.5

Stormwater Basin Solids Removal

Pursue collaborative opportunities with the academic and regulatory communities to begin characterization of solids to be removed from stormwater basins, and develop a plan for their utilization or safe ultimate disposal as governing regulations evolve.

G.6 Energy and Telecommunications

While the City's energy and telecommunications infrastructure is privately owned, there is still significant public sector involvement with these services. Transmission lines occupy public rights-of-way, and the City regulates telecommunications towers to promote public safety and manage impacts.

As the City looks at ways to cut its greenhouse gas emissions, power generation and consumption must be an important part of any strategy. Coal is currently the cheapest and most widely used source of baseline power generation. It is also the most carbon-intensive. Utilities are increasingly supplementing their power generation infrastructure with decentralized natural-gas power peaking plants and, increasingly, distributed micro-power sources with a focus on renewables. [(4)] Growth in distributed micro-power requires smarter electricity grids, net metering, and other modernizations. Distributed power generation also presents the opportunity for cogeneration—the capture of otherwise lost heat to warm buildings and perform other functions. As generating technology rapidly evolves, the City's land use and building codes must keep pace to make sure such innovations can be accommodated in new development and redevelopment.

Policy PU 6.1

Energy and Telecommunications Planning

Work with regional and private organizations to plan for adequate future energy and telecommunications facilities and service delivery. (3)

Policy PU 6.2

Alternative Energy Sources

Foster alternative energy sources within the region and state to mitigate rising energy costs and associated environmental impacts. (3, 5)

Policy PU 6.3

Visual Impacts of Utility Infrastructure

Consider ways to affect the placement and appearance of utility infrastructure—including substations, transmission towers and lines, and switching boxes—to minimize visual disruption and negative effects on quality of life, and to enhance streetscapes in pedestrian-oriented districts. (6)

4 Renewables are any energy source generated by natural resources that are not subject to depletion over a meaningful period of time and are naturally replenished. Examples include sunlight, wind, rain, tides, and geothermal heat.

Policy PU 6.4

Undergrounding in Downtown and along Major Corridors

Work with utility providers to place utilities underground in the downtown and along major road corridors, with a particular priority on those streets identified as retail streets in the Downtown Element. (6)

Policy PU 6.5

Undergrounding in Pedestrian Business Districts

Work with utility providers to place utilities underground as part of streetscape projects undertaken in pedestrian-oriented business districts. (6)

Policy PU 6.6

Cogeneration

Partner with local electricity providers to explore the potential for cogeneration (power+heat) in future projects. (3, 5)

Policy PU 6.7

Removing Barriers in Renewable Energy

Remove prohibitions and reduce barriers that impede the installation of solar panels, the use of clotheslines, and other renewable technologies in neighborhoods governed by overlay districts, restrictive covenants, and homeowner associations while allowing for appropriate oversight in historic overlay districts. (5, 6)

Action PU 6.1

Distributed Generation Pilot Project

Incorporate a distributed generation project as part of a significant City capital project, such as installation of photovoltaics over a parking facility, provision of a wind-turbine as part of a tall building, or other similar concept.

Action PU 6.2

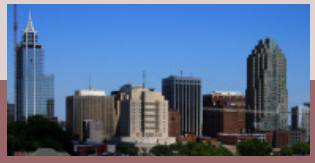
Cogeneration Pilot Project

Identify an opportunity for using cogeneration either downtown or as part of a significant public facility.

Action PU 6.3

Coordination with Utilities

Convene regular meetings with utility companies to compare growth projections and to discuss other long-range planning issues.



Community Facilities and Services

Element H: Community Facilities and Services

A community facility is established primarily for the benefit and service of the population of the community in which it is located. This Element focuses on community facilities and the policies and actions that will drive future decisions about siting, acquisition, co-location, programming, design, and construction. Community facilities and services covered include:

- Municipal buildings;
- Solid Waste Services;
- Police stations;
- Fire stations—engine, ladder, rescue, EMS, arson investigation; and
- Health and Human Services.

Two important community facilities, public schools and libraries, are provided by Wake County—the City does not maintain separate systems of its own. As such, the City's role in ensuring Raleigh's residents receive the schools and libraries they need is one of collaboration and coordination with the county. Policies and actions related to both schools and libraries can be found in Element L: 'Regional and Inter-Jurisdictional Coordination'.

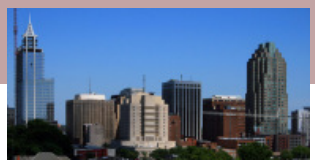
Population growth drives decisions to add community facilities to the City's landscape. Currently, City of Raleigh community facilities include: eight police facilities; twenty-eight fire stations; three solid waste services facilities; seven municipal buildings; thirty community centers; nine public libraries; seventy-five public schools; and three hospital networks.

The City has outgrown its current operational facilities and will be challenged by significant growth in the future. Service delivery has become a challenge as land, energy, and water resources have steadily decreased and land acquisition, construction, operation, and maintenance costs have risen sharply. All departments are experiencing excessive drive times to work sites due to policies that historically have centralized facilities. Given Raleigh's explosive growth and continuing low-density development, there an increasing demand for the dispersion of community facilities and services.

The Evaluation of Remote Operational Facilities study conducted by consultants to the Public Works Department set the stage for a new approach. City Council has approved and funded the implementation of a network of five decentralized Service Centers (in addition to the current seven operations facilities). Municipal crews will achieve shorter drive times and greater productivity as less time is spent bringing vehicles to and from the shop. Future decentralization of community facilities includes objectives to co-locate, or share space and costs, as the City brings more services to residents in new and emerging urban centers. While departments currently plan year-to-year, new strategies include forecasting 5, 10, 15, and 20 years out to secure land to build community facilities and to be prepared for the growth Raleigh continues to experience.

This element addresses the siting, acquisition, co-location, programming, design, and construction of community facilities downtown and in the new and emerging urban centers. In a time of dwindling land, financial, energy, and water resources, Raleigh's future viability and quality of life depend on aligning the planning processes of municipal departments and partners, and strategic use of land for siting of capital improvement projects. Issues include:

- Municipal departments and their current and potential partners often work independent of a collaborative process when forecasting land acquisition for siting facilities;



- Demographic and growth projections are derived from a variety of sources and not aligned;
- The Comprehensive Plan and the Capital Improvement Program are viewed as unrelated processes. There is a need to align both documents and better set priorities for capital improvement projects;
- No mechanisms exist to articulate levels of service that determine the adequacy of police, fire protection, and emergency services to meet community needs; and
- Projects often lack the benefit of feedback from the development services review team, which results in adverse fiscal, timeline, operations, and maintenance implications.

More information on these issues can be found in Chapter 10 of the Community Inventory Report. For information on community centers and athletic facilities, see Element F: 'Parks, Recreation, and Open Space'.

As described in 2 'Framework', Raleigh's Vision for 2030 is structured to address these community facilities and service issues through five of the six vision themes or citywide goals. The Community Facilities and Services Element will allow the City to meet these goals in numerous ways.

Relative to *Economic Prosperity and Equity*, clustering and co-locating community facilities and services is cost effective and creates conditions for economic development, including new business and job growth. Residents reap the benefits from a broader tax base, easy access to services, and reduced travel times. Social equity is reinforced as internal and external communication is improved and more residents can access the services they need.

For *Managing Our Growth*, service needs will grow proportionate with Raleigh's population. The City must have the ability to maintain high service levels at the same time reducing operation and maintenance costs. Clustering and co-locating facilities and services can be a means to sustain service levels as the City strives to lower costs. Aligning long-range construction and service plans with the Comprehensive Plan, the Future Land Use Map, and growth and demographic projections will enable the City to effectively address service needs and cost goals in the Capital Improvement Program.

For *Coordinating Land Use and Transportation*, more than two-thirds of the nation's petroleum consumption is for transportation, and that includes the delivery of municipal services. Better coordination between transportation and land use will allow Raleigh to plan more effectively for public services, while reducing its energy consumption. The City will save by distributing operational locations around the City, resulting in shorter deployment distances for employees who provide services to Raleigh residents and business owners.

For *Greenprint Raleigh*, the protection and wise use of resources will be one of the key building blocks for a sustainable future. Several priorities have already set the stage. By applying LEED certification and other sustainable practices to the siting, design, and construction of Community Facilities, the City's natural and environmental resources will be conserved and the goals of energy and water conservation advanced.

For *Growing Successful Neighborhoods and Communities*, community services and facilities are often viewed as anchors and stabilizing forces in urban neighborhoods. Building on the concept of clustering and co-location, community facilities—along with shopping, business, recreational and office services, and open space—will create focal points for success. Urban centers and their surrounding neighborhoods and communities can become destinations. The inclusion

of public art can make them distinctive, all of which will contribute to livability, sense of place, and identity.

Policies and actions in the Community Facilities and Services Element appear in the next section. To track the efficiency of the City's policies, numbers that relate to the City's six vision themes are used throughout the policy section as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

H.1 Community Facilities and Services

Raleigh needs to optimize limited resources, reduce costs, and secure the capacity to support continued growth and prosperity. Sustainability is the organizing principle that City departments will use as they evaluate new construction and renovations to City-owned property. The City's sustainability polices and procedures will create an action plan for Raleigh's future viability. The LEED green building rating system will be a key tool the City and its public and private partners will use to benchmark development practices, construction management, and facilities management and maintenance. *See also Element C: 'Environmental Protection' for additional policies on environmental sustainability.*

Key drivers in the City's community facilities efforts are the Administrative Services Department, the Construction Management Division of the Public Works Department, and the Facilities and Operations Division of the Parks and Recreation Department.

- Administrative Services coordinates the development of the City operating budget and Capital Improvement Program, provides real estate services related to the acquisition of real property for City purposes, and coordinates the City's sustainability efforts.
- Construction Management manages capital building and general improvement projects for Public Works and many other departments through conceptual planning and budgeting, site evaluation and acquisition, consultant evaluation and selection, project development and design, selection of construction delivery systems, awarding and administering contracts, and constructing improvements.
- Facilities and Operations within Parks and Recreation oversees a portion of the Capital Improvement Program and general improvement funding for projects that improve and maintain existing City facilities including police, public works, solid waste, and downtown commercial facilities. Sustainable efforts are incorporated into the life cycle replacement of these systems.

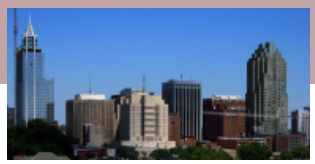
Likewise, other municipal departments responsible for community facilities and services will need to change their business model from one founded on seemingly abundant land and energy resources to one structured to be sustainable in an environment of decreasing resources. Departments will need to work collaboratively to align their growth projections, needs, studies, siting, acquisition, design, programming, construction, and maintenance. The City also will need to expand current collaborative efforts with the county, state, and regional partners.

Informed by an agreed-upon sustainable development action plan, the City of Raleigh will base activities on the following policies and actions.

Policy CS 1.1

Community Services in Urban Centers

Use the Future Land Use Map to ensure all new and emerging urban centers are connected by transit corridors and supported appropriately with fire, police, and other community facilities and services. (1, 4, 5, 6)



Policy CS 1.2

Responding to Demographic Change

Consider anticipated demographic changes and the importance of aging in place in all land use, transportation, and community service planning and decisions. (3, 4, 6)

Policy CS 1.3

Land Reservation for Community Facilities

During development and redevelopment, sufficient land areas should be retained for future schools, parks, greenways, streets, fire and police stations, and other public purposes and essential services. (3, 5, 6)

Policy CS 1.4

Equitable Facility Distribution

Provide equitable facilities and services to all of Raleigh's neighborhoods. (3, 4, 6)

Policy CS 1.5

Adequacy of Community Facilities

Plan for community facilities that are adequate to provide residents with the activities, programs, and services—including choices for passive and active pursuits—necessary to maintain a high quality of life. (5, 6) *See also F.2 'Park System and Land Acquisition' in Element F: 'Parks, Recreation, and Open Space'.*

Policy CS 1.6

Transit Accessibility of Community Facilities

Concentrate community facilities in transit accessible areas and walkable communities to increase access to and delivery of services. (1, 4, 5, 6)

Policy CS 1.7

Equitable Facility Distribution

Ensure that community centers, senior centers, libraries, schools, and other community facilities are sited equitably across Raleigh and are accessible to those requiring adaptive services. (1, 4, 6)

Policy CS 1.8

Community Facilities as Centers

Use recreation centers, senior centers, schools, and libraries as a means of enhancing and strengthening a neighborhood's sense of community. (6)

Policy CS 1.9

Co-Location

Co-locate community facilities and services when and where feasible to provide residents and businesses with easily accessible and convenient City services and to encourage the efficient use of land and resources. (3, 6)

Policy CS 1.10

Alignment of Growth Projections

Align long-range construction and service plans with the Comprehensive Plan, the Future Land Use Map, and growth and demographic projections to develop a Capital Improvement Program to meet future needs. (3)

Policy CS 1.11

Joint-Service Space

Provide space for joint-services with other municipal, county, and state entities when feasible. (3)

Policy CS 1.12

Operations and Maintenance Staffing

Maintain adequate community facility maintenance and management operations and staff as land is acquired and sites are developed. (3)

Action CS 1.1

Land Demand Projections

Develop and maintain 20-year projections for the land needs for each City department.

Action CS 1.2

Sustainable Development Plan

Develop a sustainable development action plan for community facilities.

Action CS 1.3

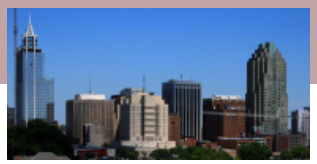
Land Acquisition

Purchase land in the short-term for long-term construction of community facilities (i.e., land bank).

Action CS 1.4

Development Plans Review Group

Implement a procedure to engage all participating departments in the Development Plans Review Group to assure that projects are aligned with the Land Use Plan, Capital Improvement Program, Comprehensive Plan, and department regulatory policies, plans, and programs.



Action CS 1.5

Building Design Team

Implement a procedure to include Raleigh Public Works Department Construction Management, Parks and Recreation, Solid Waste Services, and Sustainability staff in programming, concept and design phases for new civic buildings.

Action CS 1.6

Retrofitting of Municipal Buildings

Retrofit current municipal buildings using the agreed-upon sustainable development plan.

Action CS 1.7

Shared Space

Investigate joint agreements between City departments to maximize space and share costs.

H.2 Solid Waste

Raleigh's solid waste stream consists of household refuse destined for landfills, recyclables collected and sorted separately, and yard waste such as leaves and trimmings that are prohibited from landfills. All three are collected curbside within the City limits. Debris generated through construction and demolition is also a significant part of the waste stream, representing nearly 23 percent of waste countywide. In 2005, the City of Raleigh generated over 130,000 tons of solid waste, of which only 11 percent, or about 16,000 tons, was recycled. The City also collected and processed over 32,000 tons of yard waste, which was ground for mulch at the City's yard waste processing facility.

Municipal solid waste generated in Wake County, which totaled about 620,000 tons in 2004, is collected at five transfer stations. About 60 percent is disposed at the County's only municipal waste landfill, with the remainder destined for out-of-county and even out-of-state landfills. The Southwest/Holly Springs (Southern Wake) landfill opened in January 2008 and the Northern Wake Landfill closed in May of the same year. Trends indicate that in the future the county may eventually rely on privately-owned and -operated landfills for municipal waste disposal.

The policies below are designed to decrease the overall amount of waste generated and to divert as much of the remaining waste stream away from landfill as is practicable. These policies also reflect and incorporate the vision and goals articulated in the 2006 – 2016 Wake County Solid Waste Management Plan.

See also Element L: 'Regional and Inter-Jurisdictional Coordination' and Element C: 'Environmental Protection' for related policies on solid waste.

Policy CS 2.1

Solid Waste Collection and Disposal

Provide an adequate and cost-effective solid waste collection and disposal system that includes recycling, land reclamation, and re-use of waste materials. (5)

Policy CS 2.2

Completeness of Solid Waste Services

Ensure that solid waste management and recycling collection services are made available to all solid waste generators. (3, 5)

Policy CS 2.3

Waste Reduction Target

Reduce, re-use, and recycle and recover beneficial end products of municipal solid waste to the maximum extent practicable, with the overall objective of achieving or surpassing the State's waste reduction goal of 40 percent by 2016 as measured against a baseline of fiscal year 1988 – 89. (3, 5)

Policy CS 2.4

Expanding Recycling Programs

Continue to add new types of waste items to the recycling program as recycling technology evolves and markets for recycled materials develop. Zero waste will be the long-term goal of the City. (5)

Policy CS 2.5

E-Waste Disposal

Continue solid waste management programs including computer and other electronic equipment recycling, the Charge Up to Recycle program, ink jet and toner cartridge recycling, and the Solid Waste Services Department Swap Shop. (3, 5)

Policy CS 2.6

Safe Waste Handling

Properly manage waste requiring special handling, including hazardous materials. (5)

Policy CS 2.7

Land Clearing and Inert Debris Landfills

Ensure that land clearing and inert debris (LCID) landfills that operate in Raleigh comply with applicable rules and regulations. (3, 5)

Policy CS 2.8

Funding of Waste Management

Pursue a fair and equitable funding system to cover current and future costs associated with the programs and services needed to meet adopted solid waste reduction and management goals. (1, 3)

Policy CS 2.9

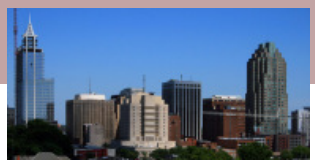
Waste-to-Energy

Pursue opportunities to utilize landfills and the waste stream as a source of energy; potential examples could include technologies such as landfill gas capture and combustion, thermal depolymerization, and the Day Cycle (incineration of waste in electric plasma furnaces at temperatures over 15,000 degrees Celsius, with excess heat used to generate electricity). (1, 3, 5)

Policy CS 2.10

Agency Coordination in Waste Management

Encourage cross-agency collaboration in managing solid waste, including participation in Development Plans Review Group site plan meetings and similar. (1, 3, 5)



Action CS 2.1

Enterprise Resource Planning and Solid Waste

As part of the Enterprise Resource Planning (ERP) project, build into Solid Waste Service's billing system the flexibility needed to implement the accounting and cost recovery practices identified in the Plan policies.

Action CS 2.2

Full-Cost Accounting for Waste Management

Utilize full-cost accounting practices for identifying and monitoring all solid waste management program costs.

Action CS 2.3

Mandatory Recycling

Explore implementing a mandatory recycling program by 2012, consistent with the 10-year Solid Waste Plan.

Action CS 2.4

Solid Waste Monitoring

Establish program measures and an evaluation system to monitor progress toward attaining local solid waste management goals, including waste reduction rates.

Action CS 2.5

Alternative Waste Disposal Techniques

Study economically viable opportunities for incineration, as well as other disposal alternatives, that arise in the future, including opportunities involving regional cooperation.

Action CS 2.6

Solid Waste Services and Site Plan Review

Include Solid Waste Services in the Development Plans Review Group site plan meetings.

Action CS 2.7

Regulations for Recyclables Storage

Update the site plan regulations to include mandatory accommodations for recycling in all new public (and private) developments.

Action CS 2.8

Retrofits to Facilitate Recycling

Explore design changes on how to retrofit existing residential and non-residential developments that facilitate participation in the recycling program.

H.3 Public Safety

The Police Department works in partnership with the community to identify and address conditions that may contribute to crime. The Department employs an approach to policing that emphasizes prevention and enforcement. Under the District Policing System, officers are becoming more involved with, and more closely linked to, the citizens they serve and protect. The Department is committed to building its capacity to meet the challenges of a growing population.

Policy CS 3.1

Planning for Adequate Police Stations

Plan and provide for police stations and supporting facilities adequate to protect the health and safety of Raleigh's current and future citizenry and business population, and to support Police Department level of service policies. (1, 3, 4, 6)

Policy CS 3.2

City Ownership of Police Stations

Police stations should be City-owned facilities providing a civic presence and appropriately designed for police functions, rather than rented space. (6)

Policy CS 3.3

Co-Location of Police and Non-Police Facilities

Co-locate police stations, training facilities, and administrative offices when feasible. In addition, consider co-locating with other community facility services, including sharing a common lobby. (3)

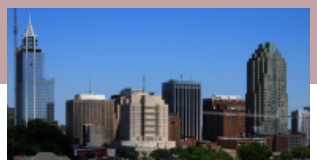
Policy CS 3.4

Crime Prevention through Environmental Design

Encourage use of the Crime Prevention through Environmental Design (CPTED) program standards as one of many tools to improve environments and deter crime. (1, 6)

The Four Strategies of Crime Prevention through Environmental Design

1. **Natural Surveillance:** A design concept directed primarily at keeping intruders easily observable.
2. **Territorial Reinforcement:** Physical design can create or extend a sphere of influence.
3. **Natural Access Control:** A design concept directed primarily at decreasing crime opportunity by denying access to



crime targets and creating in offenders a perception of risk.

4. **Target Hardening:** Accomplished by features that prohibit entry or access: window locks, dead bolts for doors, and interior door hinges.

Source: CPTED Watch The City of Raleigh supports the national CPTED program and encourages implementation of its recommendations in facilities siting, design, and construction activities.

Action CS 3.1

CPTED Development Plan Review

Include components of the Crime Prevention through Environmental Design (CPTED) program in the Development Plan review process.

Action CS 3.2

CPTED Partnerships

Partner with private and non-profit sectors to create demonstration projects throughout the City that incorporate CPTED design elements.

Action CS 3.3

Police Facility Plan

Conduct a public facilities plan for public safety to identify police station, office space, parking, and support facilities that will be required to maintain service and meet future needs.

Action CS 3.4

NE/NW Raleigh Field Offices

Evaluate need for field offices in northeast and northwest Raleigh.

Action CS 3.5

Training Facility Economies

Examine ways to work with Wake County to share space and costs at the Police training facility.

Action CS 3.6

Police Training Center

Complete construction of a Police Training Center on City-owned land at Battle Bridge Road adjacent to the current Police Range facility.

Action CS 3.7

Field Operation Units

Continue to plan and operate field operation units in combination with other public facilities. These sites are generally located in the northwest, northeast, southeast, and southwest portions of the Raleigh metropolitan area and are typically part of outlying Municipal Service Centers.

H.4 Fire and Emergency Response

The Fire Department protects life and property by providing fire prevention, fire suppression, rescue, emergency medical services, hazardous materials response, and life safety education for residents of the City of Raleigh. Construction plans reflect the Department's core response time mandate. The Department maintains an ISO Class III Fire Protection rating. The purpose of the Insurance Service Organization is to give insurance companies a uniform system on which to base their insurance premiums. The ISO uses a consistent set of guidelines to evaluate a fire department, including the number of personnel on duty, training, level of personnel (paid or volunteer), the amount of water the fire department can get to a fire, and the amount and quality of equipment used such as fire engines and hand tools. In the nation only 3.6 percent of fire departments are an ISO Class III.

The Department also follows standards established by the National Fire Protection Association to strategize the location of fire stations. The location strategy incorporates the Department's design and construction commitment to environmental initiatives to capitalize on solar energy and water re-use, adhering to the City's sustainability policies and procedures.

Policy CS 4.1

Fire and Emergency Response Facilities

Plan and provide for fire and emergency facilities adequate to protect the health, life, livelihood, and property of Raleigh's current and future citizenry and business. (1, 3, 4, 6)

Policy CS 4.2

Ancillary Fire Protection Facilities

Provide facilities equipped to meet the operational needs of the Department, including training and fire equipment service and repair. (3)

Policy CS 4.3

Fire Protection Service Standards

Adhere to standards established by the ISO and the National Fire Protection Association. Maintain the ISO Class III Fire Protection Rating. (6)

Policy CS 4.4

Response Time Standards

Maintain standards in response time/coverage for fire calls and emergency medical response calls as outlined in the National Fire Protection Association 1710 (standard for the organization and deployment of fire suppression operations, emergency medical operations, and special operations): one minute from 911 call to wheels rolling and four minutes total response time. (6)

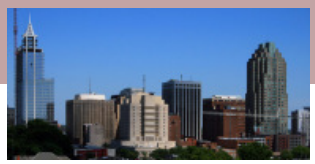
Action CS 4.1

Measuring Level of Service

Develop a mechanism to identify levels of service to determine the capacity of police, fire protection, and emergency services to meet community needs.

H.5 Health and Human Services

While the City of Raleigh does not provide health and human services directly, the City does influence the actions of private sector health care providers (including the three major hospital systems—WakeMed, Rex, and Duke Healthcare) through zoning and development review. The City of Raleigh partners with the county in working to address human service needs—including childcare and elder care. Moreover, the City's plans and



ordinances must keep current as new types of service delivery evolve—an example is continuing care retirement communities—which did not exist 20 years ago. The following policies seek to facilitate the provision of these vital services.

Policy CS 5.1

Best Practices in Health Care

Work with private and public institutions, Wake County, and non-profits to ensure medical and health facilities adhere to best practices. (3)

Policy CS 5.2

Supportive Services

Provide supportive services and facilities to Raleigh's families, elderly, special needs, and others in need of adaptive services that contribute to their quality of life. (1, 3)

Policy CS 5.3

Access to Health Care

Support the siting of health care facilities and services in appropriate and accessible locations. (6)

Policy CS 5.4

Publicity of Social and Health Programs

Improve the effectiveness of communication methods used to publicize social and health programs. Maximize participation of and support for low-income residents. (1, 3)

Policy CS 5.5

Transit Access to Health and Human Services

Promote transit accessibility for health and human service facilities. (1, 4, 6)

Policy CS 5.6

Childcare Facilities

Plan and provide for childcare facilities adequate to meet the needs of Raleigh families. (1, 3, 6)

Policy CS 5.7

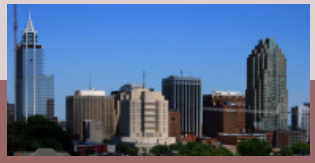
Elder Care Facilities

Plan and provide for elder care facilities adequate to meet the needs of Raleigh's aging population. (1, 3, 6)

Action CS 5.1

Zoning for Health and Human Services

Evaluate zoning in urban centers and priority corridors to ensure health and human services facilities siting can be accommodated.



Urban Design

Element I: Urban Design

Good design ensures attractive, usable, durable, and adaptable places and is a key element in achieving sustainable development. Good design is indivisible from good planning.

Urban design influences the physical form of the City and how residents experience public spaces such as streets, parks, plazas, or squares. The policies and actions of municipal government and the motivation of private developers largely determine the physical form of the City. While individual buildings may be attractive in themselves, there are numerous other design elements that contribute to the organization of a space including architectural design, building placement, height, scale, and open space. The cumulative interaction of these design elements and adjacent buildings in organizing public space is vital for achieving an environment that supports and promotes social interaction.

Raleigh has many of the physical components that contribute to a successful and vibrant city, but it continues to grapple with issues of walkability and identity. The transit network planned for Raleigh's future will be the principal driver of change in the urban form and function of the City. Its effects will be most apparent around proposed rail transit stations, where high-density, mixed-use development will be required by the City. With the transit station as the focal point, additional design considerations that promote walkability, such as small block lengths, wide sidewalks, mid-block crossings, retail and restaurant uses on the ground floor, and parking garages with wrap-around retail, will be encouraged.

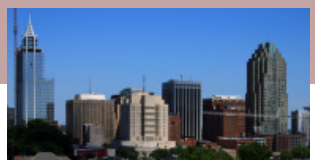
The Urban Design Element provides broad recommendations to address some of the primary issues that the City needs to focus on:

- Need for quality architecture to define the public realm and road network;
- Need for a connected and usable pedestrian circulation system throughout the City;
- Visual clutter and the lack of an urban identity along Raleigh's major thoroughfares;
- Need for connectivity between individual development sites;
- Commercial site design with large parking lots separating business uses from the street;
- Design needs of alternate travel modes such as transit, bicycle and walking;
- Transit accommodations, such as bus shelters, benches, trash receptacles, and landscaping. Raleigh should design a standard style for these elements to create a unique brand identity for the City;
- Obsolete provisions within the zoning code; and
- Design guidelines that do not meet the requirements or provide adequate direction for higher-density, mixed-use, and pedestrian-oriented urban development.

In addressing these issues and embracing the principal tenets of urban design and placemaking—such as creating compact and walkable neighborhoods with distinctive focal points, a mix of land uses with access to transit, and shared public spaces that are the center of community activity—Raleigh will be fulfilling all six of its vision themes.

Distinct neighborhoods with civic centers and complete streets[5] will help achieve the theme *Growing Successful Neighborhoods and Communities.* Coordinating new mixed-use development with the transportation and transit network will ease the burden of congestion on city streets, contributing to the vision themes of *Managing Our Growth* and *Coordinating Land Use and Transportation.* Encouraging diverse and varied neighborhoods will advance the goal of *Expanding Housing Choices*. This will also improve the variety of jobs available, and will help achieve *Economic Prosperity and Equity.* Finally, focusing on creating mixed-use neighborhoods will reduce the dependency on fossil fuels by reducing travel demand. It will also eliminate the need for extending infrastructure networks further from the center of the City, helping to preserve valuable land and natural resources.

5 For more about 'complete streets', refer to B.3 'Complete Streets: Hierarchy and Design' in Element B: 'Transportation'.



Ensuring that new buildings are energy-efficient will also go a long way towards fulfilling the vision theme of *Greenprint Raleigh*.

For more information about the underlying issues and existing urban design conditions, please consult the City of Raleigh Community Inventory Report, the companion background data volume for the Comprehensive Plan.

Policies and actions in this Element appear below. Numbers indicate their relationship to the vision themes, as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

I.1 Raleigh's Identity

A more memorable identity for Raleigh will be created in the future by enhancing the aesthetic qualities of Raleigh's corridors with a high-quality built environment, greenway network, and preserving its natural landscapes and scenic resources.

Downtown Raleigh's five local historic districts — Blount Street, Boylan Heights, Capitol Square, Moore Square, and Oakwood — represent unique residential, commercial, and institutional districts. East Raleigh - South Park, one of downtown Raleigh's national historic districts, also contributes to Raleigh's unique sense of place. This national historic district contains many residential buildings that provide integrity to downtown. It offers a window into the architectural heritage of the City's residential development.

Outside of downtown, many stable residential neighborhoods still exist along streets, such as Halifax, New Bern, and Hillsborough, with streetside planting areas and sidewalks on the axial streets. Buildings and their entrances are oriented toward the sidewalk and formal architectural elements organize the public street spaces. Early suburbs such as Cameron Park and Glenwood/Brooklyn also have very distinctive characteristics that are worth preserving and could help in establishing Raleigh's identity. Suburban residential areas are the core residential neighborhoods of the City, and additional attention to their desired form and density is required to distinguish them as Raleigh neighborhoods.

See also Element A: 'Land Use' for policies related to land use or mixed-uses.

Policy UD 1.1

Protecting Neighborhood Identity

Use Neighborhood Conservation Overlay Districts (NCOD), Historic Overlay Districts (HOD), or rezonings to retain the character of Raleigh's existing neighborhoods and strengthen the sense of visual order and stability. (1, 2, 3, 5, 6)

Policy UD 1.2

Architectural Features

Quality architecture should anchor and define the public realm. Elements of quality architecture include architectural accents and features conducive to pedestrian scale and usage, such as a distinct base, middle, and top (for high-rise buildings); vertical and horizontal articulation; rooflines that highlight entrances; primary entrances on the front façade; transparent storefront windows and activated uses on the ground floor; and corner buildings with defining landmark features. (1, 6) *See also Section I.2.7: Design Guidelines for additional policies and actions.*

Policy UD 1.3

Creating Attractive Facades

Well-designed building facades, storefront windows, and attractive signage and lighting should be used to create visual interest. Monolithic or box-like facades should be avoided to promote the human quality of the street. (1, 6) *See also C.8 'Light and Noise Pollution Controls'.*

Policy UD 1.4

Maintaining Facade Lines

Except for buildings in the Downtown and Pedestrian Business Overlays, generally maintain the established facade lines of neighborhood streets by aligning the front walls of new construction with the prevailing facades of adjacent buildings. Avoid violating this pattern by placing new construction in front of the historic facade line unless the streetscape is already characterized by such variations. Where existing facades are characterized by recurring placement of windows and doors, new construction should complement the established rhythm. (3, 6)

Policy UD 1.5

Pedestrian Wayfinding

Support the creation of a unified and comprehensive system of pedestrian wayfinding signs, kiosks, and other environmental graphics to provide directions to the pedestrian. (4, 6)

Policy UD 1.6

City Gateways

Create more distinctive and memorable gateways at points of entry to the City, and points of entry to individual neighborhoods and neighborhood centers. Gateways should provide a sense of transition and arrival, and should be designed to make a strong and positive visual impact. (6)

Policy UD 1.7

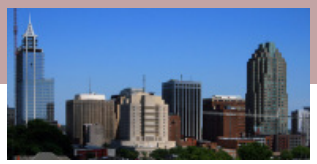
Scenic Corridors

Retain and enhance our visual and natural assets including vistas, boulevard medians, tree-lined streets, forested hillsides, wetlands, and creeks along scenic corridors into and through Raleigh. (3, 4, 5)

Policy UD 1.8

Tree Planting and Preservation

Enhance Raleigh's image as a city of trees with a comprehensive tree planting program for every major roadway, and by protecting and preserving significant stands of existing trees along or adjacent to major roadways. (3, 4, 5) *See also C.6: 'Tree Canopy Conservation and Growth' in Element C: 'Environmental Protection'.*



Policy UD 1.9

Skyline Views

Views of the evolving downtown skyline from downtown gateway corridors should be preserved. Public and private investments should take advantage of opportunities to create new skyline views. (3, 4)

Action UD 1.1

Downtown Wayfinding Improvements

Implement the recommendations of the Downtown Raleigh Wayfinding Study, and expand its scope to incorporate other mixed-use areas in the City.

Action UD 1.2

Falls of Neuse Corridor

Maintain and protect the character of the Falls of Neuse corridor adjacent to the Falls Lake watershed north of Durant Road by preserving the extensive roadside vegetation, the Falls Lake dam, and Falls Community.

Action UD 1.3

U.S. 401 Corridor

Preserve and protect the visual resources associated with the historic, residential, and rural atmosphere of the U.S. 401 corridor.

Action UD 1.4

Gateway Design in Focus Areas

Develop special gateway design treatment for focus areas, such as the three crossings of the Neuse River: Capital Boulevard, Louisburg Road, and New Bern Avenue.

Action UD 1.5

New Bern Avenue Planting Guidelines

Use tree types and planting locations on New Bern Avenue that avoid obscuring the view of the Capitol.

Action UD 1.6

Using Zoning to Achieve Design Goals

Explore zoning and other regulatory techniques to promote excellence in the design of new buildings and public spaces. Zoning should include incentives or requirements for facade features, window placement, courtyards, buffering, and other exterior architectural elements that improve the compatibility of structures, including roof structures, with their surroundings while promoting high architectural quality.

I.2 Design of Mixed-Use Developments

Mixed-use developments are the future of urban planning in Raleigh and cities around the world. They are efficient in terms of land use and urban service delivery. They encourage the use of mass transit and help in the preservation of open space.

They create active and vibrant urban spaces. By encouraging new mixed-use neighborhoods to also be mixed-income neighborhoods, the City can ensure that low- and moderate- income residents have equal access to all the advantages and opportunities of urban living.

Good urban design helps promote and implement the ideals of mixed-use neighborhoods. Residential uses should be connected to retail uses and transit through safe and attractive sidewalks that are universally accessible. Shared open spaces should be welcoming, well-lit, and equipped to serve a diverse group of users. Transit stops should function efficiently and protect riders from the elements during all seasons.

See also Element A: 'Land Use' for additional policies related to mixed-use and land use and transportation coordination.

Policy UD 2.1

Building Orientation

Buildings in mixed-use developments should be oriented along streets, plazas, and pedestrian ways. Their facades should create an active and engaging public realm. (4, 6)

Policy UD 2.2

Multi-modal Design

Mixed-use developments should accommodate all modes of transportation to the greatest extent possible. (1, 2, 3, 4, 5, 6)

Policy UD 2.3

Activating the Street

New retail and mixed-use centers should activate the pedestrian environment of the street frontage in addition to internal pedestrian networks and connections. (4, 6)

Policy UD 2.4

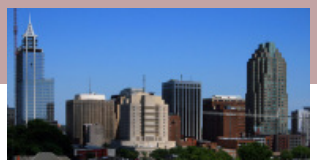
Transitions in Building Intensity

Establish gradual transitions between large-scale and small-scale development. The relationship between taller, more visually prominent buildings and lower, smaller buildings (such as single-family or row houses) can be made more pleasing when the transition is gradual rather than abrupt. The relationship can be further improved by designing larger buildings to reduce their apparent size and recessing the upper floors of the building to relate to the lower scale of the adjacent properties planned for lower density. (6)
See also A.6: 'Land Use Compatibility' in Element A: Land Use for additional policies and actions related to transitions.

Policy UD 2.5

Greenway Access

Safe and clearly marked access points to the City's greenway system should be provided in new and existing mixed-use centers where feasible. (4, 5, 6)



Policy UD 2.6

Parking Location and Design

New surface parking lots should be avoided within mixed-use centers. Instead, shared parking garages with active ground floor uses and architectural treatments for all facades visible from a public right-of-way should be used. (4, 6)

Policy UD 2.7

Public Open Space

Usable and well-appointed urban public open space should be provided within mixed-use centers to serve as focal points and community gathering spots. (6)

Action UD 2.1

Regulatory Barriers to Mixed Use

Reevaluate the requirements in the development code for separation of uses, transitional protective yards, and large setbacks to allow alternate means of compliance for landscape requirements and encourage connectivity of public spaces.

Action UD 2.2

Stepbacks for Taller Buildings

During the update of the City's development regulations, consider additional stepbacks for multi-story buildings based on the height of the building.

I.3 Appearance and Function of Raleigh's Corridors

The appearance of Raleigh's commercial corridors, especially U.S. 1, New Bern, U.S. 70, Hillsborough, and South Saunders, has been detrimental to the City's image. As primary entry corridors for visitors to the City, it is essential that these roadways convey a positive impression. There is also a need to mitigate air and noise pollution. The creation of boulevards with landscaped medians, street trees, and sidewalks will greatly improve the appearance of Raleigh's corridors, mitigate air and noise pollution, and address the needs of pedestrians and transit users. Raleigh's existing streets must be retrofit to accommodate the needs of pedestrians, bicyclists, motorists, and transit users of all ages and abilities.

For more information about complete streets, refer to B.3 'Complete Streets: Hierarchy and Design' in Element B: 'Transportation'.

Policy UD 3.1

Gateway Corridor Design Quality

Promote high quality development along gateway corridors to improve aesthetics and encourage higher levels of investment. Design of new development should contribute to the overall visual quality of the corridor and define the street space. (1, 4, 6)

Policy UD 3.2

Highlighting Important Intersections

Promote the use of gateways and landmarks to highlight access points and important intersections along key corridors. Examples include the places where roadways split to become one-way pairs entering and exiting downtown (Blount-Person, Wilmington-Salisbury, McDowell-Dawson); the proposed roundabouts along Hillsborough Street at Rosemary, Pullen, and Morgan streets; and places where key thoroughfares merge (Louisburg-Capital, Wake Forest-Falls of Neuse, etc.). (4, 6)

Policy UD 3.3

Strip Shopping Centers

Ensure that zoning and parking standards discourage strip commercial shopping centers and auto-oriented building designs. (3, 4, 6)

Policy UD 3.4

Enhanced Streetwalls

Promote a higher standard of storefront design and architectural detail along the City's commercial streets. Along walkable shopping streets, create street walls with relatively continuous facades built to the front lot line to provide a sense of enclosure and improve pedestrian comfort. (4, 6)

Policy UD 3.5

Visually Cohesive Streetscapes

Create visually cohesive streetscapes using a variety of techniques including landscaping, undergrounding of utilities, and other streetscape improvements along street frontages that reflect adjacent land uses. (5, 6)

Policy UD 3.6

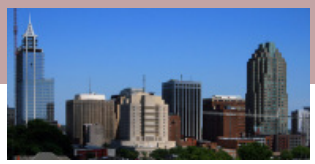
Median Plantings

Median plantings should be used where feasible and appropriate to preserve and enhance the visual character of corridors and boulevards. (5, 6)

Policy UD 3.7

Parking Lot Placement

New parking lots on designated Urban or Multi-modal corridors on the Growth Framework Map should be generally located at the side or rear of buildings. Where feasible, existing parking lots on such corridors should be landscaped to create a pedestrian-friendly streetscape with business visibility. (1, 4, 5, 6)
See also B.6 'Parking Management' in Element B: 'Transportation' for additional policies and actions.



Policy UD 3.8

Screening of Unsightly Uses

The visibility of trash storage, loading, and truck parking areas from the street, sidewalk, building entrances and corridors should be minimized. These services should not be located adjacent to residential units and useable open space. (1, 3, 6)

Policy UD 3.9

Parking Lot Design

Encourage efficient site design, shared parking between complementary uses, and reduced amounts of impervious surface in parking lot design. (1, 4, 5, 6)

Policy UD 3.10

Planting Requirements

Enhance and expand the required planting and tree coverage for parking lots by incorporating design standards that promote long term tree growth and health. Planting standards should improve permeability and reduce the heat island effect. (4, 5, 6)

Policy UD 3.11

Parking Structures

Encourage creative solutions including landscaping and other aesthetic treatments to design and retrofit parking structures to minimize their visual prominence. Where feasible, the street side of parking structures should be lined with active and visually attractive uses to lessen their impact on the streetscape. (4, 6)

Action UD 3.1

Corridor Overlay Districts

Develop Corridor Overlay Districts to implement the intended development pattern along Multi-modal, Urban and Parkway corridors.

Action UD 3.2

Undergrounding Utilities

Underground utility lines as part of long-term corridor design plans. *See also G.6 'Energy and Telecommunications' in Element G: 'Public Utilities'.*

Action UD 3.3

Parking Lot Design Standards

Revise zoning regulation provisions for parking lot design, including location relative to building placement, pervious and impervious surfaces, screening, and tree coverage. Regulations for parking lot landscaping should maximize the potential for tree growth.

Action UD 3.4

Interstate Signage

Coordinate directional and service information signage on I-440 and I-540 with NCDOT to improve visitors' orientation around the City.

I.4 Creating Inviting Public Spaces

The network of public spaces – streets, squares, plazas, parks, and sidewalks – that connect residents in their daily lives most clearly define a city. The character of public spaces is formed by the arrangement and details of the elements that define them such as building edges, public squares, and storefronts along a commercial street or dwellings that line a residential avenue.

City-owned parks and greenways are considered to be the key public spaces designed to be used by the broader community. Their role has been central to the vision of the City of Raleigh. However, smaller gathering spaces such as plazas, streets, and sidewalks have not been used to their best capacity, and can be improved to better serve the community.

Policy UD 4.1

Public Gathering Spaces

Encourage the development of public gathering spaces within all developments. Such spaces should be designed to attract people by using common and usable open space, an enhanced pedestrian realm, streetscape activation, and retail uses. (1, 4, 5, 6)

Policy UD 4.2

Streets as Public Spaces

Design streets as the main public spaces scaled for pedestrian use within City Growth, Regional, and Mixed-use Centers as designated on the Growth Framework Map. (6)

Policy UD 4.3

Improving Streetscape Design

Improve the appearance and identity of Raleigh's streets through the design of street lights, paved surfaces, landscaped areas, bus shelters, street "furniture," and adjacent building facades. (1, 4, 6)

Policy UD 4.4

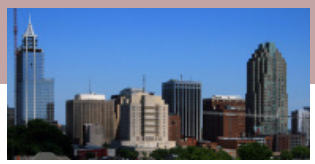
Management of Sidewalk Space

Manage Raleigh's sidewalk space in a way that promotes pedestrian safety, efficiency, and comfort and provides adequate space for tree boxes. Sidewalks should enhance the visual character of streets, with landscaping and buffer planting used to reduce the impacts of vehicle traffic. (6)

Policy UD 4.5

Improving the Street Environment

Create attractive and interesting commercial streetscapes by promoting ground level retail and desirable street activities, making walking more comfortable and convenient, ensuring that sidewalks are wide enough to accommodate pedestrian traffic, minimizing curb cuts and driveways, and avoiding windowless facades and gaps in the street wall. (4, 6)



The essential ingredients of a good public space include landscaping, furniture, and people.

Policy UD 4.6

Activated Public Space

Provide urban squares, public plazas, and similar areas that stimulate vibrant pedestrian street life and provide a focus for community activities. Encourage the "activation" of such spaces through the design of adjacent structures; for example, through the location of shop entrances, window displays, awnings, and outdoor dining areas. (6)

Policy UD 4.7

Indoor/Outdoor Transitions

Encourage private owners to take the "indoors" outdoors by extending interior space like dining areas and small merchandise displays onto walkways and plazas. Conversely, outdoor spaces should be integrated into the building by opening interior spaces like atriums to views, sunshine, and public use. (1, 6)

Policy UD 4.8

Private Sector Public Space Improvements

As appropriate and necessary, require publicly accessible plazas or open spaces to be provided by the private sector in conjunction with development or redevelopment of multi-family, commercial, or mixed-used developments. (5, 6)

Policy UD 4.9

Drought-Tolerant Landscaping

Encourage the use of native, drought-resistant plants, and other xeriscaping techniques in landscaping public spaces (xeriscaping is landscaping which does not require irrigation). (5, 6) *See also G.3 'Drinking Water' in Element G: 'Public Utilities' for additional policies and actions on drought-tolerant landscaping.*

Policy UD 4.10

Improving Pedestrian Safety

Improve pedestrian safety by providing clear transitions between vehicular and pedestrian areas through landscaping and other streetscape improvements. (4, 5, 6)
See also Section B.6: 'Pedestrian and Bicycle Circulation' in Element B: 'Transportation' for additional policies and actions.

Action UD 4.1

Open Space Standards

Revise the site plan standards for new developments and redevelopment of existing sites to incorporate

requirements for providing public plazas or publicly-accessible open spaces.

I.5 Designing Successful Neighborhoods

Raleigh's existing and new neighborhoods must be retrofit to meet the changing demands of the economy and environment. Auto-oriented suburbs without sidewalks or access to transit are lifestyle choices that the City must discourage, focusing instead on housing and transportation choices that promote sustainability. Raleigh's neighborhoods, prior to the easy availability of the automobile, provided urban design features that were sustainable, such as street trees, wide sidewalks, smaller buildings, and shared public spaces. In order to meet the challenges of global climate change and rising fuel and energy costs, a return to an environmentally-sustainable and responsible lifestyle is in order, as outlined by the policies below.

See also A.5 'Land Use Compatibility' in Element A: 'Land Use'. for additional policies and actions related to Infill Development.

Policy UD 5.1

Contextual Design

Proposed development within established neighborhoods should create or enhance a distinctive character that relates well to the surrounding area. (6)

Policy UD 5.2

Pedestrian Access to Downtown

Enhance clear and safe pedestrian networks and connections between downtown and nearby center city neighborhoods. (4, 6)

Policy UD 5.3

Improving Neighborhood Connectivity

Explore opportunities to conveniently connect existing neighborhoods to adjacent commercial centers and community facilities and services. (4, 6)

Policy UD 5.4

Neighborhood Character and Identity

Strengthen the defining visual qualities of Raleigh's neighborhoods. This should be achieved in part by relating the scale of infill development, alterations, renovations, and additions to existing neighborhood context. (6)

Policy UD 5.5

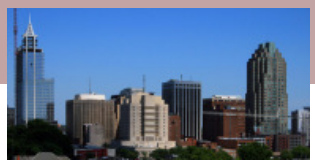
Areas of Strong Architectural Character

Preserve the architectural continuity and design integrity of historic districts and other areas of strong architectural character. New development within such areas does not need to replicate prevailing architectural styles exactly but should be complementary in form, height, and bulk. (6) *See also Element J: 'Historic Preservation' for additional policies and actions related to historic districts.*

Policy UD 5.6

Protection of Neighborhood Open Space

Infill development should respect and improve the integrity of neighborhood open spaces and public areas. Buildings should be designed to avoid the loss of sunlight and reduced usability of neighborhood parks and plazas. (6)



Action UD 5.1

LEED-ND Program

Implement the new LEED Neighborhood Design (ND) certification program (currently under development by the U.S. Green Building Council) for neighborhoods as a possible new strategy to reduce energy and resource consumption and improve the long-term sustainability of Raleigh.

Action UD 5.2

Retaining Landscaping

Require that new construction or additions retain existing landscaping and vegetation to the greatest extent possible.

I.6 Pedestrian-Friendly Design

Raleigh's pedestrian network is strongest within downtown, Planned Development Districts, Pedestrian Business Overlay Districts, and mixed-use centers. In other parts of the City, pedestrian connections are often missing. While the development code provides for the dedication of adequate open space, sidewalks, tree conservation, and connectivity, these issues are addressed on a site-by-site basis rather than in a comprehensive network-based approach. In some cases, the development code actually impedes connectivity by requiring separation of uses and transitional protective yards.

Pedestrian-friendly design not only encourages social engagement and active urban spaces, it has been proven to promote the health and well-being of residents. Obesity and obesity-related diseases such as hypertension and diabetes are a national concern today. Ensuring that all future development within the City is pedestrian-friendly will encourage residents to walk more frequently to meet their daily needs. This will also help in reducing vehicle miles traveled (VMT) and help the City to uphold its commitment to implement the U.S. Mayors Climate Protection Agreement.

See also B.5 'Pedestrian and Bicycle Circulation' in Element B: 'Transportation' for additional actions and policies related to pedestrian-friendly design.

Policy UD 6.1

Encouraging Pedestrian-Oriented Uses

New development, streetscape, and building improvements in Downtown and mixed-use corridors and centers should promote high intensity, pedestrian-oriented use and discourage automobile-oriented uses and drive-through uses. (4, 6)

Policy UD 6.2

Ensuring Pedestrian Comfort and Convenience

Promote a comfortable and convenient pedestrian environment by requiring that buildings face the sidewalk and street area. On-street parking should be provided along the pedestrian streets and surface parking should be in the rear. This should be applied

in new development, wherever feasible, especially on transit and urban corridors and in mixed-use centers. (4, 6)

Policy UD 6.3

Pedestrian Scale Lighting

Ensure that pedestrian-scale lighting is provided as a means of providing a safe and visible pedestrian realm as well as establishing a theme or character for different streets and neighborhoods. (6)

See also C.8 'Light and Noise Pollution Controls'.

Policy UD 6.4

Appropriate Street Tree Selection

Street tree plantings should be appropriate to the function of the street. For example:

- Trees on commercial streets should complement the face of the buildings;
- Trees on residential streets should shade both the street and sidewalk, and serve as a visual buffer between the street and the home; and
- In high traffic areas and downtown, trees should be planted in tree wells with grates over the top to protect the roots. (5, 6)

Action UD 6.1

New Planting Techniques

Study and integrate new planting techniques in streetscape design including wider planting/landscape strips between the curb and sidewalk and tree pits that will extend tree life.

Action UD 6.2

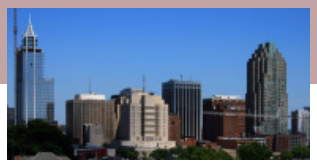
Street Tree Provisions

Update design standards and zoning regulation provisions to incorporate appropriate requirements for the selection, placement, and spacing of street trees.

I.7 Design Guidelines

Urban design guidelines help promote coordinated and high quality development and enhance the public realm and the City's image. In Raleigh, a number of guidelines were included in the 1989 Comprehensive Plan. There also exist numerous other design guidelines outside the 1989 Comprehensive Plan (See Text Box: *Guidelines*). As part of the planning effort for the Comprehensive Plan, a thorough audit of all the existing guidelines was undertaken to determine which guidelines should become part of the 2030 Comprehensive Plan. As a result of the sheer number and complexity of the existing guidelines, the age of some of the guidelines, and the overlap between the guidelines and zoning regulations, the audit resulted in a substantially shortened list of guidelines for inclusion. Relevant citywide design guidelines are contained in **Table UD-1**, while downtown-specific guidelines are located in M.7 'Urban Design' in Element M: 'Downtown Raleigh'. These guidelines replace and supersede prior adopted guidelines.

The policies below contain broad guiding principles that should influence the review of all new development in the City, as well as guidance regarding the application of the **Design Guidelines for Mixed-Use Areas** listed at the end of this section.



Guidelines

Raleigh's 1989 Comprehensive Plan included a Guidelines Element that provided guidance on the design of various urban form elements. The guidelines included were:

- Frontage Lots on Thoroughfares Guidelines, adopted 1981;
- Focus Area Height Guidelines, adopted 1987;
- Office Floor Area Ratio and Building Lot Coverage Guidelines, included in the 1989 adoption of the 2020 Plan;
- Transit Oriented Development, included in the 1989 adoption of the 2020 Plan;
- Retail Use Guidelines, adopted 1991;
- Regional Center Urban Design Guidelines, included in the 1998 Update of the 2020 Plan;
- Urban Design Guidelines for Mixed Use Neighborhood and Village Centers, adopted 2002; and
- Transit Oriented Development Guidelines, adopted 2004.

While most of these guidelines were developed in response to an identified need at the time, and have been useful in addressing those issues, many are now obsolete or have been superseded. A good example is the Transit Oriented Development Guidelines adopted in 1989. These were superseded by the Transit Oriented Development Guidelines in 2004, but had not been removed from the 1989 Comprehensive Plan as of 2008. Similarly, the Office Floor Area Ratio and Building Lot Coverage Guidelines are no longer used since the information overlaps the Zoning Code, in which case the Code takes precedence.

In addition to the Guidelines included in the 1989 Comprehensive Plan, there also exist numerous other design guidelines, including:

- Design Guidelines for Raleigh Historic Districts;
- Downtown Streetscape Master Plan;
- Fayetteville Street Downtown Urban Design Handbook;
- Guidelines for Exterior Rehabilitation for the Moore Square Historic District;
- Raleigh Downtown Urban Design Guidelines;
- Standards for Private Use of Public Spaces: A Downtown Urban Design Handbook; and
- Streets, Sidewalks, and Driveway Access Handbook.

Policy UD 7.1

Economic Value of Quality Design

Recognize and emphasize the economic value of quality design in redevelopment, infill, adaptive use of existing structures, and development of public spaces. (1, 6)

Policy UD 7.2

Promoting Quality Design

Promote quality urban design through the use of design standards, zoning regulations, promotional materials, design awards, programs, and competitions. (6)

Policy UD 7.3

Design Guidelines

The Design Guidelines in **Table UD-1** shall be used to review rezoning petitions and development applications for mixed-use developments or developments in mixed-use areas such as Pedestrian Business Overlay Districts, including preliminary site plans and development plans, petitions for the application of the Pedestrian Business or Downtown Overlay Districts, Planned Development Districts, and Conditional Use zoning petitions. (4, 6)

Action UD 7.1

Lighting Standards

Review and revise development regulations regarding the design, number, and placement of light fixtures, and their co-location with other streetscape elements on single poles (i.e. street lighting, pedestrian lighting, and banners).

Action UD 7.2

Zoning Code Review

Re-evaluate provisions of the City's Zoning Code related to overlay districts, development, and sign regulations to improve standards related to design.

Action UD 7.3

Streets, Sidewalks, and Driveway Access Handbook Revision

Revise the Streets, Sidewalks, and Driveway Access Handbook to:

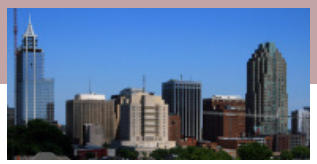
- Revise the sidewalk widths for different uses and contexts;
- Include pedestrian oriented design standards including maximum distance between crosswalks and high-visibility markings at intersections;
- Differentiate between various designations of streets as defined on the Growth Framework Map;
- Differentiate between corridors that are programmed to be transit-intensive; and
- Revise street cross sections to enhance the distance between the curb and sidewalk to allow street tree planting.

See also B.5 'Pedestrian and Bicycle Circulation' in Element B: 'Transportation' for addition actions and policies regarding pedestrian-oriented design.

Action UD 7.4

Transit Supportive Design Guidelines

Codify relevant design guidelines as standards that support transit and other modes of travel. Such standards should be applied in the development review process in mixed-use centers and along multi-modal transportation corridors.



Action UD 7.5

Siting of Service Equipment

Develop standards for the location of transformers and HVAC equipment and other building-mounted, non-street utility meters and service equipment. These standards should address the relation of such structures to buildings and public spaces, as well as suggestions for screening.

Action UD 7.6

Sign Ordinance Revisions

Re-evaluate and revise the City's sign ordinance. Signage should be human scale and serve both pedestrians and automobiles.

Action UD 7.7

PBOD and PD-CU Overlay Revisions

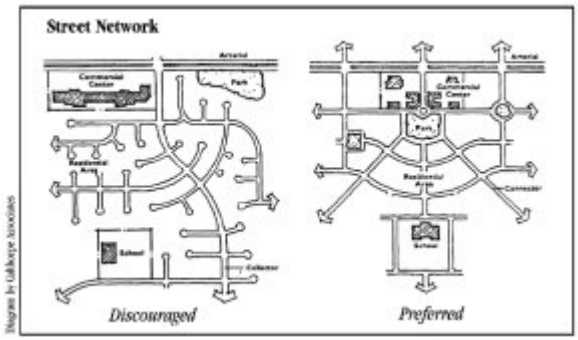
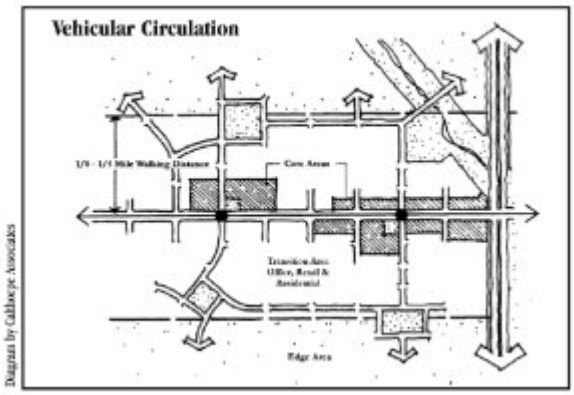
Revise the zoning regulations for the Pedestrian Business Overlay District and the Planned Development Conditional Use Overlay District to make the application and amendment process more efficient and less onerous.

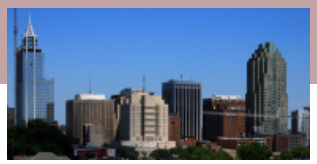
Action UD 7.8

Unity of Development

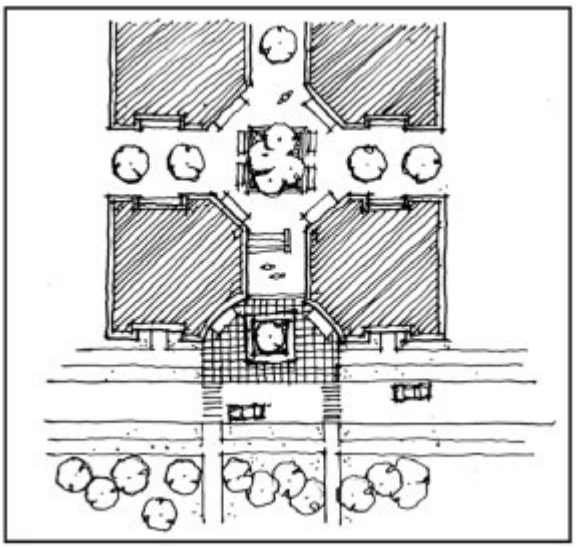
Revise the Unity of Development regulations to allow for more diversity in the styles and materials of new construction.

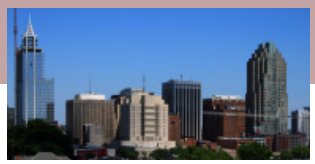
Table UD-1 Design Guidelines for Mixed-Use Developments

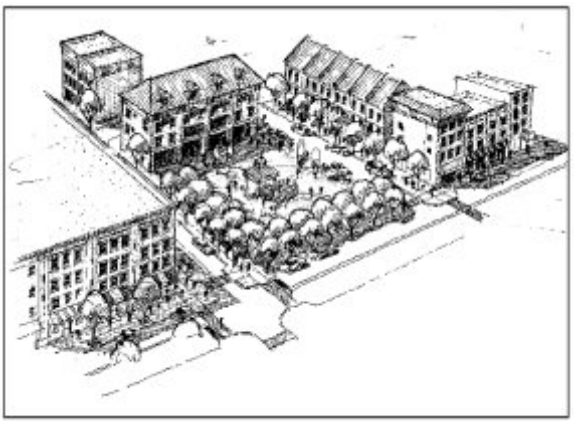
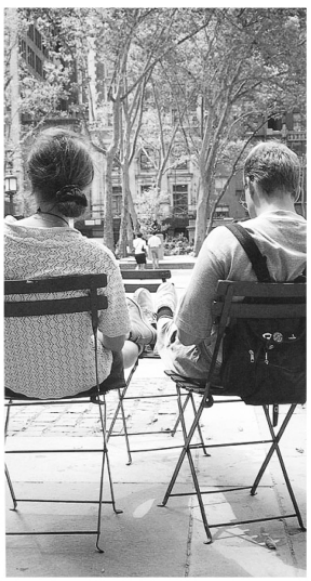
#	Guideline
Elements of Mixed-use Areas	
1	All Mixed-use Areas should generally provide retail (such as eating establishments, food stores, and banks), office, and residential uses within walking distance of each other.
Mixed-use Areas/Transition to Surrounding Neighborhoods	
2	Within all mixed-use areas, buildings that are adjacent to lower density neighborhoods should transition (height, design, distance, and/or landscaping) to the lower heights or be comparable in height and massing.
Mixed-use Areas/The Block, The Street, and The Corridor	
3	A mixed use area's road network should connect directly into the neighborhood road network of the surrounding community, providing multiple paths for movement to and through the mixed use area. In this way, trips made from the surrounding residential neighborhood(s) to the mixed use area should be possible without requiring travel along a major thoroughfare or arterial. 
4	Streets should interconnect within a development and with adjoining development. Cul-de-sacs or dead-end streets are generally discouraged except where topographic conditions and/or exterior lot line configurations offer no practical alternatives for connection or through traffic. Street stubs should be provided with development adjacent to open land to provide for future connections. Streets should be planned with due regard to the designated corridors shown on the Thoroughfare Plan. 
5	Block faces should have a length generally not exceeding 660 feet.
Site Design/Building Placement	
6	A primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared-use. Streets should be lined by buildings rather than parking lots and should provide interest especially for pedestrians. Garage entrances and/or loading areas should be located at the side or rear of a property.

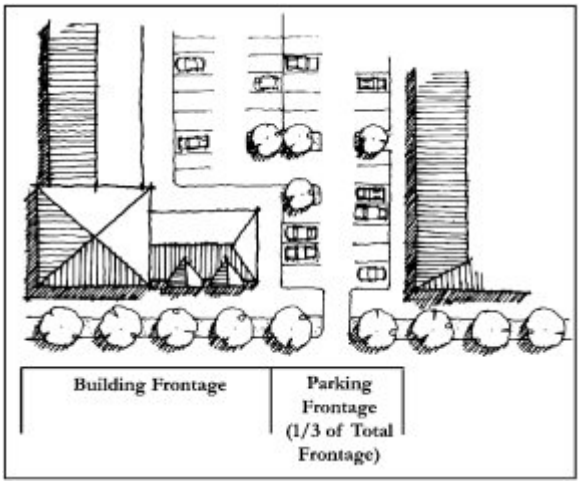


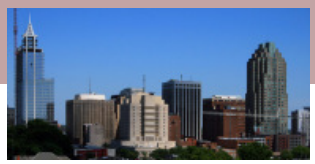
#	Guideline	
7	Buildings should be located close to the pedestrian street (within 25-feet of the curb), with off-street parking behind and/or beside the buildings.	
8	If the site is located at a street intersection, the main building of a complex, or main part of a single building should be placed at the corner. Parking, loading, or service should not be located at an intersection.	**Locate buildings on the corner to create pedestrian interest and reduce the visual impact of parking**

#	Guideline	
Site Design/Urban Open Space		
9	To ensure that urban open space is well-used, it is essential to locate and design it carefully. The space should be located where it is visible and easily accessible from public areas (building entrances, sidewalks). Take views and sun exposure into account as well.	**Squares are bound by buildings and create public gathering places for special events and casual interaction.**
10	New urban spaces should contain direct access from the adjacent streets. They should be open along the adjacent sidewalks and allow for multiple points of entry. They should also be visually permeable from the sidewalk, allowing passersby to see directly into the space.	**Internal public space must be designed property to be safe and usable, providing wide pathways and elements such as fountains and seating.** 

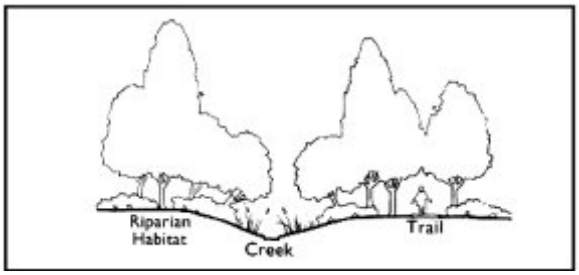
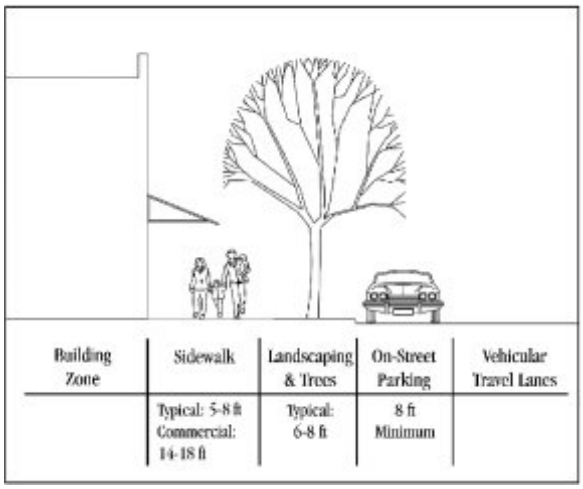


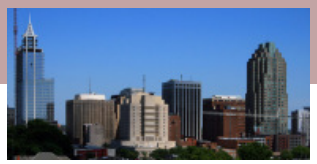
#	Guideline
11	The perimeter of urban open spaces should consist of active uses that provide pedestrian traffic for the space including retail, cafés, and restaurants and higher-density residential. **A public space that is enclosed by active buildings around its perimeter encourages its use and maintains its safety.** 
12	A properly defined urban open space is visually enclosed by the fronting of buildings to create an outdoor "room" that is comfortable to users.
Site Design/Public Seating	
13	New public spaces should provide seating opportunities. **Movable chairs give people the flexibility to adapt public spaces to their immediate needs.** 

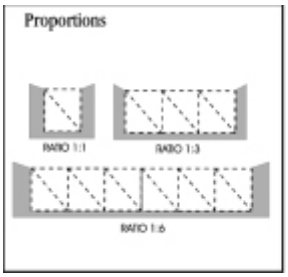
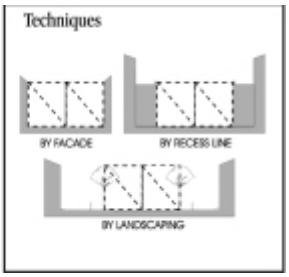
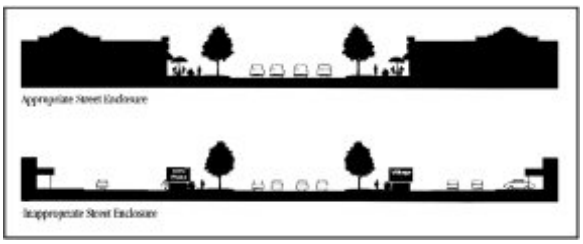
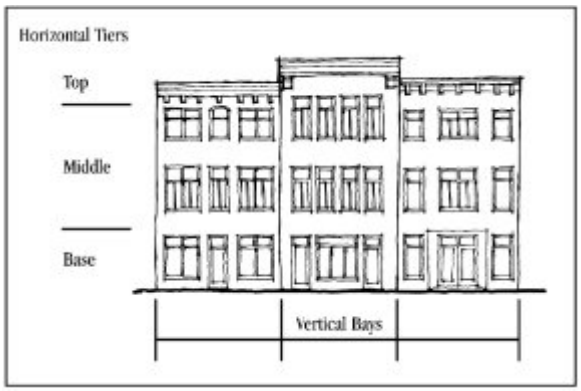
#	Guideline	
Site Design/Automobile Parking		
14	Parking lots should not dominate the frontage of pedestrian-oriented streets, interrupt pedestrian routes, or negatively impact surrounding developments.	**When a parking lot is adjacent to a street, screen it using a wall and/or landscaping.**
15	Parking lots should be located behind or in the interior of a block whenever possible. Parking lots should not occupy more than 1/3 of the frontage of the adjacent building or not more than 64 feet, whichever is less.	

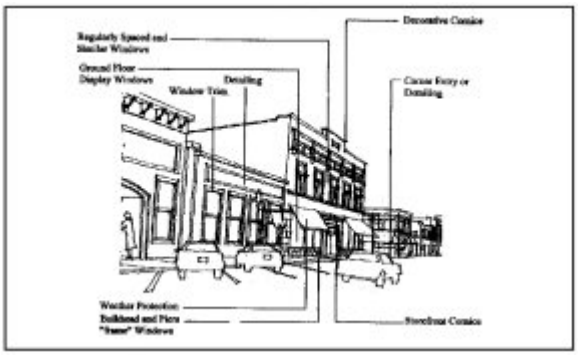


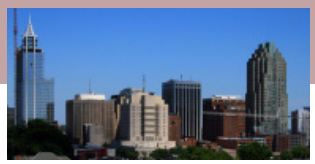
#	Guideline	
16	Parking structures are clearly an important and necessary element of the overall urban infrastructure but, given their utilitarian elements, can gave serious negative visual effects. New structures should merit the same level of materials and finishes as that a principal building would, care in the use of basic design elements cane make a significant improvement.	**Parking structures should be placed in mid-block and wrapped with linter buildigns that provide active retail storefronts.**
Site Design/Transit Stops		
17	Higher building densities and more intensive land uses should be within walking distance of transit stops, permitting public transit to become a viable alternative to the automobile.	**Bus stops should be architectually integrated with the surrounding development and provide such basic amenities and shelter and seating.**
18	Convenient, comfortable pedestrian access between the transit stop and the building entrance should be planned as part of the overall pedestrian network.	

#	Guideline
Site Design/Environmental Protection	
19	All development should respect natural resources as an essential component of the human environment. The most sensitive landscape areas, both environmentally and visually, are steep slopes greater than 15 percent, watercourses, and floodplains. Any development in these areas should minimize intervention and maintain the natural condition except under extreme circumstances. Where practical, these features should be conserved as open space amenities and incorporated in the overall site design. 
Street Design/General Street Design Principles	
20	It is the intent of these guidelines to build streets that are integral components of community design. Streets should be designed as the main public spaces of the City and should be scaled for pedestrians.
21	Sidewalks should be 5-8 feet wide in residential areas and located on both sides of the street. Sidewalks in commercial areas and Pedestrian Business Overlays should be a minimum of 14-18 feet wide to accommodate sidewalk uses such as vendors, merchandising, and outdoor seating. 
22	Streets should be designed with street trees planted in a manner appropriate to their function. Commercial streets should have trees that complement the face of the buildings and that shade the sidewalk. Residential streets should provide for an appropriate tree canopy, which shadows both the street and sidewalk and serves as a visual buffer between the street and the home. The typical width of the street landscape strip is 6-8 feet. This width ensures healthy street trees, precludes tree roots from breaking the sidewalk, and provides adequate pedestrian buffering. Street trees should be at least 6 ¼ " caliper and should be consistent with the City's landscaping, lighting, and street sight distance requirements.

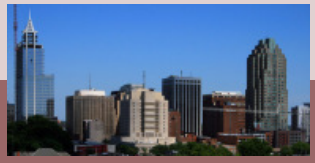


#	Guideline
Street Design/Spatial Definition	
23	Buildings should define the streets spatially. Proper spatial definition should be achieved with buildings or other architectural elements (including certain tree plantings) that make up the street edges aligned in a disciplined manner with an appropriate ratio of height to width.   **The enclosure of the street is most effectively accomplished using buildings placed behind the sidewalk.** 
Building Design/Facade Treatment	
24	The primary entrance should be both architecturally and functionally on the front facade of any building facing the primary public street. Such entrances shall be designed to convey their prominence on the fronting facade. 

#	Guideline
25	The ground level of the building should offer pedestrian interest along sidewalks. This includes windows, entrances, and architectural details. Signage, awnings, and ornamentation are encouraged. 



#	Guideline	
Building Design/Street Level Activity		
26	The sidewalks should be the principal place of pedestrian movement and casual social interaction. Designs and uses should be complementary to that function.	**Moore Square is a good example of a walkable urban village with a continuing tradition of street-level retail and well-designed facades that create a wonderful place.** **Small sidewalk displays help bring the indoors outside and add pedestrian interest.**



Historic Preservation

Element J: Historic Preservation

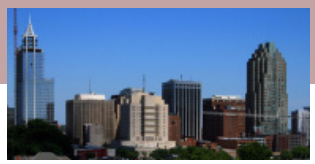
The Historic Preservation Element offers guidance to sustain and promote the identity of Raleigh as a city with great historic communities. It includes recommendations to promote preservation; enhance planning, regulatory and incentive tools; and improve coordination among stakeholders who impact the preservation of Raleigh's cultural and architectural heritage.

Raleigh has a unique heritage. The City remains one of two planned state capitals in the country. Since its establishment in 1792 when the land for Raleigh was purchased from Joel Lane, Raleigh's status as the capital city of North Carolina has shaped its evolution. The City escaped destruction by General William Sherman during the closing days of the Civil War, and continues to enjoy numerous visual aspects of its original plan, parks, and early built environment.

As the seat of a biennial legislative government, the primary economic engine during Raleigh's first one hundred fifty years was government and associated businesses that supported government services. Raleigh experienced periods of very slow to nominal growth due to this lack of economic diversification. Growth patterns changed significantly with the establishment of Research Triangle Park (RTP) in 1959. The RTP project fostered large scale economic development, which in turn created expansive diversification and change. Raleigh's cultural resources are a reflection of the economic eras, styles of fashion, architectural traditions, and ways of life that have defined the City during its transformation from Joel Lane's fields of 1792 to today's Research Triangle.

The City of Raleigh established its historic preservation program in 1961, and has a long history of historic preservation leadership and success. But like many other American cities, cumulative unrelated decisions of the past 50 years to demolish or alter buildings, or to build upon open space, have seen an erosion of the City's physical heritage. Raleigh's high rate of growth presents continuing issues today:

- Fragility of the City's historic identity. Historic resources as a percentage of Raleigh's built environment are becoming rare. Only six percent of the City's housing dates from before 1950;
- Tension between the modest scale of Raleigh's historic downtown core, and the development pressures associated with a twenty-first century central business district in one of the country's 50 largest cities. Raleigh has the opportunity to distinguish itself from other large American cities through careful preservation of its historic core;
- Disparity between building size and zoning envelope: the size of existing buildings are frequently substantially smaller than the current zoning classifications' permitted building envelope, which puts economic pressure on historic resources;
- Lack of policy guidance for National Register-listed and -eligible properties;
- Lack of attention paid to unique and/or historic properties that do not have a formal designation;
- The residential teardown/infill phenomenon in designated National Register historic districts is eroding the architectural heritage of the City and affects the integrity of these neighborhoods. Impacts are also being felt in eligible historic districts, with the result that some are no longer eligible, and others are at risk;
- Raleigh's treasure of mid-century modern architecture is at risk from lack of recognition and appreciation;
- Lack of transitions around historic resources, which can sometimes lead to jarring juxtapositions of scale and proximity that detract from the character of the historic resource's setting;
- Under-marketing and simplistic presentation of Raleigh's historic assets by the city's tourism industry, along with lack of coordination and integration among those assets, weakens our economic development potential for heritage tourism;



- Lack of communication/understanding among City departments of the related roles/responsibilities in preservation; and
- The City's historic preservation program needs to be broadened to recognize landscapes and archaeological resources. It is heavily weighted towards buildings and architectural significance, and neglects the wider sphere of cultural resources, including but not limited to designed and natural landscapes, cemeteries, view corridors, archaeological resources, and other forms of cultural heritage.

More information on these issues can be found in the Historic Resources chapter of the 2008 City of Raleigh *Community Inventory Report*.

Historic preservation is fundamentally related to the City's development history, and preservation issues and impacts can be encountered in all of the Comprehensive Plan's elements. The policies of the Historic Preservation Element advance all six vision themes that serve as the overarching goals of the 2030 Comprehensive Plan.

Relative to *Economic Prosperity and Equity*, adaptive use and rehabilitation of existing buildings serve the small entrepreneur locating a start-up business just as they do the larger developer using tax incentives for rehabilitation. Each dollar spent on rehabilitation creates more local jobs than new construction, and more of that dollar stays in the local economy, circulating multiple times. Historic preservation is also the necessary first step to capitalize on the City's heritage tourism potential.

Rehabilitation of existing housing units and adaptive use of other building types for housing *Expands Housing Choices* by providing residents with options that possess deeper cultural meaning and unique design qualities. The smaller size of many historic dwellings contributes to the City's stock of market-rate affordable housing and workforce housing.

Historic preservation helps to *Manage our Growth* by promoting the re-use of existing buildings and resources by maintaining their utility or reversing decay. This reduces the leapfrogging and abandonment effects of sprawl by retaining and enhancing the quality of life in already developed areas of the City.

Historic development patterns integrated land use and circulation in a compact street grid serving multiple modes of transportation. Preservation maintains these human-scale higher-density historic patterns of development, furthering the goal of *Coordinating Land Use and Transportation*.

Carl Elefante, AIA, LEED AP aptly coined the phrase, "The greenest building is one that is already built." In addition to using green building technology in new construction, sustainable development also embraces the preservation of existing buildings and structures. Reusing existing buildings saves landfill space and the energy expended in recycling materials from demolition. Historic preservation also plays a strong role in economic sustainability and social/cultural sustainability, advancing the Comprehensive Plan's goal of *Greenprint Raleigh*.

Many of Raleigh's historic neighborhoods with mature tree canopies and distinctive architectural character are attractive residential communities, contributing to the goal of *Growing Successful Neighborhoods and Communities*. Historic preservation conserves the best qualities of these places by preventing unnecessary demolition through restoration, rehabilitation, and adaptive use of existing structures, while ensuring that new construction is in keeping with the special character of the neighborhood and community.

Policies and actions to implement the Historic Preservation Element appear in the next section. To track the efficiency of the City's policies, numbers that relate to the City's six vision themes are used throughout the policy section as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

The Two Designation Programs: Federal and Raleigh

The ***National Register of Historic Places*** is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation for their local, statewide, or national significance in American history, architecture, archaeology, and culture. Though the National Register is a federal program, nominations are submitted by the states through state historic preservation offices. The listing of a property in the National Register places no obligation or restriction on a private owner using private resources to maintain or alter the property. Over the years, various federal incentives have been introduced to assist private preservation initiatives, such as the rehabilitation tax credit. Maps **HP-1** and **HP-2** illustrate existing and potential National Register individual and district listings.

National Historic Landmarks are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. Today, fewer than 2,500 historic places bear this national distinction. Map **HP-1** identifies Raleigh's three National Historic Landmarks.

The ***Raleigh Historic Landmark and Historic Overlay District*** designations should not be confused with National Register listings. These designations are made by the Raleigh City Council on the recommendation of a local historic preservation commission. This program of local designation is an option available to local governments under North Carolina enabling legislation (G.S. 160A-400). Local designation establishes a design review process to preserve the special character of historically significant landmarks and districts. Historic landmarks are also eligible for a 50 percent property tax deferral. Maps **HP-3** and **HP-4** show Raleigh's existing and potential designations of individual landmarks and historic overlay districts.

Table HP-1 Historic Designation Programs

	Federal/State	Local (Raleigh)
Buildings, structures, objects, sites (individual)	• National Historic Landmarks • National Register of Historic Places	• Raleigh Historic Landmarks
Districts	• National Historic Landmarks • National Register of Historic Places	• Historic Overlay Districts

CITY OF RALEIGH COMPREHENSIVE PLAN

Existing & Potential National Individual Listings

Downtown Inset

MAP HP-1

National Register of Historic Places

National Historic Landmarks

- Christ Church
- Josephus Daniels House
- NC State Capitol
- National Individual Listings
- Potential National Individual Listings

ETJ

Highway

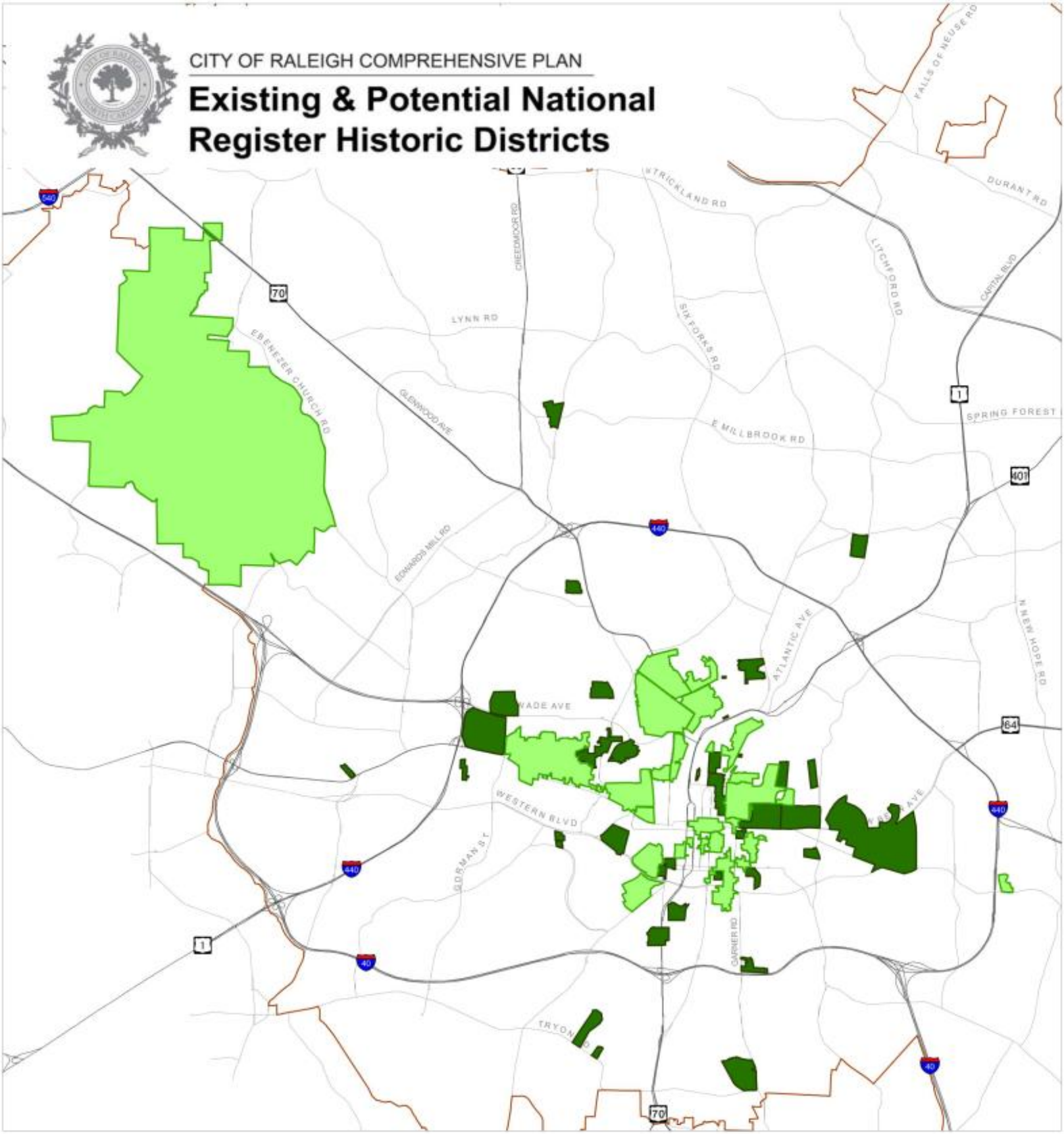
Major Streets

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division

CITY OF RALEIGH COMPREHENSIVE PLAN

Existing & Potential National Register Historic Districts



MAP HP-2

National Register of Historic Places Historic Districts

Existing

Potential

ETJ

Highway

Major Streets

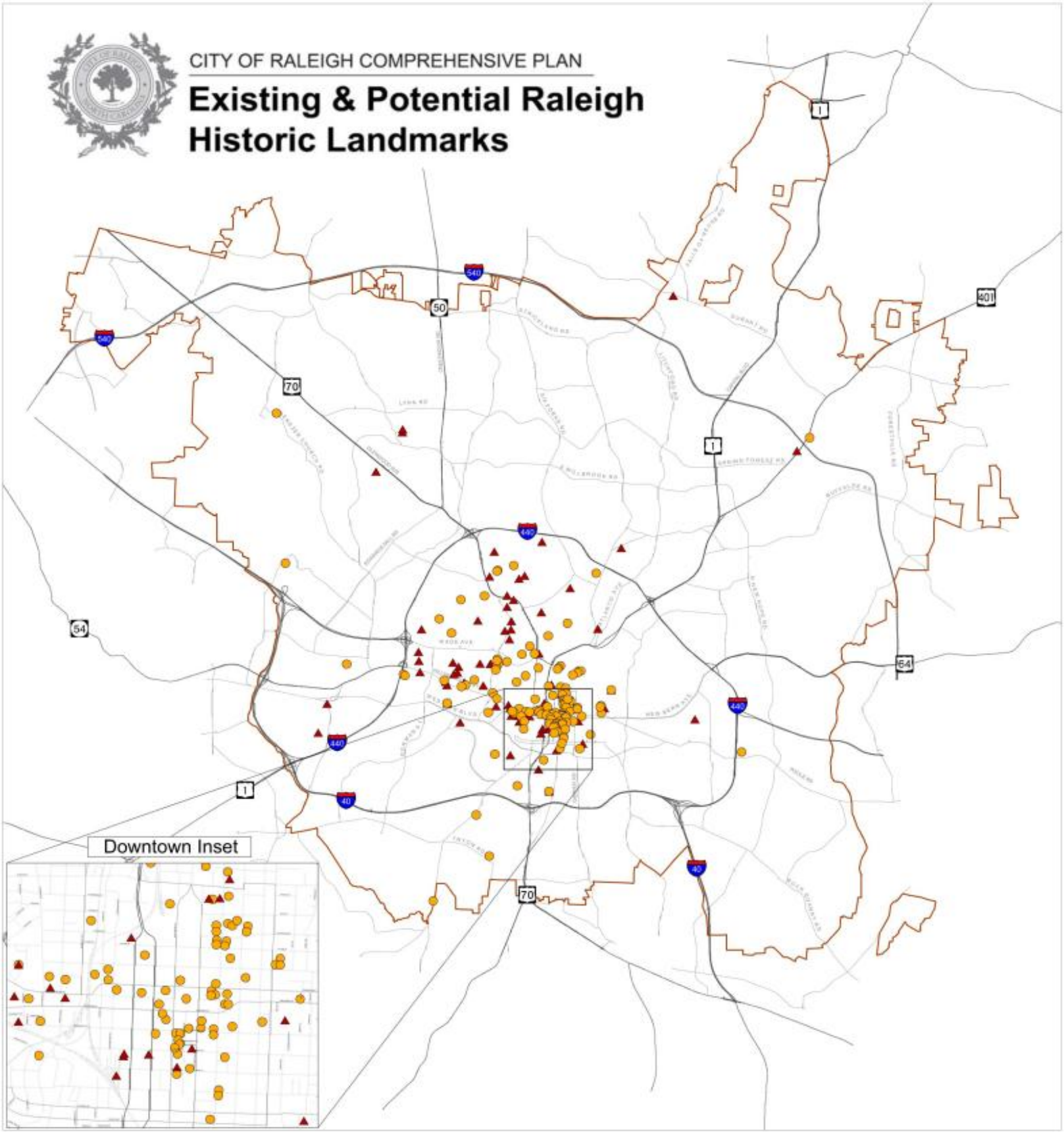
Miles

0 0.5 1

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division

CITY OF RALEIGH COMPREHENSIVE PLAN

Existing & Potential Raleigh Historic Landmarks



MAP HP-3

- Raleigh Historic Landmarks
- Potential Raleigh Historic Landmarks

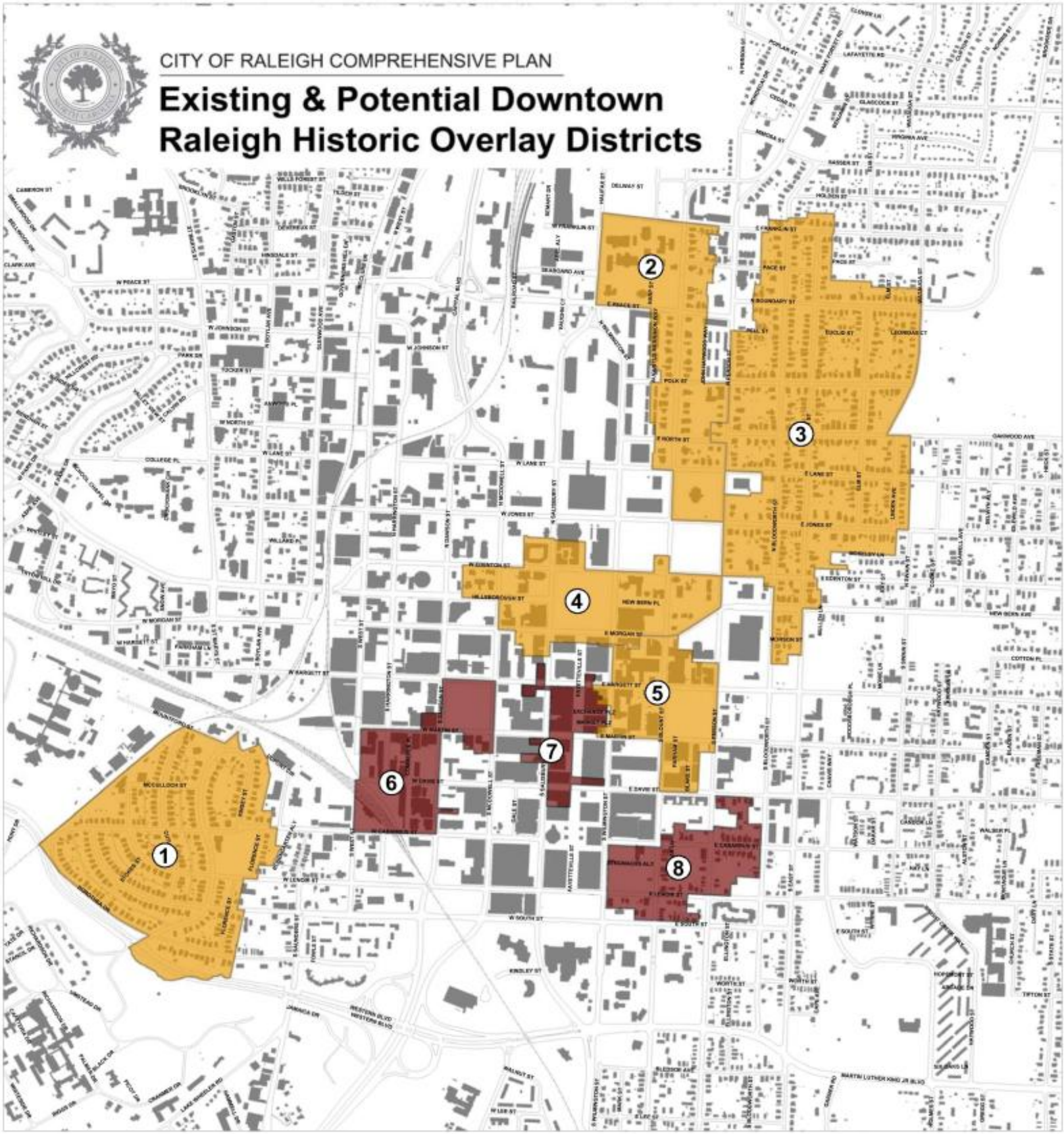
ETJ
Highway
Major Streets

Miles
0 0.5 1 2

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

CITY OF RALEIGH COMPREHENSIVE PLAN

Existing & Potential Downtown Raleigh Historic Overlay Districts



MAP HP-4

Existing

1. Boylan Heights
2. Blount Street
3. Oakwood
4. Capital Square
5. Moore Square

Potential

6. Depot
7. Fayetteville Street
8. S. Person / S. Blount

Buildings

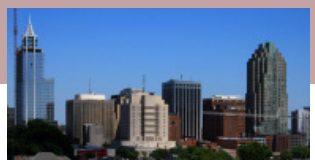
Railroads

Streets

N

0 250 500 1,000 Feet

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



J.1 Raleigh's Historic Identity

Created in 1792 as the planned site for the capital city of North Carolina, Raleigh carries a certain expectation of cultural dignity associated with a seat of government. Historic resources help convey that image. They also provide the special character and scale that distinguish Raleigh from other places and give the city a certain southern-style livability. This broader view does not diminish the importance of protecting significant landmarks. Rather, it seeks to recognize and preserve the essence of a historic southern capital city, conserve that essence, and recognize its value in shaping Raleigh's future urban form. Preservation seeks to capitalize upon and nurture those distinctive places, neighborhoods, and landscapes that make our city unique. Preservation seeks to ensure that we do not overlook the built and natural environments that define our cultural identity.

The following overarching policies relate to the city's historic identity.

Policy HP 1.1

Stewardship of Place

Foster stewardship of neighborhood, place, and landscape as the City grows and develops. (1, 2, 3, 4, 5, 6)

Policy HP 1.2

Cultural and Historic Resource Preservation

Identify, preserve, and protect cultural and historic resources including buildings, neighborhoods, designed and natural landscapes, cemeteries, streetscapes, view corridors, and archaeological resources. (1, 2, 3, 4, 5, 6)

Policy HP 1.3

Economic Value of Preservation

Promote the City's cultural and historic identity as an economic asset. (1, 5, 6) *See also Element D: 'Economic Development' for heritage tourism policies.*

Action HP 1.1

Historic View Corridors

Conduct a historic view corridor analysis. Develop strategies to protect identified historic view corridors.

Action HP 1.2

Evaluation of Archaeological Significance

Research other municipal archaeology programs and consider incorporating archaeological considerations in development plan review to ensure that archaeological significance is evaluated.

Action HP 1.3

Cultural Tourism Marketing

Collaborate with the Greater Raleigh Convention and Visitors Bureau, the Greater Raleigh Chamber of Commerce, Downtown Raleigh Alliance, owners of heritage sites, and other stakeholders in Wake and surrounding counties to develop cohesive historic identity themes, marketing products, and leisure experiences for residents and visitors.

Action HP 1.4

Wayfinding Signage

Include historic resources in the City's wayfinding signage system.

Action HP 1.5

Special Street Signs

Explore installing special white-on-brown street identification signs in locally-designated historic districts.

J.2 Planning, Zoning and Neighborhood Conservation

Raleigh is fortunate to have a collection of exceptional historic, pre-war, and post-war residential neighborhoods that have retained their ability to attract new residents and investment. These areas are marked by their intimacy of scale, maturity of landscape and tree canopy, and integration with historic commercial streets and centers.

Survey and identification of historic resources provide the foundation for planning tools to protect and enhance the City's historic identity on a citywide scale. Regular updating of the survey is necessary to reflect the passage of time, the recognition and development of new historic contexts, and the progression of professional standards. Planning and zoning tools sympathetically applied can enhance the limited protection for historic resources gained by local historic designation programs. The following policies address planning and regulatory approaches and improvements that can be applied citywide to meet the City's historic preservation goals.

Policy HP 2.1

Historic Property Inventories

Maintain accurate inventories of eligible historic properties in city databases using all available technologies so properties can be considered in planning and development actions. (1, 2, 3, 5, 6)

Policy HP 2.2

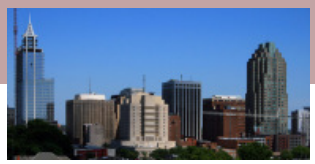
National Register Listing

Support the nomination of eligible historic resources for listing on the National Register of Historic Places. (1, 2, 3, 5, 6)

Policy HP 2.3

Raleigh Historic Designation

Encourage and sponsor the designation of eligible historic resources for local protection. (1, 2, 3, 5, 6)



Policy HP 2.4

Protecting Historic Neighborhoods

Protect the scale and character of the City's historic neighborhoods while still allowing compatible and context-sensitive infill development to occur. (1, 2, 3, 4, 5, 6)

Policy HP 2.5

Conserving Older Neighborhoods

Develop plans and programs to conserve older neighborhoods that have a unique scale and identity, but are not yet protected by an overlay district. (1, 2, 3, 4, 5, 6)

Policy HP 2.6

Contextual Historic Landscapes

Retain, protect, and maintain access to open spaces and significant natural features such as streams, mature trees, and hills that are adjacent to and contribute to a historic resource. (3, 5, 6)

Policy HP 2.7

Mitigating Impacts on Historic Sites

Development proposals adjacent to or including historic sites should identify and minimize or mitigate any negative development impacts on those sites. (3, 6)

Policy HP 2.8

Preservation and Capital Project Planning

Protect and mitigate the adverse impacts of City capital projects on National Register-listed and -eligible resources. (1, 2, 3, 4, 5, 6)

Action HP 2.1

Existing Survey and Designation Reports

Evaluate previous survey areas and designations; update surveys and designation reports as necessary to reflect current professional standards, new historical contexts, and the passage of time. Include view corridor, landscape, and archaeological considerations.

Action HP 2.2

Periodic Updates of Survey

Conduct survey updates when necessary but at least every 10 years to identify resources gaining significance due to the passage of time.

Action HP 2.3

Historic Resource GIS Data

Use GIS to map current and future historic architectural survey information and to identify areas of cohesive character. Apply preservation planning tools in these areas.

Action HP 2.4

Historic Landscape Surveys

Conduct an open space and designed landscape survey and ensure that landscape significance is evaluated in every designation application.

Action HP 2.5

Local Landmark Designation

Identify and designate any eligible properties not currently designated as Raleigh Historic Landmarks.

Action HP 2.6

Downtown Historic Overlays

Consider designating local historic overlay districts in downtown for Fayetteville Street National Register district, Depot National Register district, and South Person-South Blount Streets redevelopment plan area.

Action HP 2.7

Applying Zoning Regulations and Planning Tools

Use Historic Overlay Districts, Neighborhood Conservation Overlay Districts, and other zoning regulations and planning tools in response to neighborhood requests for protection and conservation.

Action HP 2.8

Transfer of Development Rights

Explore the use of transfer of development rights to protect historic landmarks.

Action HP 2.9

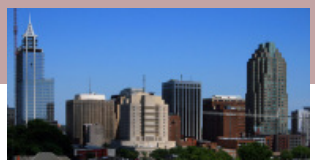
Limited Historic Overlay District

Explore creation of a new historic overlay district that would require limited design review for existing structures as a means of making historic designation more appealing to eligible residential districts.

Action HP 2.10

Preservation Criteria for Capital Projects

Establish and apply project planning criteria that require evaluation and mitigation of adverse impacts to historic resources for all City capital projects.



Action HP 2.11

Assessing Impacts to Historic Resources

Revise the review standards for rezoning petitions, subdivisions, and site plan applications to require that submittals provide an analysis of potential impacts on local or National Register-listed historic resources. Where adverse impacts are identified, require proposals to minimize and mitigate such impacts.

Action HP 2.12

Economic Hardship Provisions

Seek local state enabling legislation to allow economic hardship as a consideration in Certificate of Appropriateness deliberations.

J.3 Housing and Building Codes, Rehabilitation, and Adaptive Use

Preservation of architectural resources on an individual basis depends in large measure upon the continuing utility and economic performance of the building. Property owners act as stewards of historic resources valued by the broader community. The writing, interpretation, and application of public codes that govern building improvement activities and life safety can either encourage or hinder owners in building preservation. The following policies address the regulatory environment for maintaining, improving, and adapting historic structures for continuing use.

Policy HP 3.1

Adaptive Use

Encourage adaptive use of historic properties to preserve cultural resources and conserve natural resources. (1, 2, 3, 5, 6)

Policy HP 3.2

Retention Over Replacement

Encourage the preservation and rehabilitation of significant or contributing existing structures, favoring retention over replacement, especially in areas where other historic resources are present. (1, 2, 3, 5, 6)

Policy HP 3.3

Adaptive Use and Parking

Additional parking required for nonresidential adaptive use should be located to the rear of the historic structure. (1, 3, 5, 6)

Policy HP 3.4

Context Sensitive Design

Use the existing architectural and historical character within an area as a guide for new construction. (1, 3, 5, 6)

Policy HP 3.5

Existing Building Code

Encourage the application of the state Existing Building Code for historic resource rehabilitation proposals. (1, 2, 3, 5, 6)

Policy HP 3.6

Minimum Housing Code Application

Apply the City minimum housing code in a manner that ensures the preservation of historic resources. (1, 2, 3, 5, 6)

Policy HP 3.7

Demolition

Discourage speculative demolition of historic resources and the removal of historic resources prior to issuance of building permits for new construction on the site. Replacement proposals should provide justification for demolition and removal. (1, 2, 3, 5, 6)

Action HP 3.1

Parking Reduction for Adaptive Use

Initiate a City Code text change to reduce parking requirements for adaptive use projects to minimize site development impacts for historic sites and neighborhoods.

Action HP 3.2

Historic Resources and Affordable Housing

Identify historic resources that can be successfully used to meet the City's housing goals. Low-income housing and historic rehabilitation tax credits can be combined when historic structures are rehabilitated for affordable housing.

Action HP 3.3

Housing Code and Preservation Coordination

Coordinate the Inspections Department's minimum housing code enforcement activities with the City Planning Department's preservation staff in identifying and determining public hazards that involve historic resources and encouraging the owner to abate the violation through repair, not demolition.

Action HP 3.4

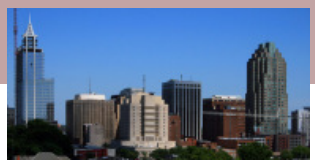
City Repair and/or Acquisition

Develop City procedures to abate violations affecting historic resources through repair and/or acquisition rather than demolition when the owner is uncooperative.

Action HP 3.5

Unsafe Building Code and Preservation

Evaluate potential Unsafe Building determinations against the Code of General Ordinances Division II, Part 10, Chapter 6., Article J. "Demolition by Neglect of Historic Landmarks and Structures within Historic Overlay Districts" to determine which enforcement tool would most likely result in abatement of the violation and preservation of the resource.



Action HP 3.6

Demolition Permit Conditions

Institute permit mechanisms based upon specific criteria and findings so that demolition permits for National Register designated property or Raleigh designated historic resources approved for removal are only issued at the time of submittal for new construction building permits.

Action HP 3.7

Demolition Denial Criteria

Explore feasibility of seeking local state enabling legislation modeled after New Bern, NC to allow demolition to be denied based on meeting specific criteria.

J.4 Coordination and Outreach

There are a wide range of private, non-profit, and public owners and stakeholders involved in the conservation of the City's historic resources. Broader awareness of the goals, policies, and incentives for historic preservation by individual property owners can aid the process of preserving and rehabilitating resources. Awareness of historic resources can also create civic pride and foster a stronger sense of civic identity for Raleigh's residents. Collaboration among stakeholders can leverage historic preservation tools to meet complementary goals and objectives. The following policies will encourage agencies, organizations, and citizens to build support for and strengthen the effectiveness of historic preservation activities.

Policy HP 4.1

Preservation Awareness

Promote awareness and appreciation of Raleigh's cultural heritage and historic resources. (1, 3, 5, 6)

Policy HP 4.2

Preservation and Other Goals

Encourage the use of preservation tools to advance housing diversity and market affordability, economic development, environmental sustainability, parks and recreation, and urban design. (1, 2, 3, 4, 5, 6)

Policy HP 4.3

Interagency Coordination

Promote interagency coordination among the City Planning, Inspections, Public Works, Public Affairs, Parks and Recreation, Community Development, and other departments/agencies as needed, as well as the State Historic Preservation Office, to provide the City with the most effective preservation programs and services. (1, 2, 3, 4, 5, 6)

Policy HP 4.4

Support for Preservation Organizations

Continue to support the efforts of the Raleigh Historic Districts Commission and the Wake County Historic Preservation Commission, as well as by working with other public, private, and non-profit entities. (1, 2, 3, 4, 5, 6)

Policy HP 4.5

Support for Neighborhoods

Support neighborhood efforts to pursue both federal and Raleigh historic designations, and to make use of zoning overlay districts. (1, 2, 3, 6)

Policy HP 4.6

Resource Protection in Future Urban Areas

Significant historic buildings and properties in the Urban Service Area should be incorporated into future park facilities. (3, 5, 6)

Policy HP 4.7

Mid-Century Modern

Recognize and celebrate Raleigh's mid-century modern architecture. Promote the preservation and rehabilitation of these properties. (1, 2, 3, 5, 6)

Policy HP 4.8

State and Federal Programs

Take full advantage of state and federal historic preservation support programs. (1, 2, 3, 4, 5, 6)

Action HP 4.1

Public Outreach

Develop outreach programs to educate the public on the various federal and local preservation programs outlined in the Historic Preservation Element.

Action HP 4.2

Preservation Advocacy Group

Work to create an independent non-profit advocacy group for historic preservation focused on Raleigh.

Action HP 4.3

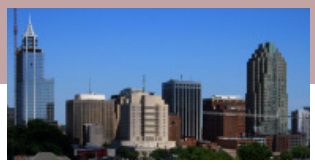
Rehabilitation Development Corporation

Establish a non-profit "Rehabilitation Development Corporation" in collaboration with the Community Development Department, Wake Tech, and the Small Business Incubator to rehabilitate existing housing units; train craftspersons in preservation technology, skills, and appropriate design; and establish small business entrepreneurs in rehabilitation fields such as window repair and millwork.

Action HP 4.4

***In The Districts* Newsletter**

Resume regular publication of the Raleigh Historic Districts Commission (RHDC) newsletter *In The Districts* and broaden its scope and distribution.



Action HP 4.5

Certified Local Government

Maintain the City's participation in the federal Certified Local Government (CLG) program.

Action HP 4.6

Preserve America Designation

Seek designation of the City as a federal "Preserve America Community."

J.5 Funding and Incentives

Federal, state, and local governments have a responsibility to protect cultural and heritage resources on behalf of the entire community. In addition to planning and regulatory tools, funding and tax incentives are frequently applied to assist in advancing historic preservation goals. Financial considerations are a major factor in the continued utility, economic performance, and community-wide heritage value of historic resources. The following policies address the City's investments in preservation as well as financial incentives provided by other entities.

Policy HP 5.1

City Support for Preservation Planning

Coordinate and expand City funding and incentives for preservation planning to reduce the current designation backlog and keep pace with growth and redevelopment pressures on historic resources. (1, 2, 3, 4, 5, 6)

Policy HP 5.2

Outside Support for Preservation

Seek opportunities to leverage outside funding, incentive, and acquisition programs. (1, 2, 3, 4, 5, 6)

Policy HP 5.3

Financial Incentives for Preservation

Promote the availability of the Raleigh Historic Landmark property tax deferral incentive and state and federal rehabilitation tax credit programs. Note their value as economic development tools as well as historic preservation incentives. (1, 2, 3, 4, 5, 6)

Action HP 5.1

Historic Overlay District Tax Deferral

Seek state enabling legislation authorizing Raleigh to grant a limited property tax deferral for properties in historic overlay districts, similar to the program for historic landmarks.

Action HP 5.2

Historic Preservation Loan Fund

Evaluate the past use and purposes of the City's current Revolving Historic Preservation Loan Fund; consider broader authorized purposes such as City acquisition of historic properties, housing and unsafe building code violation repairs, gap financing, and other potential uses.

Action HP 5.3

Preservation Easements and Acquisition

Continue to work with identified public, private, and non-profit entities to obtain preservation easements or restrictive covenants that preserve historic properties. Promote the tax benefits of donations and bargain sales.

Action HP 5.4

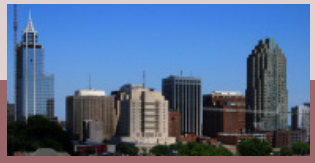
Preserve America Grants

Apply for federal Preserve America Community grants for heritage tourism projects.

Action HP 5.5

Property Tax Freeze for Certified Rehab

Support state enabling legislation to create a property tax freeze program for certified rehabilitation of designated historic resources.



Arts and Culture

Element K: Arts and Culture

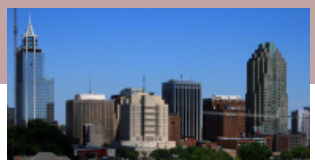
Arts and culture are an integral part of a city's enduring spirit and vitality. This is demonstrated in Raleigh's thriving art galleries, entertainment venues, and cultural events. Raleigh's commitment to arts and culture is essential to the health, well-being, and vitality of the City. In an era of competition for resources, residents, businesses, and tourists, it provides the defining competitive edge that attracts the 'creative class.' It enriches the daily lives of all its residents by providing a deeper understanding, tolerance, and respect for diverse communities. Providing the opportunity to experience and cultivate an appreciation for arts and culture among new audiences is a City aspiration. This will help secure Raleigh's reputation as the region's premier center for arts and culture, and can help preserve Raleigh's heritage and define its legacy.

In 2007, the City of Raleigh Arts Commission (CORAC), and leaders from the Raleigh arts and business community came together to form a 30th Anniversary Committee to inspire the continued growth and appreciation of the arts in Raleigh. The result was the Action Blueprint for Raleigh Arts. The Blueprint outlines numerous strategies to increase participation, funding and marketing of the arts. As part of the effort to refocus community perceptions, 46 cultural organizations, including the Raleigh Symphony, Artsplosure, PineCone, NC Master Chorale, and others that the Arts Commission funds through grant applications/awards, came together to create the 'Declaration of Raleigh Arts' stating that the Arts in Raleigh will *"Entertain, Educate, Enrich, Embolden, Elevate, Enlighten, Enliven, Engage, Enhance, Energize and help Envision our community!"*

This Arts and Culture Element provides a consolidated framework to support and integrate the visual, performing and literary arts in Raleigh. Its recommendations address some of the primary issues that the City needs to focus on, including:

- Absence of a reliable stream of public or private funding to commission and support public art in the City;
- An Arts Commission that is tasked with implementing a comprehensive public art program, but has minimal funds allocated for public art;
- A planning process for public and private projects that does not incorporate public art as an integral part of the process;
- Lack of any formal designation or program for arts districts, and only one informally-known arts district clustered around Moore Square in downtown;
- Need for incentives that would encourage artists to select Raleigh as their preferred location in the area; and
- Lack of coordination among the numerous venues and cultural facilities that are located far apart.

A thriving arts and cultural scene in Raleigh will help the City to realize its vision theme of *Economic Prosperity and Equity*. Between 1998 and 2006, employment in the arts/entertainment and accommodations/food services sector increased by 3.7 percent, making it the second fastest growing industry in Raleigh. Creating opportunities for local artists by promoting art in public places and hosting cultural events such as film festivals, music and dance festivals, and restaurant weeks will further strengthen this industry and increase Raleigh's economic stability. Additionally, increasing opportunities for art in public spaces will bring an awareness and appreciation for the arts in the daily lives of all of Raleigh's residents, regardless of race, ethnicity, or income boundaries.



The impact of the arts on Raleigh's economy is significant. In 2006, the United Arts Council of Raleigh and Wake County, the Greater Raleigh Chamber of Commerce, and the Greater Raleigh Convention and Visitors Bureau in conjunction with Americans for the Arts, sponsored an economic impact study of Wake County's non-profit arts and culture organizations and their audiences. The study found that in 2005, Wake County's non-profit arts and culture industry generated over $100 million in local economic activity from direct spending by the industry and event-related spending by their audiences. The non-profit arts and culture industry also employed almost 4,000 full-time employees in 2005, making it the 10th largest employer in the county, up from being the 20th largest employer in 2000. The majority of the county's arts organizations are located in Raleigh.

Improving Raleigh's arts and cultural resources will help the City to achieve the vision theme, *Growing Successful Neighborhoods and Communities*. Non-profit organizations like Artspace have already played a significant role in revitalizing downtown Raleigh by convincing art organizations and artists to bring exhibitions and educational programs to the community. By bringing visitors to the Moore Square Arts District, Artspace has spurred a cultural resurgence, with numerous other museums and arts venues locating in downtown Raleigh.

The City of Raleigh boasts of an impressive repertoire of museums and events venues, such as the African American Cultural Complex, Alltel Pavilion at Walnut Creek, Artspace, Progress Energy Center for the Performing Arts, Marbles Kids' Museum, and the Raleigh Museum of Natural Sciences, to name a few. (To see a detailed listing of Raleigh's existing cultural assets and entertainment venues, refer to the Community Facilities chapter of the City of Raleigh *Community Inventory Report*.)

To continue to provide the quality of life and entertainment opportunities desired by Raleigh's diverse population, the City is investing in the construction of additional cultural facilities and venues. To this end, the Raleigh Convention Center opened in downtown Raleigh in September 2008, and the Raleigh Contemporary Art Museum will also soon be moving to its new and consolidated facility in downtown Raleigh's Warehouse District. Additionally, incorporating artists' studios and live-work units in these neighborhoods will help the City to achieve its goal of *Expanding Housing Choices* for its residents.

There are a number of other up-and-coming areas that could become hubs for performing arts, such as on the City's western side where the RBC Center and North Carolina Fairgrounds are located. Creating arts/entertainment districts in neighborhoods with a large anchoring venue or a group of smaller complementary arts or entertainment facilities could generate spin-off activities, such as guided city tours, restaurants, and gift shops. This will help bring about revitalization and an enhanced sense of place and identity to these areas.

Policies and actions in the Arts and Culture Element appear in the next section. To track the efficiency of the City's policies, numbers that relate to the City's six vision themes are used throughout the policy section as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation

5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

K.1 Public Art

The City of Raleigh Arts Commission (CORAC) developed an arts advocacy plan in 2007 to encourage Raleigh residents to participate in the arts, give to the arts, and advocate for the arts. Public art is an excellent way to create a diverse audience for the arts. Raleigh has the opportunity to foster the arts by integrating public art into the City's landscape.

The City of Raleigh recently adopted an interim Percent for Arts Program to fund public art. The program allocates one-half of one percent of direct construction costs of selected projects for the creation, installation, and maintenance of permanent works of public art. Private developers are not required to provide public art, but there is a public art density bonus provision for residential projects in the Downtown Overlay District. A formally adopted document, 'Public Art Policy and Approval Process,' is used by CORAC to review public art in Raleigh. It is not codified, and the process is inefficient and needs to be further examined and enhanced.

Public art should be incorporated into both public and private developments. The plans for Fayetteville Street and City Plaza explicitly contemplated that public art would be a part of these downtown projects. The City Plaza design reserves areas for future art installations. As the City develops its network of green streets, it should also explore innovative ideas for incorporating art in the public realm by creating art walks and cultural heritage trails along certain routes.

Policy AC 1.1

Public Art and Neighborhood Identity

Encourage the use of public art to create a neighborhood identity. (6)

Policy AC 1.2

Public Art in Public Spaces and Public Projects

Install public art in City, county, and state-owned public and community facilities, City parks, and the greenway system, and incorporate public art into the planning stages of publicly-funded projects and projects on City-owned land. (1, 6)

Policy AC 1.3

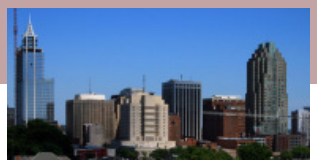
Art and Facades

Support the temporary re-use of vacant and/or underutilized building facades for art exhibitions and murals. (1, 6)

Action AC 1.1

Comprehensive Art Program

Empower the Arts Commission to implement a comprehensive art program.



Action AC 1.2

Public Art Master Plan

Develop a public art master plan that reflects a coordinated vision to bring privately-funded art to the public realm. The plan should highlight significant places in the City and include an inventory of possible future sites for public art.

Action AC 1.3

Public Art Approval Process

Revise and codify the Public Art Policy and Approval Process to streamline the procedure used to evaluate new public art in the City.

Action AC 1.4

Public Art Funding

Explore innovative public and private funding opportunities for public art.

Action AC 1.5

Density Bonuses for Art

Explore the possibility of expanding the public art density bonus provision for residential projects in the downtown overlay district to include commercial/mixed-use projects and projects in other areas in the City.

Action AC 1.6

Downtown Art Installations

Install public art in locations reserved for art installations on Fayetteville Street and in City Plaza.

K.2 Art and Entertainment Districts

The Moore Square Arts District is currently Raleigh's only prominent arts district. It is not formally designated, but its image is shaped by the presence of several art galleries, anchored by Artspace. Glenwood Avenue and the Warehouse District are two other areas that are up-and-coming arts districts due to the clustering of numerous galleries. Beyond downtown Raleigh, there are some art galleries in the North Hills Mall area, which is being promoted as the Midtown Entertainment District.

There are no incentives such as property tax credits for artists and arts establishments that locate in these arts districts. The City of Raleigh Arts Commission, however, has worked with arts organizations to help purchase buildings downtown, including Artspace and Burning Coals Theater. It also helps to fund the First Friday Gallery Walk, an organized arts outreach effort in the Moore Square Arts District.

Entertainment venues in Raleigh are scattered around the City. However, the Progress Energy Center for the Performing Arts has four theatres located within its building space. It could be considered as an entertainment complex and anchor for a larger entertainment district that extends up Fayetteville Street to the Raleigh Convention Center and over to Moore Square and Artspace.

Creating arts and entertainment districts in areas where a number of visual or performing arts venues are located will revitalize and activate under-utilized areas and encourage artists to locate their studios in the area. Arts districts can also attract private and public sector development and housing investments to a neighborhood. Collaboration

interdepartmentally and with the county and state is another capacity-building tool the City can use to formalize the designation and funding of arts and entertainment districts. This can go a long way toward promoting the arts in Raleigh.

Policy AC 2.1

Arts Districts Promotion and Designation

Promote and sustain arts districts. Encourage the designation of existing clusters of arts establishments as Arts Districts. (1, 3, 6)

Policy AC 2.2

Leveraging Funds for Arts

Coordinate with the county and state to formally adopt and designate Arts and Entertainment Districts to leverage revitalization funds for the arts. (1, 3, 6)

Action AC 2.1

Arts Overlay Zones

Consider amending the City's Zoning Code to create Arts/Entertainment Overlay Districts. (See Text Box: *Arts/Entertainment Overlay Districts.*)

Action AC 2.2

Cultural Enterprise Zones

Designate Cultural Enterprise Zones to provide tax incentives and subsidies that attract cultural organizations and private investors to culturally viable areas of the City. (See Text Box: *Cultural Enterprise Zones.*)

Action AC 2.3

Arts in RFPs

Include an arts component in development Requests for Proposals for City-owned sites, especially Sites 2 and 3 at the intersection of Fayetteville and South streets in downtown.

Action AC 2.4

Moore Square, Glenwood and Warehouse Arts Districts

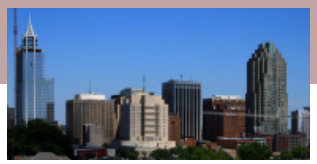
Work with arts groups and artists active in the following areas to formalize and designate the following as Arts and Entertainment Districts:

- Moore Square Arts District
- Glenwood Avenue Arts District
- Warehouse Arts District.

Arts/Entertainment Overlay Districts

Arts/Entertainment Overlay Districts are mixed-use areas where a high concentration of arts and cultural facilities serve as an anchor of attraction supplemented by restaurants and retail uses. They are overlay zones in the Zoning Code and are used to encourage a scale of development, a mixture of building uses, and other attributes that foster the arts and facilitate pedestrian and vehicular movement. Arts/Entertainment Overlay Districts also require that a designated percentage of the ground level area of the buildings be occupied by arts and related uses, such as art centers, art galleries, art schools, artists' housing and studios, art supply stores, book stores, museums, and theaters.

Developers are allowed bonus densities if they meet the requirements of the overlay district. Other requirements pertaining to design,



appearance, signs, size, landscaping, and other such requirements may also be imposed to protect neighboring property and to achieve the purposes of the overlay district.

Cultural Enterprise Zones

Cultural Enterprise Zones are areas within the City where commercial and non-profit arts and cultural organizations have clustered. The combination of office space, rehearsal and performance space, retail boutiques and galleries, and studio and living spaces for individual artists can trigger the revitalization and economic resurgence of the neighborhood. Tax incentives and subsidies are used to attract cultural organizations and private investors to such areas.

K.3 Arts and Cultural Venues

Although Raleigh's collection of museums, art galleries, theaters, and other performance venues is impressive, there is a lack of performing arts venues for theater and other performance groups. In response to its growing population, Raleigh must continue to evaluate and expand its cultural venues to cater to the increasing entertainment needs of its residents.

Policy AC 3.1

Supporting the Arts

Support and maintain existing cultural facilities, programs, and events. (1, 3, 6)

Policy AC 3.2

New Cultural Arts Venues

Develop a range of new cultural arts venues to meet increasing demands from new and existing residents. (1, 3, 6)

Policy AC 3.3

Non-Traditional Venues

Encourage performances and events in non-traditional settings such as galleries and clubs in addition to traditional venues such as museums and concert halls. (1, 6)

Policy AC 3.4

Cultural Partnerships

Partner with area agencies, groups, and institutions (including colleges and universities) to broaden the cultural facilities and programs available to the public. (1, 6)

Policy AC 3.5

Encouraging Arts Clusters

Encourage connections between and among venues to locate proximate to one another in identifiable clusters or districts and in proximity to complementary uses such as coffee shops, dining and drinking establishments, and retail. (6)

Policy AC 3.6

Acquisition of Performance Sites

Continue to explore opportunities to acquire sites for use by the arts. (1, 3)

Policy AC 3.7

Public-Private Partnerships

Use public-private partnerships to create additional cultural centers in Raleigh. (1, 3)

Policy AC 3.8

Universal Access

Ensure that all facilities and venues are universally accessible. (1)

Policy AC 3.9

Live-Work Space

Encourage flex/live-work spaces and promote live-work units in affordable housing developments to provide housing options to artists and others who could benefit from such units. (1, 2, 6)

Action AC 3.1

Underwriting Arts Costs

Include appropriate revenue-producing and fund raising activities in community cultural centers to help underwrite the costs of operation.

Action AC 3.2

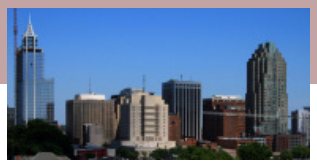
Venue Inventory

Maintain an inventory of existing cultural venues and identify sites for future venues.

Action AC 3.3

Live-Work Regulations

During the update to the City's development regulations, incorporate flex/live-work space for artists and other creative professionals as appropriate.



K.4 Economic Development Through the Arts

A flourishing arts and entertainment industry in Raleigh impacts much more than the employment of artists and generation of arts- and culture-based tourism revenue. Improving the quality of life through the arts attracts more knowledge workers to Raleigh. This, in turn, encourages creative industries to locate in the City.

See also Element D: 'Economic Development' for additional policies and actions.

Policy AC 4.1

Arts Training

Encourage partnerships with local universities to offer vocational training opportunities in arts/entertainment, such as graphic and web design, arts management, stage design, and lighting. (1, 6)

Policy AC 4.2

Private Support for the Arts

Encourage partnerships with the private sector and organizations to encourage monetary and non-monetary support for the arts. (1, 3, 6)

Policy AC 4.3

Partnership for Arts Development

Promote partnerships among arts organizations, educational institutions, and charitable foundations to enhance programming, funding, and facility development. (1, 3)

Action AC 4.1

Attracting Artists

Use tools such as incentives, start-up loans, and art incubators to encourage artists to locate in the City.

Action AC 4.2

Arts and Music Partnership

Develop a City-funded program of innovative public-private partnerships to support arts and music in Raleigh.

Action AC 4.3

Cultural Directory

Publish a Cultural Directory listing programs, services, and funding available from the City government and other public agencies.

Action AC 4.4

Cultural Tours

Work with the Convention and Visitors Bureau, Chamber of Commerce, and Downtown Raleigh Alliance to promote tour programs that increase awareness of the arts, culture, and architecture.

Action AC 4.5

Action Blueprint for Raleigh Arts

Implement the recommendations outlined in the Action Blueprint for Raleigh Arts to connect, communicate, and celebrate the arts.

K.5 Artistic and Cultural Identity

The ultimate reward for Raleigh in promoting arts and culture is to enhance its positive reputation for events and festivals. As the capital of North Carolina, Raleigh is already uniquely positioned to showcase the state's history and culture. In addition, annual art shows, film festivals, and concert events held around the same time every year can become a tourism generator of regional, national, and international renown. The African American Cultural Complex produces an annual outdoor performance of the drama "Amistad Saga: Reflections" in the last two weeks of July every year. The North Carolina State Fair is also held annually at the NC State Fairgrounds. Other events also enhance Raleigh's cultural identity and must be aggressively promoted. These include Artsplosure, a spring downtown arts festival; Raleigh First Night, the City's New Year's celebration; and the plays by the theater company Hot Summer Nights at the Kennedy, performed at the Progress Energy Center for the Performing Arts during the summer months every year.

Local universities and their students play a notable role in contributing to Raleigh's cultural identity. North Carolina State University has a very strong arts department and is active in theater, arts and crafts, and music. A number of other colleges such as Wake Technical Community College, St. Augustine's College, and Peace College offer courses in graphic design, visual arts, theater and film, and music.

Policy AC 5.1

Festivals and Arts Events

Promote and market events that support and encourage cultural tourism. Partner with art galleries, independent theaters, local universities and colleges, and the private sector in hosting and organizing annual festivals and arts events to establish a cultural identity for Raleigh. (1, 5, 6)

Policy AC 5.2

Engaging the Arts Community in Planning

Engage the arts community in local planning to understand how the City can support their activities and help them to expand and grow. (6)

Policy AC 5.3

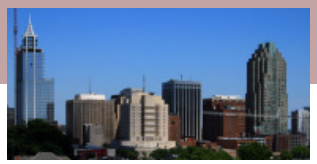
Cultural Districts

Promote the creation of Cultural Districts and/or Heritage Trails to highlight the rich cultural identity of Raleigh. (1, 6)

Action AC 5.1

South Park and Olde East Cultural Districts

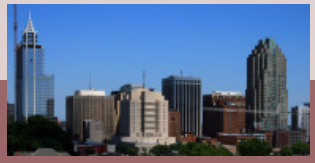
Implement the planned Cultural Districts for South Park and Olde East Raleigh.



Action AC 5.2

Cultural Heritage Office

Consider establishment of a new cultural heritage office tasked with managing City cultural assets and programs by coordinating departments with responsibilities for historic resources.



Regional and Inter-Jurisdictional Coordination

Element L: Regional and Inter-Jurisdictional Coordination

The effects of climate change, widespread inter-jurisdictional commuting patterns, and shifting economies require thinking and planning at a regional scale. Cities can no longer act in isolation, expecting that plans and actions terminating at political boundaries will maintain economic health, environmental assets, and residents' quality of life. Cities across the nation must now collaborate with other cities and counties, coordinating within and across jurisdictional boundaries to manage growth, development issues, and service provision.

Raleigh's continued success relies on its ability to plan and act regionally—this is one of the City's biggest challenges. Other regions across the nation are acting regionally and changing the way they plan; these regions can offer models of success and lessons learned as the City of Raleigh and the Research Triangle region move forward.

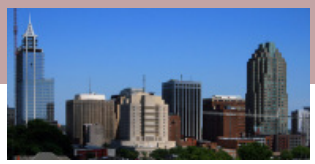
The City of Raleigh is one of many municipalities contributing to the Triangle region's economic success, benefiting from its natural resources, and responsible for its sustainability. Ensuring the economic, environmental, and social welfare of the extended region requires intergovernmental cooperation in planning and the provision of public services. Raleigh's regional challenges include transportation, land use and growth management, diversity of housing choices, economic development, education, protection of natural resources, mitigation of climate change, improvement of air quality, and provision of public services.

Some individual municipalities participate in regional matters through local planning, such as Orange County's regional park facility planning initiatives or Raleigh's participation in the Center of the Region Enterprise (CORE) plan development and implementation. At the county level, Wake County is pursuing the merger of all Wake County water and sewer systems into a single utility by 2015. Several public services are operated on a countywide basis—such as the public school system, public libraries, landfills, hazardous waste collection, and EMS service—and require local input for facility planning. In addition to these local efforts, regional policies and programs are also being developed by various organizations and regional bodies. The Triangle J Council of Governments (TJCOG) is active in regional land use and transportation planning. The Triangle region also has two main metropolitan planning organizations (MPOs) responsible for long-range regional transportation planning: Capital Area MPO (CAMPO), which governs the City of Raleigh, and Durham-Chapel Hill-Carrboro MPO (DCHC-MPO). The Burlington-Graham MPO and the North Carolina Department of Transportation (NCDOT) are also regional actors in transportation planning.

All of these groups plan for and carry out the regional transportation programs that affect land use, growth management, and resource planning. Organizations such as the Triangle Land Conservancy and Triangle GreenPrint seek to preserve open and green space to ensure responsible regional growth management. Triangle Tomorrow, through the Urban Land Institute's Reality Check, has initiated a planning effort on how to handle growth in the 15 counties that surround RTP over the next 20 years. The Research Triangle Region is projected to grow by 1.2 million people and add 700,000 jobs by 2030.

In addition to the MPOs and regional non-profit organizations that act locally, Raleigh has a series of ad-hoc taskforces, partnerships, and advisory groups that address specific regional concerns. Examples include the Western Wake Partnership for Wastewater Infrastructure ("Western Wake Partners") initiative to develop regional wastewater treatment facilities, the Wake County Growth Issues Taskforce, and the Special Transit Advisory Commission (STAC) tasked with developing and evaluating a vision for regional transit.

These state, local, county, non-profit, and ad-hoc efforts represent a regional awareness that certain types of mid- and long-range planning cannot take place within isolated political boundaries. Patterns and consequences of land use and development cross city and county lines. This regional awareness is transformed into local planning commitment as municipalities, including Raleigh, sign on to national (U.S. Mayor's Climate Protection Agreement) and



international (International Council for Local Environmental Initiatives - ICLEI) agreements to pursue more sustainable development and growth practices.

Current efforts at regional coordination are disparate and may not be able to accomplish separately what a more coordinated, unified program or entity might. The specific policies and actions described in this Regional and Inter-jurisdictional Coordination Element all fall under the broader goal of having improved and more effective regional governance. Raleigh and its regional neighbors must provide adequate public infrastructure, and improve regional mobility to keep up with the region's high population growth rate. Key issues addressed in this element include:

- A need to manage growth;
- Loss of rural land and character in areas where it might be preserved;
- A need to protect natural and historic resources;
- Reduction in green spaces and the need to offset the loss of natural areas in the region;
- Continually increasing travel times, traffic congestion, and reliance on the automobile;
- Challenge of providing adequate public utilities and facilities for a rapidly growing population—everything from drinking water and solid waste removal to public schools and community centers;
- Responsibility to change development and transportation patterns to improve air quality; and
- Stewardship of water resources and protection of water quality.

In working together as a region, each individual locality's ability to achieve its planning goals and to create visible and lasting change increases.

The Comprehensive Plan vision theme of *Managing Our Growth* cannot be accomplished without coordination with the State, Wake County and other jurisdictions within the greater Triangle region. Increased cross-commuting patterns, regional transportation planning, and state-level maintenance of roadways require that regional coordination occur to achieve the vision theme of *Coordinating Land Use and Transportation*. *Economic Prosperity and Equity* and *Greenprint Raleigh*—Sustainable Development also require that Raleigh partner and collaborate with other regional actors.

Policies and actions to implement this element appear below. Numbers indicate their relationship to the themes, as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh
6. Growing Successful Neighborhoods and Communities

L.1 Transportation Investments

The City of Raleigh partners with several organizations for transportation planning and implementation; these organizations include Capital Area MPO (CAMPO), North Carolina Department of Transportation (NCDOT), and Triangle Transit. Together with the City, these organizations provide residents of Raleigh and the Triangle region with a multi-modal system. NCDOT has primary responsibility for the maintenance of interstates, state highways, and bridges. CAMPO maintains the region's 2030 Long Range Transportation Plan, which includes plans not only for automobiles, but also for transit, bicycles, and pedestrians. The Raleigh area is served primarily by two transit services—the regional Triangle Transit (TT) and Raleigh's Capital Area Transit (CAT). Another locally-oriented transit system is North Carolina State University's Wolfline, which primarily serves the university but is also open to the general public.

Increasing population and changing patterns of development will place additional strain on the existing transportation system unless investments target the creation of alternative, non-automotive modes. Investments and policies must focus on enhancing transit options—adding new modes, such as rail transit—as well as improving existing modes such as bicycle routes and trails. The number of riders on CAT increased by nine percent in January and 18 percent in February 2008 compared to January and February 2007. This trend already

suggests the growing need for additional transit service. Regional rail and enhanced bus service are already in the conceptual stages. The efforts of TT, NCDOT, and the Special Transit Advisory Commission (STAC) represent important first steps towards regional transit. Continued collaboration accompanied by targeted investments will bring these efforts from concept to implementation. Transportation issues related to Raleigh-Durham International Airport and commercial and freight transportation also require regional coordination.

See also: B.3 'Roadway System and Transportation Demand Management,' B.5 'Public Transportation,' B.6 'Pedestrian and Bicycle Circulation,' and B.9 'Commercial Truck and Rail Freight' in Element B: 'Transportation' for related policies and actions.

Policy RC 1.1

Regional Transit Planning

Work with other regional jurisdictions and stakeholders to improve regional transit, including regional rail, through coordinated land use and transportation planning, investment in transit infrastructure, and alternative funding methods. (3, 4, 5)
See also Element B: 'Transportation'.

Policy RC 1.2

Transit Agency Coordination

Facilitate coordination between Triangle Transit's services, Wake County's extended transit services, and the City of Raleigh's Capital Area Transit. Support coordinated improvements to service frequency, schedules, routes, fare collections, and establishing a unified rider information system. (3, 4, 5)

Policy RC 1.3

Transit Funding

Explore and support funding alternatives, such as a regional sales tax, to help fund a regional transit system and regional transit services. (3, 4, 5)

Policy RC 1.4

Bridges

Coordinate with NCDOT for bridge monitoring, maintenance, and rehabilitation. (3, 4)

Policy RC 1.5

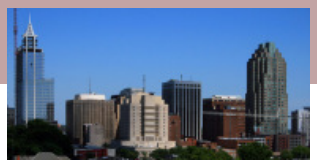
Reducing Regional VMT

Support efforts to reduce traffic congestion and decrease vehicle miles traveled through cross-jurisdictional transit-oriented design and transportation planning programs. (3, 4, 5)

Policy RC 1.6

Pedestrian and Bicycle Links

Expand regional accessibility and linkages for pedestrians and bicyclists. (3, 4, 5)



Policy RC 1.7

Regional Bicycle Planning

Provide regional bicycle mobility, developing cross-jurisdiction bicycle corridors such as that proposed by Triangle J Council of Governments' (TJCOG) Center of the Region Enterprise (CORE). (4, 5)

Action RC 1.1

Transit Agency Coordination Plan

Develop a plan to integrate the activities of the numerous regional transit agencies, such as schedules, routes, and fare collections.

Action RC 1.2

Regional Transit Vision

Invest in an expanded regional bus system followed by long-term investments in rail transit, as recommended in the Special Transit Advisory Commission's Regional Transit Vision Plan.

Action RC 1.3

Sales Tax Feasibility Study

Consult with other regions including the Charlotte region to determine if and how implementation of a regional sales tax to fund transit might be applicable in Raleigh.

L.2 Land Use and Growth Management

The City of Raleigh currently exercises planning and zoning authority within its incorporated limits (its taxing and municipal service area) as well as its extra-territorial jurisdiction (ETJ), an area outside of the incorporated limits where the City has been granted land use authority by Wake County. The City also has annexation agreements with adjacent municipalities delineating areas that are programmed for eventual annexation by Raleigh. Wake County's Land Use Plan recognizes these annexation agreement boundaries by designating the future growth areas of all Wake County cities and towns as Short or Long Range Urban Service Areas (USAs), depending upon the anticipated time horizon for utility extension. These areas currently consist primarily of undeveloped land, farmland, and low-density residential uses, and they comprise all land in the county outside of water supply watersheds.

Recent development patterns have consumed land at a faster rate than population growth, due to low density development patterns. Coordination with Wake County and other adjacent municipalities is required to develop a countywide growth management plan. Approaches that provide for more compact and orderly growth and better coordination of land development with infrastructure and public facilities are required. Future annexation areas should remain predominately undeveloped until developable and redevelopable land areas within current jurisdictional boundaries are more fully utilized. Many growth management initiatives exist, as described in this Element's Overview, but a unified and coordinated approach to a more sustainable pattern of growth does not.

Central to encouraging compact growth is the provision of affordable and accessible housing. The City currently collaborates with Wake County, the Raleigh Housing Authority, the North Carolina Housing Finance Agency, and private housing developers to produce and preserve affordable and supportive housing throughout the City. As land

becomes more expensive, the need to coordinate affordable housing development with public facility development will become more critical.

Policy RC 2.1

Regional Smart Growth Promotion

Work with regional and local groups to promote smart growth, focusing growth in already developed areas, creating walkable and livable communities, increasing transportation options, and preserving green spaces. (3, 4, 5, 6) *See also Element A: 'Land Use'.*

Policy RC 2.2

TJCOG Land Use Strategies

Pursue opportunities through TJCOG to more effectively address regional land use and growth management challenges, while preserving local planning autonomy. (3, 4, 5) *See also Element A: 'Land Use'.*

Policy RC 2.3

Regional TOD Strategies

Encourage a regional distribution of land uses and economic activities that will encourage transit-oriented development patterns rather than development patterns based on the single-occupant automobile. Provide for more compact and efficient patterns of development to support transit and non-motorized travel. (1, 3, 4, 5) *See also Element A: 'Land Use' and Element B: 'Transportation'.*

Policy RC 2.4

Employer-Assisted Housing

Work with Wake County and the State of North Carolina to create employer-assisted housing programs to encourage employees to live in or near downtown Raleigh. (1, 2, 3, 4, 5, 6) *See also Element A: 'Land Use', Element K: 'Arts and Culture', and Element E: 'Housing'.*

Policy RC 2.5

Housing and Neighborhood Planning

Ensure interdepartmental and intergovernmental coordination and funding of housing and neighborhood planning activities and programs. (2, 3, 6) *See also Element A: 'Land Use'.*

Policy RC 2.6

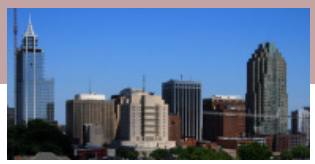
Regional Coordination on Emerging Issues

Promote intergovernmental coordination to focus on emerging development issues, such as reinvigorating aging commercial centers and corridors. (1, 3, 5, 6) *See also Element A: 'Land Use'.*

Policy RC 2.7

Regional Open Space Networks

Support initiatives, such as the Triangle Green Print initiatives, that work to create a protected, linked network of natural areas, wildlife habitats, and greenspaces throughout the region. Specifically, accelerate connections between greenway systems throughout the region. (3, 5, 6)



Policy RC 2.8

Shared Corridors

Ensure coordination between the City and adjacent municipalities in land use development, access, and natural resource protection along shared corridors linking the municipalities. (3, 4, 5, 6)

Policy RC 2.9

Coordinating Schools, Libraries, and Parks

Foster collaboration with WCPSS and Wake County Libraries in co-locating these facilities. (3, 5, 6)

Policy RC 2.10

School and Library Planning

Work with Wake County to plan for land adequate to meet present and future public school and library needs. (3, 5, 6)

Policy RC 2.11

Concurrency and County Facilities

Coordinate with the State of North Carolina and Wake County to ensure appropriate infrastructure is planned or in place when siting facilities. (3, 4, 5)

Policy RC 2.12

County and State Government Facilities Planning

Coordinate with the State of North Carolina and Wake County to enhance transit, bicycle and pedestrian access to new and existing government facilities, encourage compact and efficient use of publicly-owned lands, and leverage public investments to spur complementary private investment. (3, 5, 6)

Action RC 2.1

Regional Growth Management Agreement

Promote the adoption of a voluntary regional agreement among the Triangle's cities and counties containing principles addressing how to manage future regional urban growth and services. *See also Element A: 'Land Use'.*

Action RC 2.2

Regional Growth Management Initiatives

Participate in regional initiatives to manage growth, conserve land, and increase regional mobility, such as the TJCOG's Development and Infrastructure Partnership and the Wake County Growth Issues Task Force.

Action RC 2.3

State and County Role in Park Acquisition

Pursue a greater state and county role in acquiring and funding regional park facilities.

Action RC 2.4

Rural Development Guidelines

Prepare rural development guidelines for the Long-Range USA with collaboration between the City, Wake County, adjacent municipalities, and affected residents and property owners.

Action RC 2.5

Developments of Regional Impact

Coordinate with State, County and regional agencies in the project review procedures of developments likely to cause land use, transportation, and environmental impacts beyond the political boundaries in which they occur—projects of this type are referred to as developments of regional impact (DRIs) in many states.

Action RC 2.6

Regional Land Use Maps

Work with TJCOG and Triangle counties and municipalities to prepare regional existing and future land use maps. Use these maps to analyze land capacity and impacts on a regional basis.

Action RC 2.7

Inter-local Agreement on Affordable Housing

Create an inter-local governmental agreement that promotes a regional approach to affordable housing countywide.

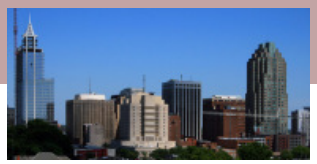
L.3 Economic Development Initiatives

One of the nation's most rapidly growing regions, the Triangle is benefiting from long-term investments in major educational institutions and the Research Triangle Park. The expanding base of technology industries continues to generate new jobs and the area's highly-touted and affordable quality of life provides regional employers with a competitive advantage for attracting and retaining qualified workers.

The Triangle's component jurisdictions are increasingly connected as employees cross-commute, new businesses develop to serve companies throughout the region, and existing industry spins off new businesses. The region is recognized as an economic powerhouse for biotech innovations, medical breakthroughs, technological advancements, state-of-the-art educational institutions and advanced research—a pivotal factor in its economic longevity. Continued cultivation of growing industries, particularly information, biosciences, and other technologies will foster continued economic prosperity for Raleigh and the region.

Coordination between jurisdictions in the region and with the State will be critical to protecting Raleigh's high quality of life and continuing economic success. Employment and development will need to be distributed equitably and efficiently to prevent market saturation and uneven, single-use patterns of development. Resources and efforts from various regional actors will be required to address job readiness and job transitions as manufacturing jobs decrease and other sectors replace them.

There are a variety of organizations working in and around Raleigh on economic development issues and initiatives, including Wake County Economic Development (WCED) in the Raleigh Chamber of Commerce, Southeast Raleigh Assembly (SERA), Greater Raleigh Visitors and Convention Bureau (GRVCB), and Research Triangle Region Partnership (RTRP). Additional collaboration among these groups combined with support from jurisdictions will help the region better manage economic development—employment, services, and development.



See also D.7 'Creative Industries' in Element D: 'Economic Development' for related policies on colleges and universities.

Policy RC 3.1

Economic Development Coordination

Coordinate with local, state, and regional economic development organizations to develop strategic programs that focus on maintaining Raleigh's economic success and regional competitiveness. (1, 3) *See also Element D: 'Economic Development.'*

Policy RC 3.2

Tracking Regional Economic Change

Identify emerging changes in local and regional economies and collaborate with regional economic development partners to address issues adequately and equitably through new programs, policies, and incentives as appropriate. (1, 3) *See also Element D: 'Economic Development.'*

Policy RC 3.3

Capturing Economic Opportunities

Continue to work with Wake County Economic Development (WCED) and the Raleigh Chamber of Commerce to better capitalize on local economic development opportunities. (1, 3) *See also 'Economic Development.'*

Action RC 3.1

Job Retraining Programs

Work with Wake County and local universities to provide job training and education for those who need to re-train for new industry jobs.

Action RC 3.2

Research Triangle Regional Partnership

Support the work of the Research Triangle Regional Partnership and similar groups in maintaining continued regional competitiveness.

Action RC 3.3

Green Technology Strategy

Develop a regional strategy for attracting and supporting businesses and start-ups in the green technology industry with participation from regional economic development entities and research universities.

L.4 Education Investments

The City of Raleigh is served by the Wake County Public School System (WCPSS), which is made up of more than a hundred schools, some 13,000 teachers and staff, and thousands of volunteers working together to educate the children of Wake County. The system was formed in 1976 with the merger of the former City of Raleigh and Wake County school systems and is the largest system in the state.

In a November 2007 report, the WCPSS's Growth and Planning Department worked jointly with the Wake County Planning Department to determine new enrollment projections for the next three years. The school system is expected to enroll over 20,200 more new students over the next three years increasing total enrollment for the 2010-2011 school year to a projected level of over 154,000 students. According to the Blue Ribbon Committee Report on the Future of Wake County, in 2030, the projected numbers of students in Wake County schools will more than double current enrollment levels.

The demand for new schools due to the rapid growth in school-aged population is straining the County's ability to plan for and build schools. Existing funding mechanisms as well as levels of coordination cannot keep pace with projected growth. Regional coordination on issues related to better funding for the capital costs of school construction and new infrastructure to accommodate growth is needed for this important asset to be maintained.

Raleigh is also home to eight universities and colleges, enriching the City's educational opportunities. Among these educational institutions are North Carolina State University, a major research institution, two private women's colleges, and two historically significant schools that were founded as institutions of higher learning for African Americans. With a combined student population approaching 40,000, these institutions have a major impact on the demographic makeup of the City. Raleigh is also the primary home to Wake Technical Community College, which provides two-year associate degrees, continuing education classes, coursework that can be transferred for college credit, and an array of diplomas and certificates.

The strength of Raleigh's schools is central to the region's high quality of life and economic success. These educational opportunities are the product of overlapping municipal, county, and state institutions. Raleigh must partner and coordinate with county and state organizations to maintain and improve its educational assets.

Policy RC 4.1

Coordinated School Planning

Coordinate with Wake County Schools, County government, and Wake Technical Community College through the Wake Public Facilities Coordinating Committee in the planning and construction of needed educational facilities. (1, 3, 6)

Policy RC 4.2

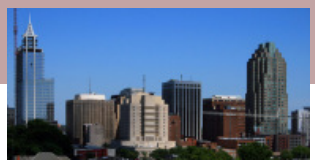
WCPSS Review of Development Plans

Keep the Wake County Public School System informed of subdivision and residential site plans, rezoning requests, and other development activity that may impact school enrollments. (1, 3, 6)

Policy RC 4.3

School Siting and Design

Collaborate with WCPSS on school siting and design criteria to provide facilities that are universally accessible and best meet public needs. Consider issues of walkability, non-motorized transportation projects, proximity to growth areas, and access to transit. (1, 3, 6)



Policy RC 4.4

School and Library Planning

Work with Wake County to plan for and designate land adequate to meet present and future public school and library needs. (1, 3, 6)

Policy RC 4.5

College and University Planning

Encourage increased cooperation and partnerships between college and universities and surrounding communities. (1, 3, 6)
See also Element D: 'Economic Development'.

Policy RC 4.6

Co-location of Schools and Housing

Coordinate with WCPSS to co-locate affordable housing, with priority given to households below 50 percent of AMI, in conjunction with new schools to encourage economic diversity within new neighborhoods and schools, encourage walking, and reduce the need for busing. (2, 3, 4, 6)

Policy RC 4.7

Sustainable Schools

Promote use of sustainable development practices for schools, including construction of high performance facilities that conserve water and energy. (3, 5, 6)

Action RC 4.1

School Enrollment Projections

Use common population forecasts and future land use projections for the City and County to improve the accuracy of enrollment projections.

Action RC 4.2

Financing of School Construction

Explore possible alternatives to the property tax to fund the capital costs of school construction and new infrastructure.

Action RC 4.3

Partnerships with Design and Construction Staff

Establish new and maintain current partnerships with WCPSS Facilities Design and Construction staff.

Action RC 4.4

Rezoning Impacts on Schools

Implement recently adopted guidelines for evaluating the impact of re-zonings and proposed site plans on the school system.

Action RC 4.5

Distance Learning

Encourage WCPSS to expand the use of online, virtual, and distance learning to allow a broader population to take advantage of educational opportunities without significantly adding to the need for new buildings or instructional space.

Action RC 4.6

Pedestrian Access to Schools

Coordinate with WCPSS to incorporate pedestrian accessibility into all school location decisions and site plans. *See also Element B: 'Transportation.'*

Action RC 4.7

School Site Location Working Group

Establish an inter-jurisdictional site location working group to identify available property for future school locations.

L.5 Public Libraries

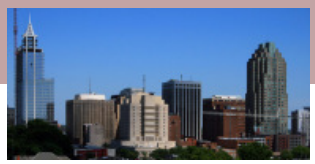
As the population and demand for library services grow, so does the need to build new facilities. The Wake County Public Libraries 2007 Master Plan includes both service elements and capital elements. The service elements outline the core services and service priorities of the system. North Hills is one of the top six recommended projects and downtown Raleigh is designated as a horizon project in the 2007 Library Service Analysis. The analysis concluded that overall status is good. All libraries had been renovated, remodeled, or newly constructed with the past decade. Excellent service, cost effectiveness, and productivity are hallmarks of the growing system.

Wake County Public Libraries has developed facilities through library bonds dating back to the establishment of the system in the mid 1980s. A $10 million bond referendum in 1993 and $35 million bond referendum in 2003 helped fund many of the system's current facilities. There are two library projects in the planning stages that will be the last ones funded from the 2003 bond. These projects are the Leesville Branch Library (2009) and Northeast Regional Library (2010). The 2003 Library Bond has helped WCPL keep pace, but on-going population growth is once again placing libraries at capacity levels. In 2007 another bond was issued in response to recommendations outlined in the 2007 Master Plan. For more information on the 2007 Master Plan, see the *Community Inventory Report.*

Policy RC 5.1

Library System Investment

Continue the County's investment in libraries by continuing to expand the library system to reach the unserved and under-served populations. Ensure adequate access to library services in future growth areas. (3, 6)



Policy RC 5.2

Sustainable Library Design

Collaborate with Wake County to incorporate sustainable development and design in the construction of libraries. (3, 5)

Policy RC 5.3

Library Siting

Provide library facilities that are sensitive to natural surroundings, universally accessible, and located near centers of activity and public transit. (3, 5, 6)

Policy RC 5.4

Library Co-location

Consider co-location and joint use opportunities as part of the library building program plan. (3, 5, 6)

Action RC 5.1

Downtown and North Hills Branch Libraries

Encourage the construction of downtown and North Hills branch libraries.

Action RC 5.2

Wake County Coordination on Library Siting

Maintain communication with Wake County public facilities and capital improvement staff as land use plans are confirmed and available property is identified for the siting of additional public libraries.

L.6 Environmental Sustainability and Natural Resources

At the end of 2007, Wake County was immersed in a historic drought, rated as Exceptional (the most severe rating) by the North Carolina Division of Water Resources. The drought was unusual both in its severity and closeness to the prior drought in 2002. If this represents an emerging climate pattern, there could be revisions to the safe yield calibration for water supply bodies both in Wake County and throughout the Southeast. This would have major implications for water system and resource planning everywhere, including Wake County and the Triangle region.

Changes in climate and decreases in resources are just two of many indications signaling a needed shift in resource, land, and energy use and management. The City of Raleigh has joined the International Council for Local Environmental Initiatives (ICLEI) Local Governments for Sustainability, an international association of local governments and national and regional local government organizations that have made a commitment to sustainable development. Membership means a

commitment to sustainability and a recognition that regional and collaborative action is necessary to improve resource stewardship and better manage regional growth.

Strategies to conserve water and energy, to protect natural habitats and species, and to improve air and water quality are already used in Raleigh and neighboring jurisdictions. Regional efforts, such as those of the Triangle J Council of Governments' Water Conservation Task Force, also exist. What remains is for local and regional groups to improve collaboration and promote methods for development and conservation that improve the long-term health of human and ecological systems.

See also Element C: 'Environmental Protection' for additional policies and actions.

Policy RC 6.1

Conservation Partnerships

Pursue partnerships with neighboring jurisdictions, regional bodies, and other levels of government to create more effective regional resource and ecosystem management and conservation programs including wildlife habitat conservation, restoration, and management. (3, 5)

Policy RC 6.2

Falls Lake Watershed Protection

Coordinate with conservation and land trust groups to protect the Falls Lake watershed through the Upper Neuse Clean Water Initiative (UNCWI). (3, 5) *See also C.3 'Water Quality and Conservation' in Element C: 'Environmental Protection'.*

Policy RC 6.3

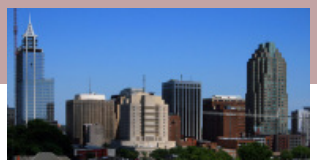
Water Supply Management

Work with neighboring jurisdictions and existing and future organizations to manage and protect the regional water supply, including protecting the watershed of the planned Little River Reservoir from inappropriate development that would degrade water quality. (3, 5) *See also C.3 'Water Quality and Conservation' in Element C: 'Environmental Protection'.*

Policy RC 6.4

Air Quality Partnerships

Collaborate with the Triangle Air Quality Partnership, the Triangle Clean Cities Coalition, the Triangle Air Awareness Coalition, and other regional partners to adopt additional air quality policies and fulfill regional air quality goals. (3, 5) *See also Element C: 'Environmental Protection'.*



Policy RC 6.5

Water Standards

Maintain the non-degradation standards and goals for water leaving Raleigh's jurisdiction. The standards state that (a) water quality leaving Raleigh's sanitary sewers (effluent) be as good as or better than water quality entering the City's intake, and (b) water quality (runoff) entering the City's storm sewers should have minimal degradation or contamination. (3, 5)

Action RC 6.1

Neuse River Corridor Extension

Extend planning efforts for the Neuse River corridor to the Wake-Johnston County line. As City limits and services are extended along the river, these properties should be incorporated into the City's Parks and Greenway system.

Action RC 6.2

Participation in UNRBA Initiatives

Participate in and support the regional water quality efforts of the Upper Neuse River Basin Association (UNRBA). Remain involved in UNRBA initiatives such as the state-level Neuse Management Strategy and Lick Creek Local Watershed Plan.

Action RC 6.3

Stormwater Discharge Alternatives

Use drainage basin studies to identify feasible minor regional facilities and other facility improvements that may be constructed as alternatives to on-site discharge control.

Action RC 6.4

Air Pollution Mitigation Projects

Identify specific transportation projects that will reduce air pollutants and improve air quality. Use Congestion Mitigation and Air Quality (CMAQ) program funds to pay for them.

Action RC 6.5

Regional Open Space Plan

Work with other jurisdictions and stakeholders to develop a regional open space plan to ensure the continued existence of recreational and natural areas and to provide for regional accessibility and linkages for pedestrians and bicyclists.

Action RC 6.6

Regional Climate Action Planning

Develop a coordinated regional approach for dealing with issues of climate change.

Action RC 6.7

Wildlife Habitats

Coordinate wildlife habitat conservation, restoration, and management with Wake County municipalities, the North Carolina Wildlife Resources Commission, Wake Nature Preserves Partnership, and other relevant stakeholders.

L.7 Public Facilities and Infrastructure

The City of Raleigh has merged water and sewer utilities with all the municipalities in eastern Wake County including Garner, Rolesville, Wake Forest, Knightdale, Wendell, and Zebulon. Further, the Towns of Fuquay-Varina and Holly Springs periodically rely on the City for drinking water. The vast majority of the drinking water supply for Raleigh (and surrounding municipalities connected to the regional system) is from Falls Lake on the Neuse River, with a small amount coming from Wake Forest Lake on Smith Creek. Two new water treatment facilities, the D. E. Benton Water Treatment Plant and the Little River Water Treatment Plant, are anticipated to be in service by 2010 and 2025 respectively. The City also has or is planning water interconnects with the Town of Cary, the City of Durham, and Johnston County.

Regional water system planning challenges include not only supplying adequate potable water, but also managing wastewater and stormwater generated by growth and development. During extreme low flow events, [(6)] the City's Neuse River Wastewater Treatment Plant discharge can be up to 40 percent of the river flow at the downstream water supply intake for Johnston County. Multi-jurisdictional initiatives similar to the Lake Preservation Policy will be central to future stormwater management considerations as the City's pattern of development changes. Other public services, such as solid waste and energy infrastructure, will also benefit from collaborative regional approaches. Wake County's new regional solid waste management facility, South Wake, is one example of such an approach.

Policy RC 7.1

Water Planning and Climate Change

Update water system planning methods with surrounding jurisdictions to account for emerging climate patterns. (3, 5) *See also Element G: 'Public Utilities'.*

Policy RC 7.2

Balancing Infrastructure and Conservation

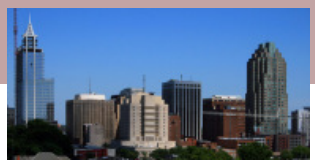
Collaborate with other jurisdictions to better balance the demand for infrastructure with the preservation of resources. (3, 5) *See also Element A: 'Land Use', and Element B: 'Transportation'.*

Policy RC 7.3

Regional Energy Planning

Support regional efforts (such as the Research Triangle Energy Consortium) to improve energy efficiency, reduce the environmental impact of energy production, and improve energy security. (3, 5)

6 Low flow is the flow of water in a stream during prolonged dry weather. The flow or stream capacity is low relative to some minimum quantity or statistically defined amount such as the 7Q10 level, or the lowest 7-day average flow that occurs on average once every 10 years. An extreme low flow event is a period of time when a stream's flow is significantly below the 7Q10, or similar, levels.



Policy RC 7.4

Regional Solid Waste Management

Establish a regional solid waste reduction and management program. (3, 5)

Policy RC 7.5

Solid Waste Disposal Facility Planning

Working with Wake County, ensure that suitable municipal solid waste (MSW) disposal capacity is available, including facilities as needed for the proper management of solid waste resulting from natural disasters and emergencies. (3, 6)

Policy RC 7.6

Transfer and Recovery Stations

Working with Wake County, establish transfer/recovery stations, as needed, to provide for efficient delivery of solid waste to the designated disposal and processing facilities. (3, 6)

Action RC 7.1

Solid Waste Plan Implementation

Working with the County and other jurisdictions, implement the Wake County Solid Waste Management Plan for the planning period July 1, 2006 – June 30, 2016.

Action RC 7.2

Emergency Water Transmission

Participate in developing an inter-connected emergency water transmission system for the Research Triangle area.

Action RC 7.3

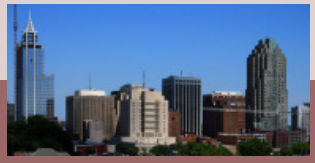
Landfill Capacity Monitoring

Monitor use and remaining capacity of the new South Wake regional solid waste landfill (designed to have a 25-year disposal capacity).

Action RC 7.4

Regional Stormwater Management Plan

Continue to support the regional stormwater management plan now under development through a collaborative effort by the City, the State, and the property owners in the Northeast Regional Center.

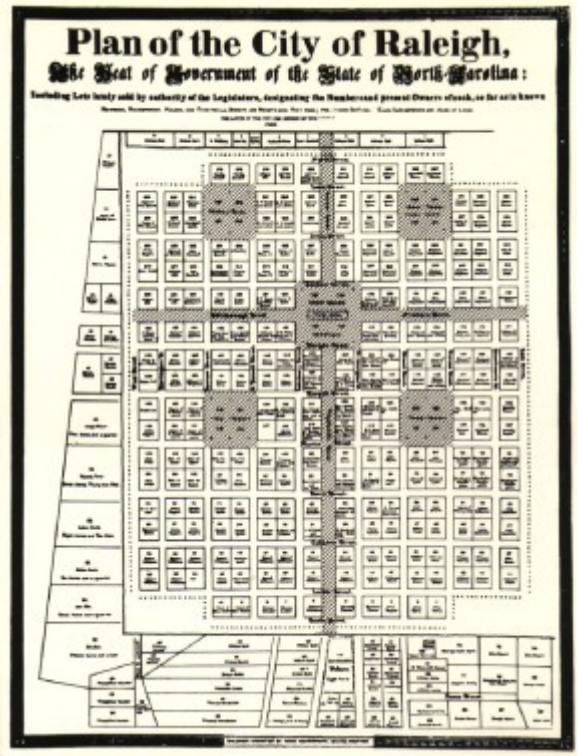


Downtown Raleigh

Element M: Downtown Raleigh

Downtown is the historic, functional, and symbolic heart of Raleigh. It contains the largest concentration of government and commercial buildings in Raleigh, and lies at the nexus of the City's roadway and public transportation networks. It is the seat of government for the County and State as well as the municipality. More cultural venues, attractions, and events are located in downtown than any other area of the region. More recently, it has become a fast-growing residential neighborhood. The downtown skyline is the signature image appearing on City and regional public information and marketing materials, as well as on the many articles written about Raleigh in national publications. A healthy, vital, and growing downtown is therefore essential to Raleigh's sustainability, quality of life, and future economic competitiveness.

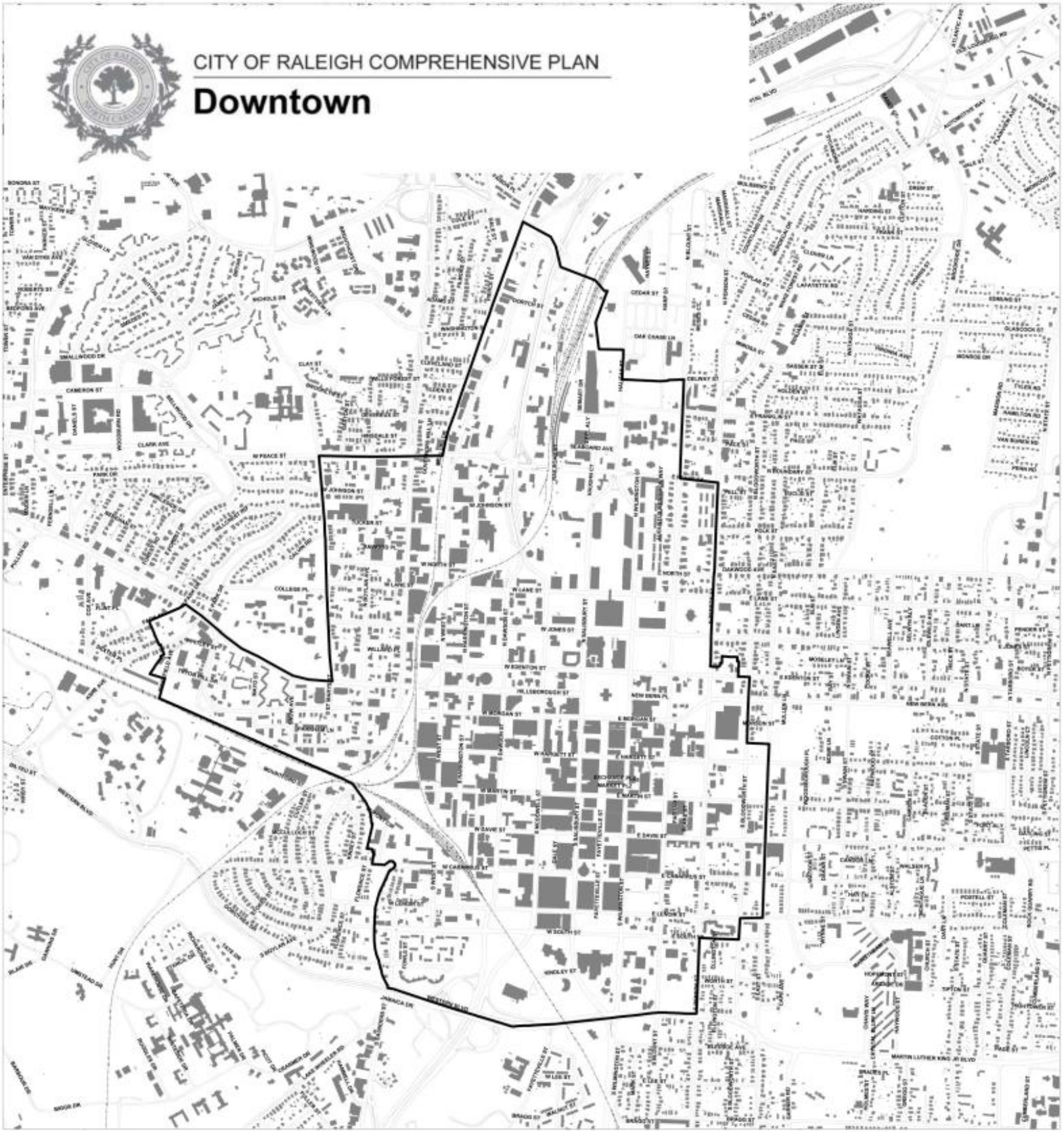
Raleigh's geographic limits were originally established by the William Christmas Plan of 1792. North, East, South, and West streets defined the extent of the walkable city at that time. Now the area regarded as downtown stretches beyond those original boundaries. The Christmas Plan also provided a simple urban design hierarchy containing a dominant street grid with 66-foot wide rights-of-way, four strong axial 99-foot wide streets emanating from the State Capitol, four public park-like squares, and a central six-acre square designed to serve as the Capitol grounds. Among the axial boulevards, Fayetteville Street, extending southward from the Capitol, was intended to be the high street of the City. Fayetteville Street is still home to Raleigh's most significant urban design features, the terminated vistas that spotlight the Capitol and the Performing Arts Center. Although the City has grown and developed, downtown still maintains many of the defining urban design features established by the Christmas Plan.



The area regarded as downtown Raleigh today currently spans approximately 754 acres, or 1.18 square miles. The geographic area that encompasses downtown constitutes less than one percent of Raleigh's incorporated area. However, as has occurred since the early part of the twentieth century, the area considered downtown will continue to expand. **Map DT-1** outlines the Downtown Element boundaries. The boundary shown on this map, which appears on all maps in this Element, delineates where the policies contained in the Element apply. It does not carry with it any specific recommendation for appropriate land uses; such guidance is found on the Future Land Use map.

CITY OF RALEIGH COMPREHENSIVE PLAN

Downtown



MAP DT-1

- Downtown Element Boundary
- Buildings
- Streets
- Railroads

0 375 750 1,500 Feet

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

Despite its relatively small size, downtown is emerging as the center of the Triangle region. Regional growth patterns are shifting eastward, placing downtown closer to the center of the region's urbanized land mass as projected to 2030. Significant infrastructure investments such as the multi-modal transportation center will render downtown the destination point for thousands of daily commuters originating from places near and far.

As a major employment center within the region, an estimated 37,500 daytime employees fill approximately 5.1 million square feet of commercial office space and 5.2 million square feet of governmental office space. Approximately one-third of the employment base is governmental; as a capital city, the downtown area houses four layers of government: city, county, state, and federal. The major nodes of office space are oriented between Wilmington and Salisbury streets, with the State government occupying the majority of the northern half of downtown. The private sector populates the southern half of downtown.

As a complement to the office space, the downtown has made significant strides in growing a residential base. Approximately 2,600 multifamily units are located within downtown, and the housing typology ranges from college dorms to luxury condominiums, and many other housing types in-between.

In spite of its small geographic area and large concentrations of tax-exempt property, downtown Raleigh is a major contributor to the City's fiscal health. Downtown generates approximately 7.3 percent of the property tax base while occupying less than half a percent of all developable property within Raleigh.

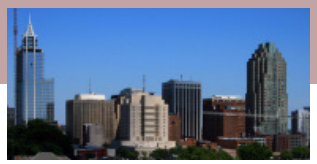
The City has a significant number of new public and private development projects that will increase downtown's vitality, provide new uses and services, and transform the skyline. By 2012, these new developments are projected to infuse approximately $2.5 billion into downtown and will support additional housing, retail, service, and entertainment uses in the future.

Recent development has concentrated around four areas: the Seaboard area adjacent to Peace College; Glenwood Avenue between Peace and Hillsborough streets; Fayetteville Street between Morgan and Lenoir streets; and the area just west of Nash Square. Most recently, land assembly and development proposals have revealed a future focus along Hillsborough Street between Dawson Street and Glenwood Avenue. Looking forward, additional significant development activity is expected in the Warehouse district surrounding the proposed multi-modal transportation center, and in the northeast corner of downtown via the 21-acre Blount Street Commons project.

There has also been a steady level of redevelopment activity in the historic core of downtown in the form of one- and two-story buildings slated for historic preservation/adaptive use to accommodate more active ground-floor uses such as retailers, bars, and restaurants. More than two dozen such buildings are either being restored or have been within the last five years. These projects indicate a confidence that downtown Raleigh will continue to emerge as a destination, currently for dining and entertainment, but ultimately for retail.

The prevailing development model in downtown Raleigh is mixed-use, with some combination of for-sale residential condominiums, office space, and ground-floor retail space. Year after year, each successive project allocates a greater portion of the building's ground-floor to active uses. That trend is indicative of an increasingly positive outlook regarding the market for retail in downtown Raleigh. Additionally, newer residential projects have also increased in size; residential projects completed within the past three years averaged about 70 units per development, whereas the residential projects currently under construction average about 125 units per development. The trend towards mixed-use can be characterized as a significant departure from the development paradigm of the early 2000s.

The upward trend in downtown Raleigh's revitalization has resulted in significant economic, fiscal, civic, and cultural gains. Strong job growth, commercial and residential development, and significant public projects have helped downtown establish a competitive edge and become a net revenue generator for Raleigh. The remarkable growth and improved quality of downtown between 2003 and 2008 is due in part to successful



public-private partnerships, courageous private sector leadership, and a commitment by the City to invest in downtown's future through strategic projects intended to leverage private sector investment.

The confluence and complexities of uses, scale, activities, and physical spaces in downtown require a finer level of specificity than can be achieved using only the citywide policies that appear elsewhere in the Comprehensive Plan. The Downtown Element outlines a collection of development values and strategic initiatives that address vibrancy, walkability, place making, and other methods designed to create a prized urban center for Raleigh citizens, a commercial nucleus within the Triangle region, and model of sustainability for cities in the southeastern United States. While most of the citywide policies are relevant and applicable to downtown, this element includes policies intended to address downtown-specific issues and ways to encourage downtown investment to ensure a healthy economic, cultural, and symbolic heart of the City.

The following are the main issues addressed in the Downtown Element:

- The lack of transportation options to move people into, out of, and around downtown;
- The need to accommodate a significant and diverse share of the City's anticipated population and employment growth;
- Inconsistent urban design decision-making;
- Inaccessibility to some of Raleigh's citizens;
- A growing urgency regarding environmental stewardship;
- Connectivity challenges between downtown districts and activity generators;
- Insufficient utilization of the ground floor of buildings for active use, particularly along key corridors;
- The need to establish a unique urban identity;
- Missed opportunities to grow visitation and tourism;
- Jeopardizing our cultural identity, legacy, and assets; and
- Ensuring that downtown is a place for all of Raleigh's citizens.

As described in the Framework chapter, Raleigh's Vision for 2030 is structured to address these issues through six vision themes or citywide goals. By actively encouraging growth and development, both commercial and residential, within downtown, Raleigh will advance towards its goal of *Economic Prosperity and Equity*. By exploring strategies to provide a wide range of opportunities for people to live within downtown, Raleigh make strides towards achieving its goal of *Expanding Housing Choices*. By focusing the City's highest intensity development within downtown, Raleigh will meet its over-arching goal of *Managing Our Growth*. Through the encouragement of high-density transit-oriented development, expanding accessibility and transportation options, and improving connectivity among downtown activity centers, Raleigh will make progress toward *Coordinating Land Use and Transportation*. Through sustainable building design, the promotion of publicly-accessible open space, and connecting downtown with the regional greenway network, Raleigh embraces its *Greenprint Raleigh* goal. Lastly, by growing a vibrant retail marketplace, furthering a unique sense of place, and advancing strategic planning and investments, Raleigh ensures its goal of *Growing Successful Neighborhoods and Communities*.

Numbers are utilized to link the intent of the policy language with the six themes of the Plan, which are enumerated as follows:

1. Economic Prosperity and Equity
2. Expanding Housing Choices
3. Managing Our Growth
4. Coordinating Land Use and Transportation
5. Greenprint Raleigh—Sustainable Development
6. Growing Successful Neighborhoods and Communities

Downtown Element Organization and Use

The sections following this overview provide the recommended policies and actions for the Downtown Element and are organized by sub-element and topic.

The policies and actions contained in the Downtown Element are downtown-specific. They supplement rather than replace applicable citywide policies

under the same headings. Taken together, they utilize the framework of the overall Comprehensive Plan and apply it at a more detailed level to Raleigh's urban core. In applying the policies in this element, the following guidance applies:

- Relevant policies in the citywide elements also apply to downtown unless otherwise noted.
- Policies contained within this element, where not echoed elsewhere in the Plan, apply to downtown only.
- Where there is a conflict between a citywide policy and a downtown policy, the downtown policy shall control in downtown.

M.1 Land Use

Land in downtown Raleigh has the highest levels of density permitted within the City of Raleigh. This high level of development intensity influences downtown's physical form.

The greater downtown area covers over one thousand square acres of land, and roughly includes the area between Martin Luther King, Jr. Blvd. to the south, Saint Mary's School to the west, the industrial area along Capital Boulevard on the north, and the Historic Oakwood and East Raleigh neighborhoods on the east. In the center of this area is the City's historic urban grid, a 400-acre area planned by William Christmas in 1792. Within the historic grid are more than ten million square feet of built space that contain a mix of uses, from government offices to single-family homes. This mix of uses contributes to the downtown's vibrancy and economic well being. Approximately 88,600 people currently live within a three-mile radius of the Capitol. Based on recent development trends and assumptions that future densities will replicate maximum zoning allowances, the Downtown District area delineated on the Future land Use Map could potentially accommodate an additional 25,000 residents.

The policies and actions below reduce conflict between incompatible uses, provide the opportunity for a variety of uses, and encourage the development of the uses needed for downtown to become a stronger regional economic generator. The following land use and development issues are addressed in this element:

- Accommodating a full range of retail, office, residential, government and civic uses downtown;
- Coordinating land use and transportation;
- Transitions or buffers between uses and development intensities; and
- Determining the best development opportunities for land controlled by public entities.

Future Land Uses

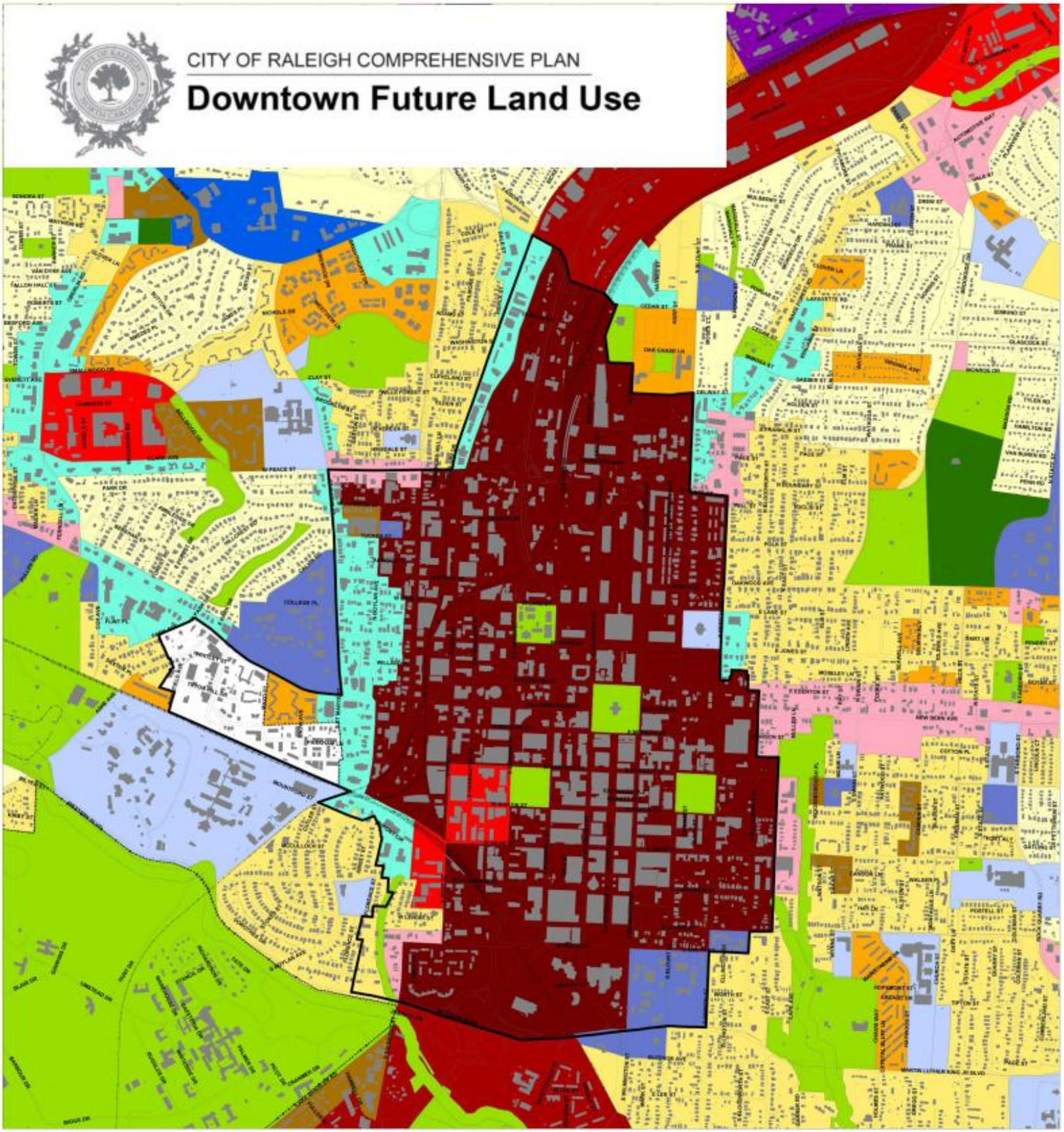
The Downtown Future Land Use Map builds upon downtown's existing land use patterns while accommodating significant residential and commercial development. The largest amount of land is planned for a future land use entitled "Central Business District," a land use designation intended to enhance downtown Raleigh as a vibrant mixed-use urban center. As the heart of Raleigh, downtown should feature a mix of high-intensity office, retail, housing, government, institutional, visitor-serving, cultural, and entertainment uses. Surrounding most of downtown are many of Raleigh's historic residential neighborhoods such as Oakwood, Boylan Heights, South Park, and Cameron Park.

The process of building a successful downtown requires close coordination between private and public development interests. The sites selected for redevelopment are often a reflection of multiple factors, including proximity to prominent civic and commercial uses, accessibility to transportation infrastructure, entitlements, and real estate economics.

Downtown's future land use patterns are illustrated on **Map DT-2**. This map is a zoom of the citywide Future Land Use Map.

CITY OF RALEIGH COMPREHENSIVE PLAN

Downtown Future Land Use



MAP DT-2

- Downtown Element Boundary
- Special Study Areas

Future Land Use Categories

- Public Parks & Open Space
- Private Open Space
- Rural Residential
- Low Density Residential
- Moderate Density Residential
- Medium Density Residential
- High Density Residential
- Office & Residential Mixed Use
- Office/Research & Development
- Institutional
- Public Facilities
- Neighborhood Retail Mixed Use
- Business & Commercial Services
- Community Retail Mixed Use
- Regional Retail Mixed Use
- Central Business District
- General Industrial

- Buildings
- Railroads
- Streets

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0 375 750 1,500 Feet

Map created 10/7/2009 by the City of Raleigh
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Policy DT 1.1

Downtown Future Land Use Map

The Future Land Use Map should guide public and private land use development decisions to ensure the efficient and predictable use of land and effectively coordinate land use with infrastructure needs. (1, 2, 3, 4, 5, 6)

Policy DT 1.2

Vertical Mixed Use

Encourage vertical mixed-use development throughout downtown, unless otherwise indicated on the Future Land Use Map. (1, 3, 6)

Policy DT 1.3

Underutilized Sites in Downtown

Encourage the redevelopment of underutilized sites in downtown, included but not limited to vacant sites, surface parking lots, and brownfield sites. (1, 3, 4, 6)

Policy DT 1.4

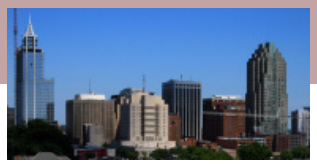
Redevelopment around the MTC

Support the redevelopment of underutilized land adjacent to the proposed Multi-modal Transit Center (MTC) with uses that will contribute to the success of the MTC and downtown. (1, 2, 3, 4, 5, 6)

Action DT 1.1

Downtown Zoning District

As part of the City's update of its development regulations, amend the zoning ordinance to create a new "Downtown" zoning district to regulate mixed-use development in the downtown. This general use district would replace the current zoning scheme of different base districts plus a downtown overlay, and would roughly correspond to the area mapped "Central Business District" on the Future Land Use Map. Floor Area Ratio (FAR) should be the primary tool for regulating development intensity in the Downtown District zone.



Action DT 1.2

Form-Based Zoning in Downtown

Explore the use of form-based zoning to guide infill and mixed-use development downtown.

Action DT 1.3

Downtown Plan

Develop a physical master plan that provides a vision for downtown's development.

Downtown Development

As redevelopment occurs across downtown, the increasing workforce and residential density will result in increased demand on existing infrastructure. Key investments in infrastructure, facilities, and open space have the ability to catalyze new private development that will help grow downtown as a regional employment center, vibrant urban neighborhood, and entertainment destination.

Across downtown, public entities such as the State of North Carolina, Wake County, and the City of Raleigh control large swaths of land. Many of these sites are currently underdeveloped, underutilized, or house services that soon will be relocated. In some cases, these publicly-controlled sites are considered opportune for redevelopment through public-private partnerships. Key sites along the axial streets and at other locations downtown where relatively large land assemblies are possible can become suitable for major activity generators. Opportunities to restore elements of the Christmas Plan, both the northern squares and the street grid, are also possible. The redevelopment of these sites through public-private partnerships presents opportunities to advance the City's goals and push the marketplace beyond what is feasible via private market activity alone.

Policy DT 1.5

Supporting Retail Growth

Encourage the scale and intensity of development needed to strengthen downtown's capacity to support a vibrant retail environment. (1, 3, 4, 6)

Policy DT 1.6

Providing Downtown Development Opportunities

Ensure a pipeline of suitable development sites through regulatory measures, infrastructure investments, and assistance with site assembly. (1, 3, 6)

Policy DT 1.7

Redevelopment of City-Owned Sites

Redevelop City-owned sites such as Devereux Meadows to include a mix of uses that will advance the vision of downtown as a vibrant employment, population, cultural, arts, and entertainment center. Where appropriate, integrate greenway trails and/or other recreational and open space amenities. (1, 3, 4, 6)

Policy DT 1.8

Air Rights Development

Encourage the sale or lease of the air rights over publicly-owned transportation infrastructure such as City-owned parking garages and transit facilities. (1, 3, 4, 6)

Policy DT 1.9

Higher Education Institutions

Support the integration of higher education institutions into the downtown. (1, 6)

Policy DT 1.10

Downtown as a State Office Center

Encourage the administrative headquarters for all departments of the State of North Carolina to be located within downtown. (1, 6)

Action DT 1.4

Downtown Infrastructure

Study and determine the locations and existing capacity of the transportation, water, sewer, and stormwater networks to ensure their capacity to accommodate forecasted demand.

Action DT 1.5

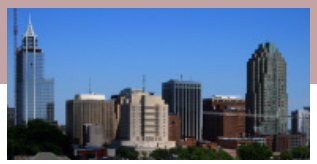
Downtown Strategic Plan Update

Develop a strategic plan update for downtown that identifies potential catalytic public investments and align these with the Capital Improvement Program.

Action DT 1.6

Development Site Database

Create and maintain a database of available and underutilized downtown sites suitable for development and redevelopment. Create a marketing strategy to make these sites attractive development opportunities.



Action DT 1.7

Disposal of City-Owned Land

Develop criteria and a strategy for disposing of City-owned lands within the downtown. Explore the formation of partnerships between multiple public entities to master develop and maximize the utility of publicly-controlled land.

Transitions, Buffering and Compatibility

The juxtaposition of different building types can be traced back to Raleigh's earliest history. Despite Raleigh's origin as a capital city, very few sites were developed according to a prevailing development pattern. Small homes were often sited next to larger commercial and governmental buildings. For nearly a century before the streetcar system was launched in 1891, the predominant method of transportation around the city was on foot or horseback. Proximity was paramount. Over time, market conditions favored higher uses on increasingly expensive land, resulting in a building up of the core area of downtown. At the edge areas of the built-up core are historic districts and neighborhoods including Boylan Heights, Cameron Park, Glenwood-Brooklyn, Oakwood, Pullen and South Park. Transition zones are used to reduce or blur a sharp delineation between areas of disparate development intensity, often through appropriate and accepted controls of use, height, scale, and building materials. Such controls can weave the downtown and these historic areas together into one continuous urban fabric.

Policy DT 1.11

Downtown Edges

Appropriate transitions in height, scale, and design should be provided between Central Business District land uses and adjacent residential districts. (1, 6)

See A.5 'Land Use Compatibility' in Element A: 'Land Use' for more information on transitions.

Policy DT 1.12

Edge Area Intensity

In areas where the CBD designation is located in proximity to established residential neighborhoods, residential densities should taper to be compatible with adjacent development. Non-residential uses with the greatest impacts— such as theaters, concentrated destination nightlife and retail, and sports and entertainment uses—should be directed away from these edge areas. See **Map DT-3:Downtown Transition Areas** for edge area locations. (1, 6)

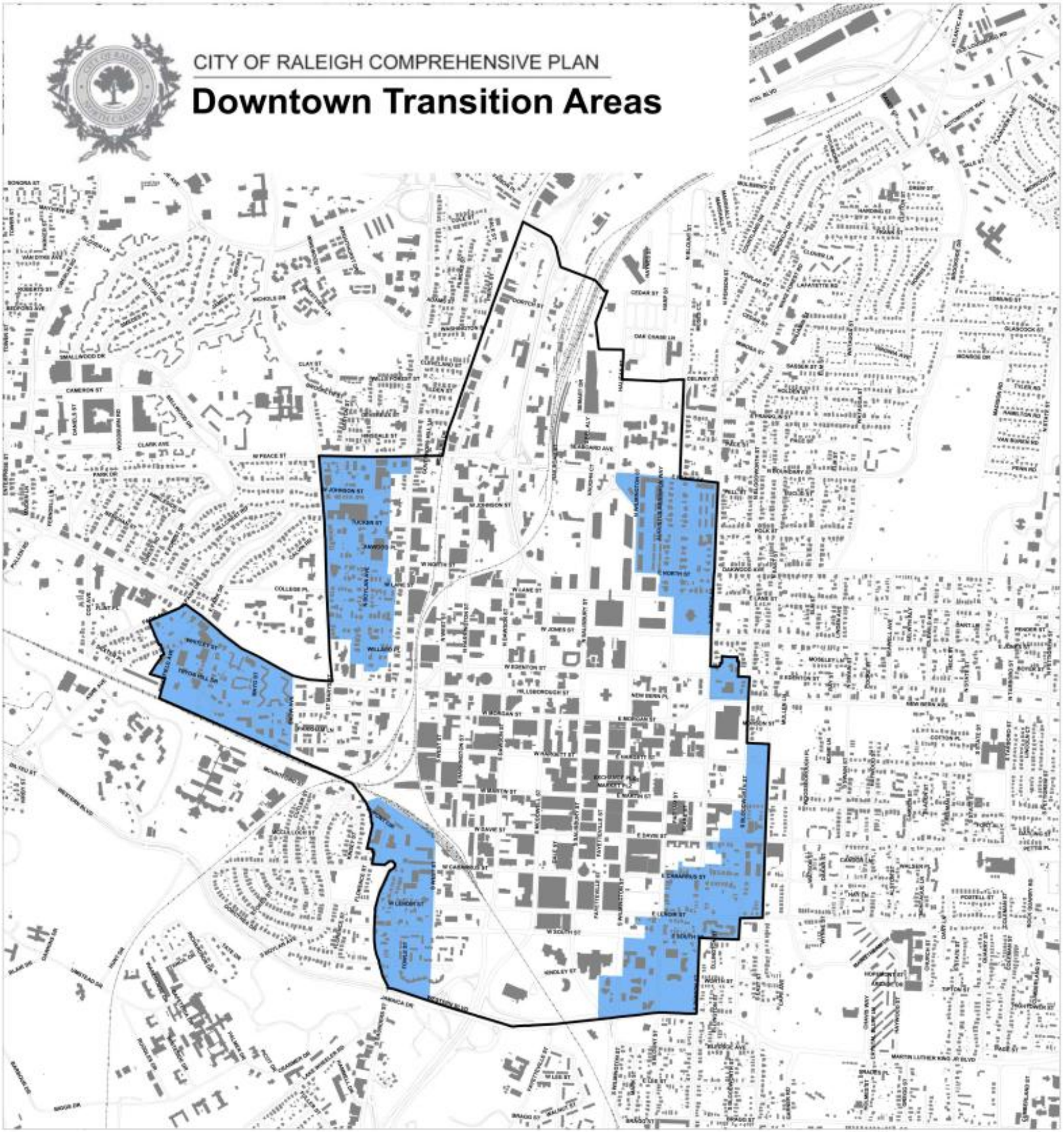
Policy DT 1.13

Downtown Transition Areas

In areas where the Downtown Element boundaries are located in proximity to established residential neighborhoods, residential densities should taper to be compatible with adjacent development. Non-residential uses with the greatest impacts—such as theaters, concentrated destination nightlife and retail, and sports and entertainment uses—should be directed away from these transition areas. Where existing zoning overlays are mapped, the height guidance in these districts should not be changed outside of an area planning process. See **Map DT-3** for transition area locations. (1, 6)

CITY OF RALEIGH COMPREHENSIVE PLAN

Downtown Transition Areas



MAP DT-3

- Downtown Element Boundary
- Downtown Transition Areas
- Buildings
- Streets
- Railroads

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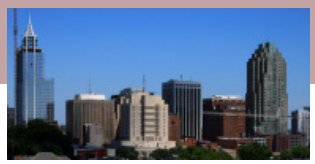
Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Policy DT 1.14

Compatible Mix of Uses on Downtown Perimeter

Encourage a compatible mix of housing options, community-serving institutional uses, and neighborhood-serving retail within the neighborhoods surrounding downtown. (1, 2, 3, 6)

Action DT 1.8

Identifying Transition Areas

As part of any Area Plans undertaken for areas adjoining the downtown, define the areas and methods appropriate for transitional form, use, and scale between downtown and established residential neighborhoods.

Achieving Vibrancy through Density

To support initiatives such as a vibrant urban retail environment, high quality transit, and the development of new recreational and cultural venues, dense development downtown is desirable. Like the citywide growth policies that focus on infill development within centers and corridors, high-density, mixed-use development will help to foster a downtown that is accessible by transit, supports a mix of incomes, ages and cultures, and has an vibrant street life and cultural scene.

Policy DT 1.15

High Density Development

Highest density development should occur along the axial streets (Hillsborough Street, Fayetteville Street and New Bern Avenue), major corridors (as identified by the thoroughfare plan), surrounding the squares, and within close proximity to planned transit stations. (1, 3, 4, 6)

Policy DT 1.16

High Density Public Realm Amenities

High-density developments downtown should include public realm amenities, such as publicly-accessible open space, public art, seating areas, and water features that complement the building and its nearby uses. (1, 6)

Policy DT 1.17

Auto-Oriented Businesses

Development, building types, and building features with an automobile orientation, such as drive-throughs, should not be developed in downtown or in pedestrian-oriented business districts. (4, 6)

Action DT 1.9

Density Bonuses for Public Benefits

Review the density bonus regulations and refine, if necessary, to ensure that the incentives offered foster the desired public benefits.

Action DT 1.10

Zoning and High-Density Development

During the update of the City's development regulations, define ways to manage high-density development so that it is sited in appropriate areas and that new developments include public realm amenities.

Action DT 1.11

Regulation of Drive-Through Uses

Amend the Zoning Code to prohibit drive-throughs in downtown and pedestrian-oriented business districts.

M.2 Transportation

With over 38,000 jobs, 35,000 parking spaces, three million visitors annually, and an increasingly dense residential neighborhood, Downtown Raleigh is the largest trip generator in the City and within the life of this Plan may become the largest in the region. Great downtowns accommodate multiple modes of transportation and public realm improvements that promote and balance traffic, transit, walking, and bicycling.

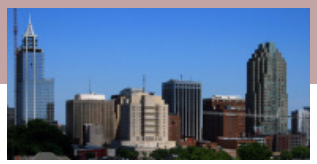
The key transportation issues in downtown include:

- Making new mobility connections in a compact environment;
- Improving conditions for pedestrians and bicycles;
- Designating and designing streets to serve various modes;
- Expanding choice in public transportation and making successful links from proposed transit to the downtown core;
- Designing and managing our parking resources more efficiently; and
- Minimizing conflicts created by freight and deliveries to businesses and residents.

Multi-modal and Connected Street Grid

As Downtown redevelops into a compact mixed-use center, new transportation connections will be needed to complement existing connections. Downtown's compact and connected street grid has been and remains its greatest asset, as the grid disperses rather than concentrates traffic and provides multiple routes to the same destination. The grid permits downtown streets to function with a high level of service while serving the greatest intensity of land use. Street closings, superblocks, and an over-abundance of one-way streets erode the functionality of the grid and should be avoided. As transportation continues to evolve, the grid will help downtown adapt and prosper.

The City's greenway system plays a significant role in providing recreational opportunities for downtown residents and visitors. The greenway system should be expanded in downtown. Because downtown presents a more urban development pattern compared to other areas of the City, an urban greenway type should be incorporated on the major pedestrian thoroughfares identified as Green Streets on **Map DT-4**. An urban greenway is defined as a street meeting the requirements specified by Action DT-19 'Green Street Design Standards'.



Policy DT 2.1

Multi-modal Downtown Transportation System

Downtown should be well served by the broadest range of transportation options, including bikeways, sidewalks, greenway trails, roadways, streetcars, light rail, and buses. (4, 5)

Policy DT 2.2

Protect the Downtown Street Grid

Preserve, protect, and extend the downtown grid pattern of small blocks and interconnected streets. Maintain existing rights-of-way to the greatest extent possible. Explore the creation of new roadway connections within and adjacent to downtown, including opportunities to extend the grid north of Peace Street and along Capital Boulevard. (4)

Policy DT 2.3

Restore Two-Way Traffic

Improve circulation within downtown by converting one-way streets classified as minor thoroughfares and below to two-way traffic flow, where feasible. (4)

Policy DT 2.4

Access from Grade-Separated Crossings

Due to its often adverse effects on adjacent land uses, avoid new rail or roadway flyovers and bridges within downtown if the opportunity exists to locate new facilities on existing grade separated crossings. (1, 4, 6)

Policy DT 2.5

Widen Sidewalks

In new streetscape designs, provide expansive sidewalks and widen existing sidewalks to a 14-foot minimum where there is available right-of-way. (4, 5)

Policy DT 2.6

Pedestrian Bridges and Tunnels

Strongly discourage pedestrian overhead bridges or underground tunnel connections across the public right-of-way. (6)

Policy DT 2.7

Ped-Bike Benefits on Green Streets

For all public/private sector design and traffic engineering/operations decisions made for the Green Streets shown on **Map DT-4**, pedestrians, bicyclists, and environmental benefits should be given equal priority to vehicular traffic flow and other street functions, including but not limited to parking and loading functions. (1, 4, 6)

Policy DT 2.8

Priority Pedestrian Streets

For all public/private sector design and traffic engineering / operations decisions made for Priority Pedestrian Streets shown on Map **DT-4**, the needs, safety, and comfort of pedestrians should be given priority. (1, 4, 6)

Policy DT 2.9

Downtown Green Streets

Preserve and expand the City's greenway system along Green Streets in downtown, using it to help connect housing, employment, commercial, and recreational areas. (3, 4, 5, 6)

Policy DT 2.10

Downtown Alleys

Encourage the preservation and protection of existing internal alleyways in downtown. (6)

Action DT 2.1

Expand the Downtown Grid

Study expansion of the downtown grid north along Capital Boulevard. Create new roadway connections throughout downtown to better disperse and serve the growing traffic volumes. Specifically explore:

- S. West St. to W. Lenoir St. over the railroad tracks;
- W. Morgan St. to Western Blvd. west of Central Prison; and
- A new east/west connection between N. Blount St. and N. Glenwood Ave., north of Peace St.

Action DT 2.2

Lane Striping Study

Study lane striping in downtown to ensure that the number and widths of lanes match traffic loads: minimizing conflicts between through-traffic and parked vehicles to provide for the safety of pedestrians and bicycles; and maximizing opportunities for on-street parking.

Action DT 2.3

Downtown Public Realm Study

Fund and implement the recommendations of the Downtown Public Realm Study, including a comprehensive pedestrian-improvement and streetscape strategy.

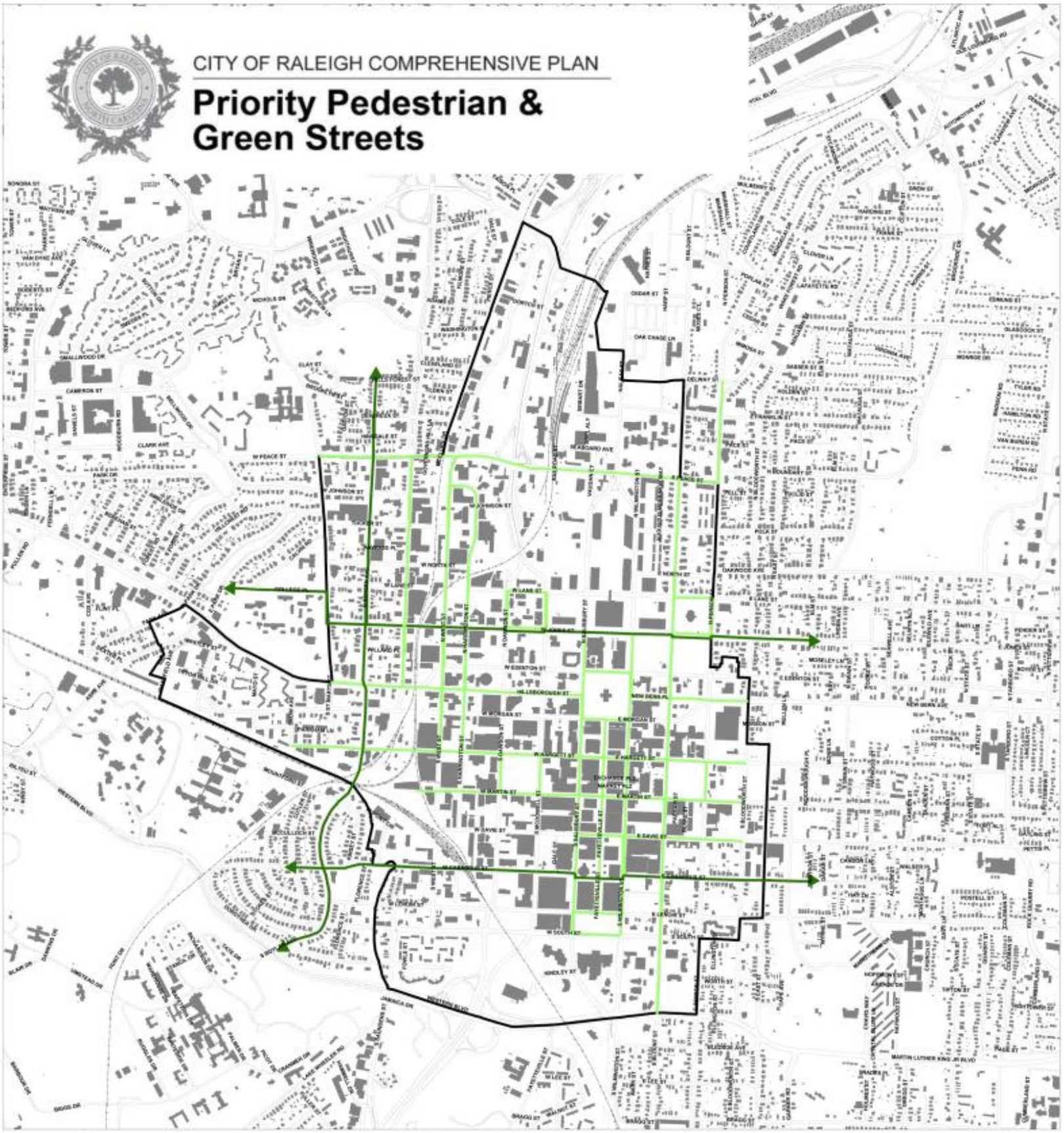
Action DT 2.4

No Right on Red

Consider prohibiting right turns on red in downtown to improve pedestrian safety and mobility.

CITY OF RALEIGH COMPREHENSIVE PLAN

Priority Pedestrian & Green Streets



MAP DT-4

Public Realm Improvements

- Green Streets
- Priority Pedestrian Streets
- Downtown Element Boundary

- Buildings
- Railroads
- Streets

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Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division

Action DT 2.5

Downtown Street Design Standards

Develop downtown-specific design standards for street, sidewalk, and bicycle networks for incorporation into the Streets, Sidewalks, and Driveways Access Handbook (SSDAH). Specifically, conduct a study to define, designate and develop street sections and design standards for inclusion in the SSDAH for key types of streets within downtown.

Action DT 2.6

Priority Pedestrian Street Improvements

As part of the Public Realm Strategy, identify pedestrian enhancements for Priority Pedestrian Streets indicated on **Map DT-4**, and schedule implementation as part of the Capital Improvement Program.

Action DT 2.7

Pedestrian Counts

Conduct a study of pedestrian counts on pedestrian and retail streets, and update the counts on a regular basis. Such a study is useful both for transportation planning as well as retail recruitment.

Action DT 2.8

Green Street Design Standards

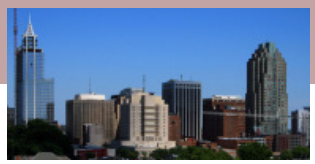
Study, schedule, design, and fund new facilities that integrate sustainable streetscape technologies for the Green Streets identified on **Map DT-4**. Use initial implementation of Green Streets to refine the concept and identify additional streets where implementation is appropriate. Green Streets should include:

- Pedestrian amenities;
- Landscaped planting strips where space permits;
- Wider sidewalks, bicycle lanes, and mid-block crossings;
- Recommended speed limit maximums of 25 mph;
- Signage and wayfinding embedded into the concrete that clearly denotes the street as a "green street" and provides information about greenway connections;
- Pedestrian-scaled, energy-saving "light-emitting diode" (LED) street lighting; and
- Innovative stormwater management facilities such as porous pavers, tree boxes, and rain gardens.

Action DT 2.9

Incorporate Greenways in the Pedestrian Network

Expand and modify the downtown pedestrian wayfinding system to include the downtown greenway trails and other ties to the citywide greenway network.



Action DT 2.10

Alleyway Study

Study the feasibility, location, design, and funding/dedication of an expanded public alleyway system in downtown.

Public Transportation

The anticipated growth of downtown will add significant built space over the coming decades that will increase trip generation commensurately. Elevated demand coupled with the inability to widen roadways will render downtown the most transit-dependent area within the region. As the future hub of long- and short-distance rail and bus service, the multi-modal transportation center will contribute to the transformation of the built environment in the west side of downtown by linking land use intensity with transportation infrastructure. The inclusion of light rail and streetcar networks will eventually connect the transportation hub with other activity generators within and close to downtown. Complementing the provision of viable transportation alternatives, transportation demand management strategies are utilized to reduce vehicle dependency and mitigate automotive pollution. The area is scaled in such a way that the operation of an automobile is not a requisite for short trips within and around the downtown. Particularly within a radius of one-quarter mile surrounding proposed transit stations, walking will become the dominant method of personal transportation.

Policy DT 2.11

Enhanced Downtown Transit Service

Promote non-automotive circulation among downtown activity and employment centers through enhanced transit service including circulators, which may be bus or streetcar. (1, 3, 4, 5, 6)

Policy DT 2.12

Development Around Major Transit Facilities

Integrate recreation, retail, service, and community uses within public transportation facilities, including the Moore Square transit station and proposed Multi-Modal Transportation Center. (1, 4, 6)

Policy DT 2.13

Car and Bicycle Sharing

Promote car and bicycle sharing services within the downtown. (1, 5)

Action DT 2.11

Downtown Circulators

Expand the use of circulators downtown.

Action DT 2.12

Downtown Fixed Rail Transit Study

Conduct a study that will determine the appropriate course of action for fixed-rail transportation service in and around downtown, including the identification of future streetcar corridors. Determine how to connect the system to the new Multi-modal Transportation Center.

Action DT 2.13

Car-Sharing and City Vehicles

Explore contracting with an established car-sharing company to replace a portion of the City's existing vehicular fleet as a way of establishing a guaranteed market for car sharing in downtown.

Action DT 2.14

Moore Square Station Redesign

Redesign and upgrade the Moore Square transit station to provide enhanced capacity, better passenger amenities and improved aesthetics. Explore the development of the air rights over the station and its access points.

Design and Management of Vehicle Parking and Access

In downtown Raleigh, where parking development costs are high and land for parking is scarce, parking design and management strategies must maximize the efficient use of both public and private parking supply. Downtown Raleigh at present is primarily accessed by people in automobiles. The area has abundant documented capacity in its existing parking facilities even though the overall ratio of parking spaces to development is about half of what would typically be found in suburban development. In the future, it is anticipated that public transportation and other modes will make up a larger share of the travel market into and out of downtown. As the percentage of commuters arriving to downtown in cars decreases, the ratio of spaces to the built environment should decrease as well. Parking policies and development strategies will need to be flexible to make better use of the existing, underutilized parking supply and to increase development intensity. Such strategies will therefore emphasize managed public facilities and shared parking wherever feasible.

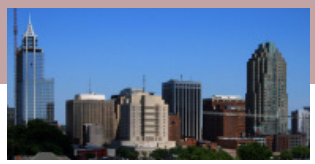
Most of downtown's off-street supply will continue to be provided in parking decks. Because decks are major pieces of infrastructure and are not active uses, they can have significant negative urban design impacts if not properly mitigated. Strategies such as retail bases, screening, and liner buildings can mitigate or eliminate these impacts.

On-street parking is an important part of the total parking supply. On-street spaces are most valuable as short-term parking for visitors, errand-runners, and shoppers. Free and unregulated curb parking results in high occupancy with little turnover, leading to a widespread perception of inadequate parking even as hundreds of off-street spaces go unused. Pricing and management strategies can free up the on-street supply.

Policy DT 2.14

Maximizing On-Street Parking

Maximize the provision of on-street parking within downtown by providing for curb parking wherever and whenever possible and practical. (1, 6)



Policy DT 2.15

Parking Pricing and Management Strategies

Manage on-street spaces such that they are available for short-term parking for visitors, errand-runners, and shoppers. Use pricing and management strategies to balance on- and off-street parking demand. (1, 6)

Policy DT 2.16

Demand-Responsive Parking Regulations

Ensure that off-street parking regulations do not require more off-street parking than needed by periodically reevaluating the requirements against observed demand. (4, 6)

Policy DT 2.17

Parking Garage Entrances

To minimize pedestrian and vehicle conflicts, parking garage and service entrances should not be located on Pedestrian Priority Streets (see **Map DT-3**). (4, 6)

Policy DT 2.18

TDM and Parking Decks

Support and encourage Transportation Demand Management strategies, including parking cash-out, as a part of the development agreement for any public-private partnered parking deck. (1, 5, 6)

Policy DT 2.19

Parking and Economic Development

Expand the role of the municipally-administered parking enterprise in supporting and promoting economic development, including using parking arrangements and public-private partnerships as a means to attract and catalyze development. (1, 4, 6)

Policy DT 2.20

Management of Parking Revenues

Operate the City's parking program as a self-sustaining enterprise fund, with any revenues above capital, operating costs, and maintenance reserves made available for investments and activities that further its mission. [7] (1, 3, 6)

Policy DT 2.21

Avoiding Parking and Loading Conflicts

Strongly discourage the delivery of goods and services requiring on-street loading during the peak morning and evening travel times. (4, 6)

Policy DT 2.22

Below-Grade Parking Preference

When feasible, encourage underground or entirely below-grade parking as the preferred solution for the provision of parking downtown. (1, 4, 6)

7 This may require a change in the State statute authorizing municipal parking meter programs.

Policy DT 2.23

Wrapped Parking Preference

Where underground or below-grade parking is not feasible, parking garages should be "wrapped" with active uses along the entire vertical frontage of buildings along the public right-of-way. (1, 4, 6)

Policy DT 2.24

Parking Garage Constrained Streets

Where underground or wrapped parking is not feasible on the streets identified on **Map DT-5**, parking garages should be screened using materials consistent with adjacent and/or proposed buildings, but without active uses above the ground level. Parking garages should not be visibly distinct from the buildings they serve. To achieve this, parking garages should be screened by using the same materials, fenestration, and other design elements of the buildings. In some cases, the internal venting of garages will be necessary. Vehicle entrances should be located away from the streets identified on **Map DT-5. (**6)

Policy DT 2.25

Parking Garage Non-Constrained Streets

For all other streets not designated on Map DT-5 but within downtown, parking garages should be architecturally screened so that stored vehicles are not visible from the adjacent right-of-way. (6)

Policy DT 2.26

Active Ground Floor Parking Uses

Ground floor uses should be provided in all parking garages on all Pedestrian Priority streets (see **Map DT-4**) and active ground floor uses should be provided in all parking garages on Retail Streets (See **Map DT-6**). (1, 4, 6)

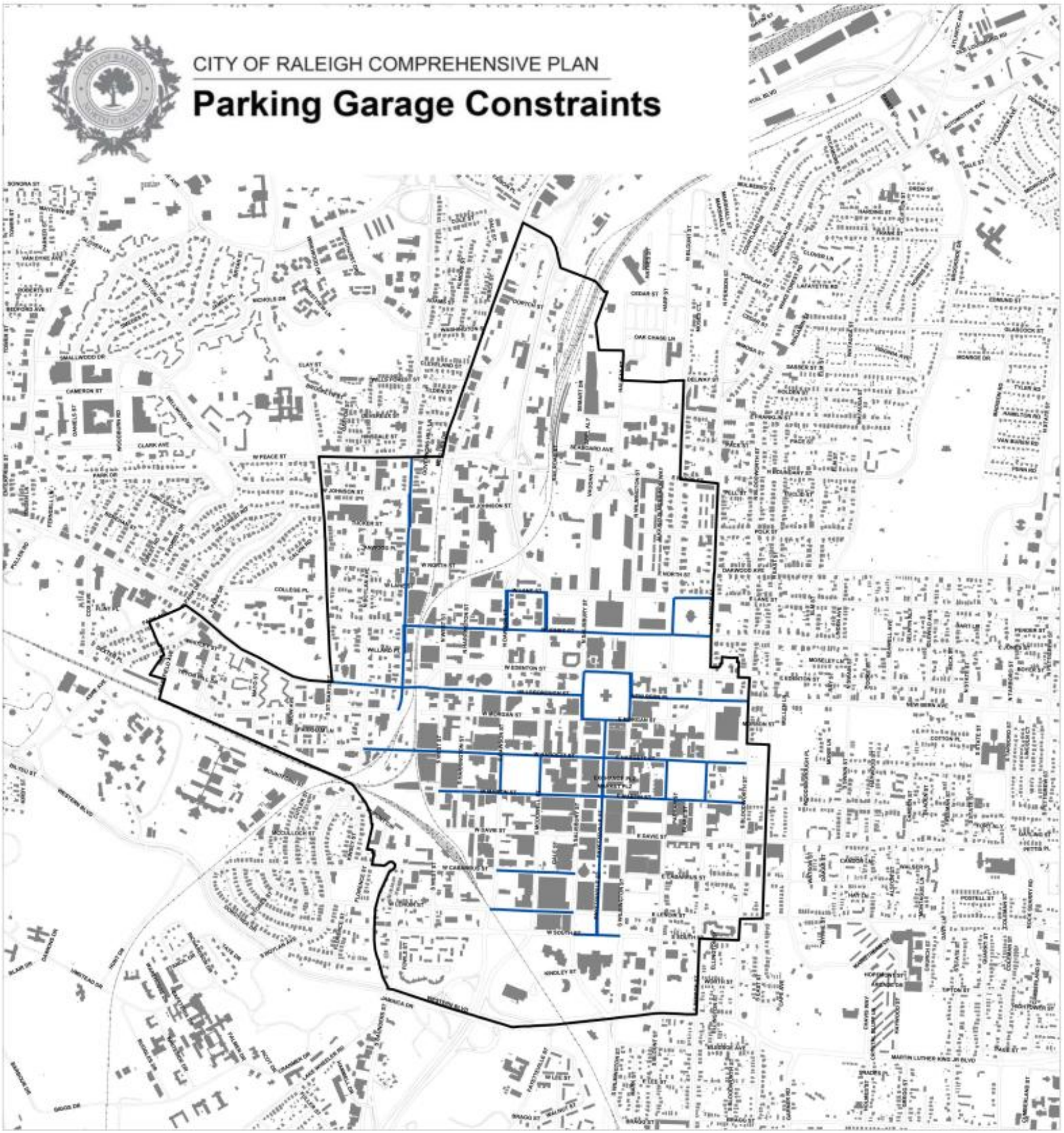
Policy DT 2.27

Parking Beneath City Squares

As financially feasible, construct underground parking facilities beneath new squares as part of an expanded square plan. (3, 4, 6)

CITY OF RALEIGH COMPREHENSIVE PLAN

Parking Garage Constraints



MAP DT-5

Parking Garage Constraints

Parking Garage Constraints

Downtown Element Boundary

Buildings

Railroads

Streets

0 375 750 1,500 Feet

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

Action DT 2.15

Downtown Parking Master Plan

Implement the recommendations of the 2008 Downtown Parking Master Plan.

Action DT 2.16

Downtown Parking Model

Maintain and use the parking model developed as part of the 2008 Downtown Parking Master Plan to determine the need for new facilities.

Action DT 2.17

Curb Parking Inventory

Undertake a comprehensive inventory and study of curb parking in downtown, and identify locations and hours where additional curb parking can be provided. Update the inventory whenever changes to curb parking locations and regulations are made.

Action DT 2.18

Parking Fee In-Lieu

Revise the zoning ordinance to provide a "fee-in-lieu" option for downtown whereby developers can buy out of their minimum parking requirements by contributing towards the provision of City-provided parking.

Action DT 2.19

Downtown Loading and Service Regulations

During the update of the City's development regulations, review the sufficiency of regulations in the Zoning Code for off-street loading and service areas downtown.

M.3 Economic Development

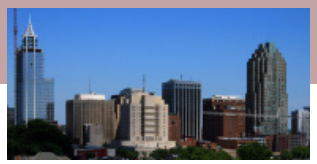
A strong and diversified downtown economy is critical to the prosperity of the residents of Raleigh and the region. Downtown's unique character and geography – including close access to universities, its status as the hub of government, and a compact, pedestrian-oriented urban character have provided downtown with a competitive economic advantage. Both now and in the future, Raleigh's ability to attract a talented and diverse workforce, foster ideas and innovation, and make strategic infrastructure investments will be key components to downtown's economic growth and success.

The critical economic development issues facing downtown Raleigh that are addressed in this section include:

- Activating streets through the provision of retail and active uses;
- Bolstering the economic climate through the recruitment and retention of businesses; and
- Expanding hospitality and tourism.

Expanding Retail for Active Streets

No matter how tall their skylines, downtowns succeed or fail at the street level—compare Los Angeles, with towering skyscrapers but empty sidewalks, with Alexandria, VA, which has no tall buildings but is a lively and active destination. The convenience and vibrancy offered by successful street-level retailing is a downtown's key competitive advantage, and the selling point that justifies downtown rents and prices. The land use aspect of creating retail space is included here within



the context of economic development. The policies below address how to promote the use of ground floor space by businesses that will add to the vitality of the downtown experience.

Space designed and constructed for active-use at the ground-level plays a very important role in shaping a pedestrian-oriented built environment and in creating value for the upper floor uses. As the retail development market matures, the City needs to proactively guide the placement of active-uses on downtown's most important streets to promote a lively downtown destination built on a strong retail core. Retail streets prosper when complementary uses are in close proximity. By guiding where retail uses are located, Raleigh will grow its economic capacity, strengthen existing public spaces, and enliven the downtown experience by clustering these active uses between and surrounding activity generators.

Policy DT 3.1

Ground Floor Uses on Primary Retail Streets

New development should dedicate at least 60 percent of its linear frontage along the public right-of-way of Primary Retail Streets as identified on **Map DT-6** for ground-floor space designed and constructed to accommodate one or more retail uses including consumer-goods shops, dining and eating establishments, convenience goods, museums, galleries, arts and entertainment uses, and hotel lobbies. (1, 6)

Policy DT 3.2

Ground Floor Uses on Secondary Retail Streets

New development should dedicate at least 50 percent of its linear frontage along the public right-of-way of Secondary Retail Streets as identified on **Map DT-6** for ground-floor space designed and constructed for the uses encouraged on primary streets or service retail and professional services including but not limited to: fitness centers, dry cleaners, shoe repair, and medical offices. (1, 6)

Policy DT 3.3

Encouraging Pedestrian-Scale Design

All new development within the Downtown District but not on either a Primary or Secondary Retail Street should integrate architectural elements that connect to the public right-of-way. Examples of such architectural elements include but are not limited to: inclusion of windows at the sidewalk level, multiple building entrances adjacent to public right-of-way, pedestrian scale building materials with a high level of detail, lighting along the sidewalks, and awnings. (1, 6)

Policy DT 3.4

Leasing of City-Owned Space

When leasing City-owned retail spaces, seek to fill identified gaps in the marketplace rather than focusing solely on achieving the highest rent. (1, 6)

Policy DT 3.5

Retail in City Facilities

Where feasible, add retail space to existing City facilities including offices and parking garages. (1, 6)

Policy DT 3.6

Two-Way Traffic on Retail Streets

Prioritize retail streets for two-way traffic and curb parking on both sides of the street. (1, 6)

Policy DT 3.7

Retail Signage

Encourage retail signage downtown which is eclectic, lively, and pedestrian-oriented. (1, 6)

Action DT 3.1

Financial Assistance for New Retailers

Explore the creation of a loan pool, grant provisions, or revolving fund to provide gap financing to entrepreneurs interested in starting viable retail businesses downtown.

Action DT 3.2

Facade Improvement Incentives

Incentivize improvements to building and storefront facades.

Action DT 3.3

Retail Study Implementation

Partner in implementing the Downtown Raleigh Alliance retail study and strategy.

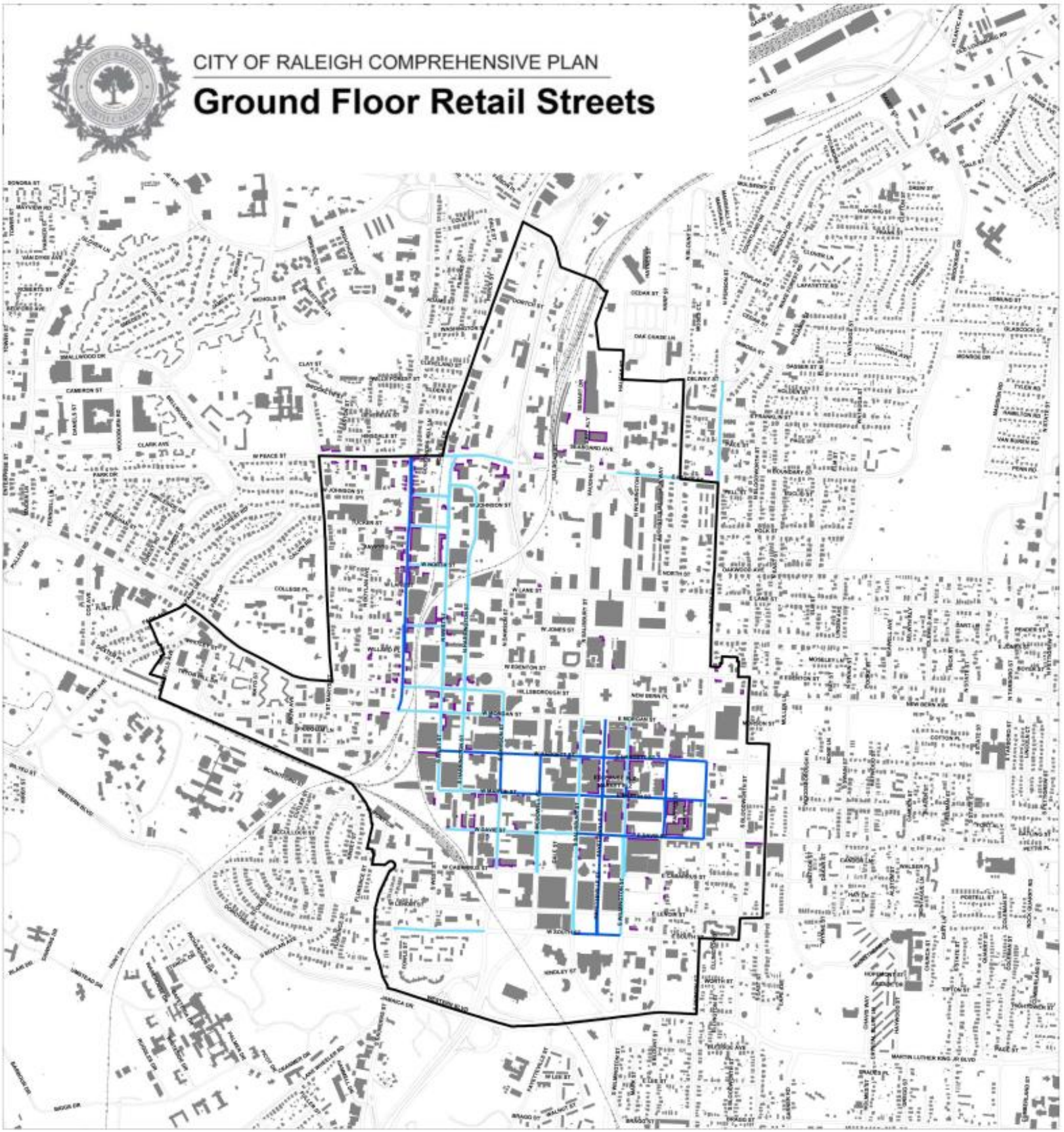
Action DT 3.4

Downtown Retail Space Inventory

Assist the Downtown Raleigh Alliance in creating and maintaining a database of available Downtown retail spaces.

CITY OF RALEIGH COMPREHENSIVE PLAN

Ground Floor Retail Streets



MAP DT-6

Ground Floor Retail Streets

- Primary Retail Street
- Secondary Retail Streets
- Existing Retail Frontage

- Buildings
- Railroads
- Streets

0 375 750 1,500 Feet

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Department of City Planning & GIS Division

Business Recruitment and Retention

As a regional employment and cultural center that has more than 200 acres of underdeveloped land, the downtown presents significant opportunities to house new space constructed to accommodate commercial tenants. For downtown to prosper and mature into a vibrant, mixed-use center, the retention and expansion of the commercial base will require concerted, coordinated efforts. Efforts to grow downtown business opportunities should target companies large and small, from Fortune 500 companies to independently-owned retailers. A coordinated business recruitment and retention effort will combine the efforts of multiple agencies currently operating with limited municipal oversight. The lack in coordination results in significant gaps in recruitment and retention efforts. *See also D.8 'Organizational Structure and Functions' in Element D: 'Economic Development'.*

Policy DT 3.8

Downtown as a Regional Center

Encourage new investments and developments that position downtown as the center of the region for headquarters, jobs, urban housing, entertainment, and transit. (1, 2, 3, 4, 5, 6)

Policy DT 3.9

Downtown Business Recruitment and Retention

Promote downtown as part of a coordinated business recruitment/retention program that effectively engages economic development agencies. (1, 3, 6)

Policy DT 3.10

Incentives for Key Downtown Uses

Target incentives, including grants, loans, and zoning bonuses, to jump-start lagging business sectors that have been identified as important to downtown's success. (1, 2, 3, 4, 5, 6)

Policy DT 3.11

State Government Offices in Downtown

Encourage the administrative headquarters for all departments of the State of North Carolina to be located within downtown. (1, 6)

Action DT 3.5

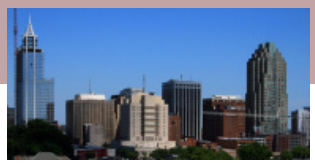
Downtown Economic Development Study

Conduct an economic development study to identify the representation of business sectors essential to downtown's economic success.

Action DT 3.6

Promotion of Downtown Assistance Programs

Identify and publicize programs that will provide downtown businesses with access to operating and capital assistance.



Action DT 3.7

Coordinating Downtown Business Programs

Coordinate and consolidate, as needed, the business recruitment and retention initiatives for downtown.

Arts, Culture, Entertainment and Hospitality

With recent investments in the new Convention Center, Fayetteville Street, the Contemporary Art Museum, Marbles Museum, and the Green Square Project, downtown is emerging as a regional and statewide destination. More than 2.4 million visitors came to downtown in 2007, a figure that is expected to grow considerably in the coming years following the completion of projects currently under construction.

Downtown's many cultural and entertainment resources offer valuable opportunities to enhance tourism and expand not only the downtown economy, but the City's economy as a whole. A key benefit of having regional and super-regional destinations is the opportunity to capture the ancillary retail, food, and drink spending of out-of-town visitors. However, this spending potential cannot be fully captured if there are no restaurants and shops conveniently located near the destination. Downtown, with its growing number of shopping and dining options and walkable streets, is uniquely positioned to capture the ancillary spending of tourists, visitors, and arts patrons.

Policy DT 3.12

Downtown as an Arts and Culture Hub

Downtown should be the priority location for major cultural and arts institutions. (3, 6)

Policy DT 3.13

Downtown Attractions and Events

Encourage the development of additional tourist attractions and visitor-supportive uses, activity generators, and events downtown, including live performances and programming in downtown's public spaces. (1, 3, 4, 6)

Policy DT 3.14

Creative and Heritage Businesses

Support and strengthen the downtown creative and heritage business communities. (1, 6)

Action DT 3.8

Heritage Tourism in Downtown

Develop historic tours, trails, and signage designed to promote the historic assets of downtown.

Action DT 3.9

Concessions in Downtown Squares

Coordinate efforts between the appropriate City and State departments to determine the viability of permanent food/drink concessions within the downtown squares.

Action DT 3.10

Coordinating Heritage Tourism Organizations

Coordinate efforts among the Raleigh Historic Districts Commission, the Raleigh City Museum, the N.C. History Museum, and other entities to maximize the potential for downtown's historic assets to drive tourism.

Action DT 3.11

Support for Creative Talent

Create a City-sponsored institution that provides support, space, training, education, and opportunities for emerging creative talent in the downtown.

Action DT 3.12

Recruiting Hospitality Uses

Work with economic development agencies such as the Greater Raleigh Chamber of Commerce, Greater Raleigh Convention and Visitors Bureau, and the Downtown Raleigh Alliance to recruit new hospitality-sector uses to downtown.

M.4 Housing

To be an asset for the entire City, downtown needs a strong and diverse residential base to complement its employment and hospitality sectors. Downtown should be able to provide its share of housing options for the growing population. It provides the optimal location for the highest residential densities in the City. It also presents unique opportunities to reuse existing buildings that were originally built for non-residential uses, but could be converted for residential use.

Across the nation, people are choosing to relocate to more urban environments that offer amenities within a close distance. Downtown Raleigh is the primary candidate for this type of environment. For it to be a strong residential center, downtown needs to have diversity in both housing choices and residents. Like the City as a whole, downtown should reflect the racial, age, and income diversity of Raleigh's population and provide housing choices that satisfy all types of choices and users. Market-rate, workforce, mixed-income, and affordable housing are critical elements of a successful, diverse residential environment.

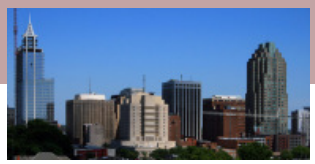
The challenges mentioned above can best be addressed by focusing this section on the following issues:

- Accommodating a sizable share of the City's growing population; and
- Creating a larger supply of workforce and affordable housing.

Policy DT 4.1

Encouraging Downtown Housing

Encourage high-density residential development in downtown, consistent with the target of accommodating another 25,000 residents by 2030. (1, 2, 3, 6)



Policy DT 4.2

Adaptive Use for Housing

Encourage the adaptive use of functionally obsolete commercial buildings for housing. (2, 3, 6)

Policy DT 4.3

Expanding Downtown's Affordable Housing Supply

Preserve and expand the existing supply of affordable housing in and near downtown. (2, 3, 4, 6)

Policy DT 4.4

Mixed Income Housing

Encourage mixed-income housing downtown. (1, 2, 3, 6)

Action DT 4.1

Zoning for Downtown Housing

During the update to the City's development regulations, review and reduce regulatory impediments that inhibit the adaptive use of commercial buildings for housing.

Action DT 4.2

Promoting Downtown as a Neighborhood

Work with the Downtown Raleigh Alliance to promote downtown as a residential neighborhood for singles, couples, and families.

Action DT 4.3

Tools and Regulations for Affordable Housing

Develop and implement financial and development tools and regulations (e.g. increased density bonuses) that will incentivize the inclusion of affordable housing in and around downtown.

See also E.2 'Affordable and Workforce Housing' in Element E: 'Housing' for additional information regarding affordable housing on publicly-owned sites.

M.5 Parks, Recreation and Open Space

Downtown has a need for parks and open spaces that provide recreational opportunities for residents, workers, and visitors.

Downtown is a planned capital with a system of five park-like squares laid out as part of its original development pattern. This provides recreational opportunities for residents and visitors that are unique to Downtown Raleigh. Working to take advantage of the five-square plan for its original and expanded purposes is a priority.

The supply, quality, and usability of parks and recreational spaces in Downtown needs to be increased, including extending the greenway system within Downtown. New development should provide its fair share of open space and existing parks and recreational facilities to better serve the growing population.

In order to address these concerns, this section concentrates on the following issues:

- Maintaining and improving a healthy open space to resident ratio
- Expanding an insufficient Downtown parks and recreational presence
- Restoring and Enhancing Raleigh's historic squares

Open Space in New Development

As the population continues to grow and new development comes on-line, additional open space will be required to maintain a healthy ratio of open space to population.

Policy DT 5.1

Green Roofs as Open Space

Encourage the use of roof gardens, green roofs, and other environmentally sustainable options for use as private open space in new downtown developments. (4, 5, 6)

Action DT 5.1

Fees for Open Space

Create a fund supported by development fees and fee-in-lieu of open space and public art provisions to bank open space and pay for public realm amenities in downtown.

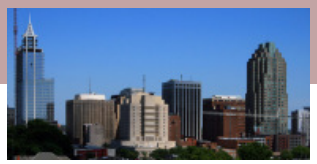
Parks and Recreational Facilities

As the population of downtown increases, the amount of open space and recreational facilities must keep pace. The public sector has the opportunity to create new parks, recreational facilities, and open spaces and refurbish existing facilities for use by residents, workers, and visitors in downtown. Private development, as it comes on-line, will also participate in providing park and open spaces.

Policy DT 5.2

Increasing Downtown Open Space

Increase public parkland, recreational facilities, and open spaces for downtown residents, workers, and visitors. Seek traditional and non-traditional means for providing these amenities. (3, 5, 6)



Policy DT 5.3

Dorothea Dix Open Space

Encourage the creation of a regional park and recreational amenity on the Dorothea Dix property. Provide for green connectivity between Dorothea Dix and downtown. (3, 5, 6)

Policy DT 5.4

Partnership for Parks

Encourage partnership opportunities that will result in upgraded parks in and around downtown to satisfy a growing population. (3, 5, 6)

Action DT 5.2

Downtown Parks Plan

Fund and develop a downtown-specific parks and recreation plan that identifies needs and opportunities to develop parks, open spaces, and recreational activities. The plan should include a study of current and future open space needs and a strategy for open space acquisition.

Action DT 5.3

Development Regulations for Open Space

During the update to the City's development regulations, identify ways to provide visible open space within new residential, non-residential, and mixed-use developments. Include methods to incentivize the provision of publicly-accessible open space, such as a restructuring of the density bonus system.

Action DT 5.4

BID Open Space Improvements

Expand the public purposes of the Downtown Business Improvement District to include contributions towards downtown public space improvements.

Action DT 5.5

Halifax Mall

Investigate adapting Halifax Mall into a recreational resource. Encourage the State to allow recreational uses at appropriate times.

Action DT 5.6

Chavis Park

Revitalize Chavis Park and strengthen its connection to downtown.

Action DT 5.7

Downtown College Open Space

Coordinate with downtown colleges for the mutual use and development of shared athletic fields and facilities that can serve both the general public and students.

M.6 Community Facilities and Services

Downtown's vitality depends on many attributes of good planning, among them the siting, acquisition, co-location, programming, design, maintenance, and construction of high-performance, sustainable community facilities that benefit and serve the downtown community. In addition to those already outlined in Element H: *Community Facilities and Services*, the following downtown-specific policies and actions create conditions for continuing success.

Policy DT 6.1

Design Competitions for Public Facilities

Promote the use of design competitions for all major new downtown public facilities. (3, 6)

Policy DT 6.2

Consolidation of Downtown Services

Consolidate downtown municipal services on the block bounded by Hargett, McDowell, Dawson, and Morgan streets. (3)

Policy DT 6.3

Consolidation of Downtown Services

Include space designed and constructed to accommodate ground-floor active-uses in new community facilities built downtown. (3, 6)

Action DT 6.1

Downtown Library

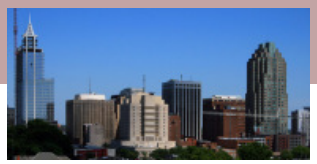
Collaborate with Wake County to locate and construct a downtown library.

M.7 Urban Design

The space between buildings is important; in the urban environment buildings define space. It is in the space between buildings where most users experience downtown. This affords the opportunity to experience the details of a space: the interaction of planes, the materials and details of spaces, and the environment formed by the interaction of nature and the manmade. Because experiencing places as a pedestrian is more common downtown and because the types of buildings and structure of spaces downtown is unique within Raleigh, urban design plays an important role in determining the shape and experience of the City.

The Scale, Form, and Placement of Buildings

Building height and form contribute to the sense of order and image of downtown. In addition to establishing the organizational hierarchy of downtown, the 1792 Christmas Plan utilized the topography of the land to site the Capitol and four axial streets. Fayetteville Street is sited along the ridgeline, while the Capitol is located at the highest elevation within downtown. To reinforce and build upon that design, prominent buildings and activity-generating uses are encouraged in areas that will accentuate the Christmas Plan, such as



surrounding the squares or along the axial streets. All buildings should respond to and respect the character of the built environment, including the scale of the ground floor, the form of the building, and the relationship between buildings. In some cases, the incorporation of similar architectural treatments will help to blend new buildings with the historic building stock. Policies and actions within this section intend to foster a harmonious relationship between buildings, as well as an organized and predictable urban form for downtown.

Policy DT 7.1

Reinforcing the Christmas Plan

Reinforce the William Christmas Plan by encouraging prominent buildings and uses to be developed along axial streets (i.e. Hillsborough, Fayetteville, and New Bern) and the squares. (1, 3, 4, 6)

Policy DT 7.2

Maintaining Consistent Setbacks

New buildings should respond to the existing built character by using similar setbacks and stepbacks to provide a continuous cornice line and consistent street-level pedestrian experience. Along the principal north-south vehicular street pair, Dawson and McDowell streets, buildings should be set back to provide an approximately 20' wide pedestrian area between the street curb line and the building face. (6)

Policy DT 7.3

Streetwalls

Except as required by code, the placement of buildings along the right-of-way should create a continuous streetwall that defines and accentuates the streets and squares. (6)

Policy DT 7.4

Building Entries

The main entrance of new buildings should front onto a public street. Where buildings abut multiple streets and one of which is an axial street, the main entrance of the building shall front onto the axial street. This policy also applies, where practicable, to existing buildings undergoing major renovations or rehabilitation. (6)

Action DT 7.1

Managing High-Rise Impacts

During the update of the City's development regulations, consider ways to address the impacts of new buildings, especially towers, on adjacent public and private property related to the height/width ratio of streets, wind and shadow, privacy, setbacks, stepbacks, and adequate spacing of towers. Determine the allowed degree of shade cast from buildings on major public spaces such as Moore and Nash squares.

The Ground Level Experience

The ground floor of buildings and the quality of the public realm play a significant role in shaping the success of downtown. Well-designed buildings

respect the pedestrian and enliven the ground level experience through architectural treatments such as multiple entrances, transparent materials, pedestrian-scaled lighting, and awnings, as well as the type of use that occurs on the ground floor. Service entrances, loading bays, and parking garage entrances often result in conflicts between the pedestrian and vehicles and should be avoided whenever feasible.

Policy DT 7.5

Ground Level Design

The ground level of every building should engage the pedestrian with multiple entrances, large transparent windows at the pedestrian level, creative signage, and a high level of articulation and pedestrian scale building materials on all façades. Also, the ground level of every building should provide pedestrian amenities such as adequate lighting levels and protection from the elements. This can be accomplished through the use of façade-mounted lighting elements, canopies and awnings, and arcades. (6)

Policy DT 7.6

Minimizing Service Entrance Visibility

Service entrances and functions should be located internal to the building-in alleys or in parking decks. Their presence on the public right-of-way should be minimized. (4, 6)

Policy DT 7.7

Signage

Signage should be human scale and serve both pedestrians and automobiles. (6)

Policy DT 7.8

Private Use of Sidewalk Space

To add vitality to downtown streets, the private use of public sidewalks for cafes, vending, performance, and sales is encouraged (see *Private Use of Public Space Handbook*). (6)

Policy DT 7.9

Street Trees

Provide and maintain street trees on all downtown streets. (6)

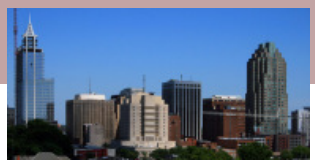
Action DT 7.2

Downtown Planting Standards

Develop tree planting standards addressing tree selection, placement, and spacing for all downtown streets.

Public Spaces: Parks, Plazas, and Squares

According to the William Christmas Plan of 1792, downtown was laid out with five squares to provide green spaces for residents. Over the years, some of these squares were developed for governmental use by the State of North Carolina, decreasing the amount of open space available for residents, workers, and visitors. Opportunities exist for reincorporating one of the squares developed by the State and to further expand upon the William Christmas Plan by incorporating new open space squares further out from the downtown core.



Policy DT 7.10

Extending the Christmas Plan

Pursue opportunities to expand upon the William Christmas Plan by adding new squares and open spaces. (6)

Policy DT 7.11

Facilities in Public Spaces

Include public and private facilities such as museums, underground parking, centers, markets, restaurants, services, retail pavilions, and vending opportunities in new and existing public spaces, where appropriate. (3, 5, 6)

Policy DT 7.12

Plaza/Square Perimeter Uses

Downtown plazas, parks, and squares should be ringed by activity. Require ground floor active use surrounding publicly-accessible open spaces and encourage upper level balconies, terraces, and gathering spaces. (1, 6)

Action DT 7.3

Nash and Moore Square Improvements

Schedule, design, plan, and budget for improvements to Nash and Moore squares that will enhance each square as a distinct destination.

Action DT 7.4

Caswell Square

Work with the State of North Carolina to reclaim Caswell Square in accordance with State Government Complex Master Plan.

Action DT 7.5

Moore and Nash Square Ownership

Develop an agreement with the State of North Carolina to transfer the control of Moore and Nash squares back to the City.

Vistas and Gateways

There are several vantage points providing views of all or parts of downtown from a distance. Generally, these views are of the upper portions of buildings, thus making the skyline an important aspect of Raleigh's image. Distinctive crown features, building placement, the accentuation of architectural features through lighting, and the screening of mechanical equipment all factor in creating a distinctive skyline. In addition to the skyline, other vistas and ceremonial entrance points into downtown provide a sense of arrival and a highlighted appreciation of significant buildings that contribute to a unique sense of place. The reinforcement and emphasis of these features are essential steps toward creating a civic identity.

Policy DT 7.13

Landmark and Viewshed Protection

Preserve important cultural landmarks, viewsheds, focal points, and terminated vistas. (6)

Policy DT 7.14

Skyline Definition

The tops of tall buildings should be designed to positively contribute to creating a distinctive skyline. (6)

Policy DT 7.15

Downtown Gateways

Prominent gateways into downtown such as South Saunders Street south of the intersection with South Street, Edenton Street at Bloodworth and East streets, Morgan and Hillsborough streets at St. Mary's Street, and Capital Boulevard by the train tracks at Peace Street, shall be enhanced to create a sense of arrival and define the geographic boundaries of downtown. (6)

Policy DT 7.16

Special Intersections

The respective intersections of Hillsborough and New Bern streets with Dawson-McDowell and Person-Blount streets, should receive special treatment to emphasize the intersection of axial streets (ceremonial corridors) with major traffic arteries. (6)

Action DT 7.6

Regulations for Building Crowns

During the update to the City's development regulations, investigate changes to the regulations that address crown features for tall buildings and buildings on prominent sites that have high visibility from key gateways.

Action DT 7.7

Reopening New Bern

Assess the feasibility of reopening the 100 and 200 blocks of New Bern Place as a connected public street for pedestrians and vehicles, and to restore views to the Capitol.

Wayfinding

As downtown continues to grow in population, employment, and visitation, a more comprehensive system of visual communication is needed. This system will help guide users to downtown destinations and transportation facilities, and should utilize existing and developing technologies for its development and maintenance.

Policy DT 7.17

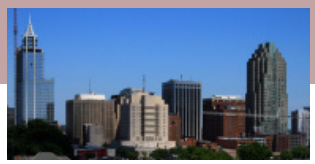
Downtown Wayfinding

Promote and maintain a high-quality wayfinding system downtown, including a consistent and effective system for both public and private parking decks. (1, 3, 4)

Action DT 7.8

Wayfinding System Development

Fund and develop a wayfinding system for downtown, working with other public agencies and private entities to identify points of interest. Explore the use of new technology solutions that provide information to visitors.



Design Guidelines

The downtown urban design guidelines constitute a set of principles that guide the review of private development in the downtown district. The general purpose of the guidelines is to create a high quality, engaging and dynamic, pedestrian-friendly built environment. They give direction regarding building form, ground floor design, location and screening of parking, service and mechanical functions, and the design and location of signage. Those guidelines marked "FG" serve as the principles for reviewing and approving façade grant applications.

Policy DT 7.18

Downtown Design Guidelines

The design guidelines in **Table DT-1** shall be used to review development applications, including site plan applications, in the downtown. (6)

Policy DT 7.19

Downtown Design Guideline Consistency

Development projects in the downtown should implement and be consistent with the design guidelines in **Table DT-1** to the maximum extent practicable. (6)

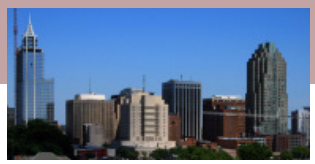
Policy DT 7.20

Facade Grant Program Guidelines

All successful applications for funding under the City's Facade Grant Program shall be consistent with the highlighted design guidelines in **Table DT-1**. (6)

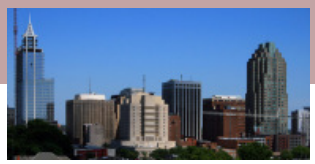
Table DT-1 Downtown Urban Design and Facade Grant Guidelines

#	Guideline	Also a Facade Grant policy
Parking, Loading, Service and Mechanical		
1	Fayetteville Street should be free of service elements including loading docks, mechanical equipment, and driveways.	
2	Loading or service entrances should be embedded within the block where possible. If embedding the loading dock is not possible, the loading dock should be located to the side or rear of a building. The width should be minimized and doors or gates should shield the loading docks from view. Roll-down gates should be decorative if facing the public realm.	
3	Surface and structured parking should be landscaped, emphasizing interior tree canopies in surface lots, formal borders, and street trees to reinforce the streetwall.	
4	Mechanical equipment, satellite or microwave dishes, elevator penthouses, and other utilitarian equipment should be screened from view by a structure that complements the design of the building through the use of similar materials, colors, finishes, and architectural details. Views from buildings above should also be considered when designing rooftop mechanical equipment.	FG
5	The widths of all curb cuts at parking deck entrances should be minimized. Design techniques should be used (such as lane splits within the deck to encourage consolidated single exit or entrance lanes at the street side, and/or columns between lanes to reduce the perceived size of the openings), while maintaining adequate ingress and egress capacity to provide efficient operations and meet air quality conformity.	



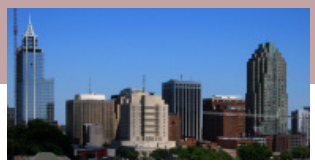
#	Guideline	Also a Facade Grant policy
Ground Floor, Building Base and Pedestrian Zone		
6	Building entries should be emphasized with architectural features, changes in roofline, different massing, or unique materials.	FG
7	The primary pedestrian building entrances should be located along the store front. For buildings that front on three streets, the primary pedestrian entrances should be located on the axial street or the corner if the building is located at an intersection.	FG
8	Building entries should be at grade.	FG
9	The level of architectural detail should be most intense at street level, within view of pedestrians on the sidewalk.	FG
10	The use of solid roll-down security gates is discouraged.	FG
11	Facades should be broken into distinct 20-30 foot modules or bays from side to side to prevent a monolithic edge to the street.	FG
12	Large unarticulated walls are discouraged, and should have a window or functional public access at least every 10 feet.	FG

#	Guideline	Also a Facade Grant policy
13	The articulation of the façade should be designed to appear more vertical than horizontal.	FG
14	Entries that provide access to a building's upper floors should be located along a street to promote street life. They should be designed as separate entries, and distinguished from ground level spaces with different architectural details, materials, colors, lighting, signage, and/or paving so that it is clear which entries are public and which are private.	FG



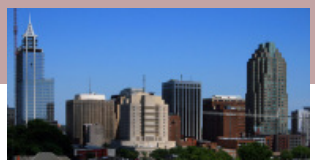
#	Guideline	Also a Facade Grant policy
15	Recessed entries are encouraged. They should be no wider than one-third of the width of the storefront or 20 feet, whichever is less. Recessed entries should be a minimum of 4 feet deep, except where necessary to meet fire code.	FG
16	A minimum of 2/3 of the first story façade should be windows. Of the total amount of glass on the first floor façade, a minimum of 85% must be transparent. Tinted or reflective glass is discouraged. First story windows should be located a maximum of three (3) feet above the adjacent sidewalk	FG

#	Guideline	Also a Facade Grant policy
17	Windows should be used to display products and services and maximize visibility into storefronts. Windows should not be obscured with elements that prevent pedestrians from seeing inside.	FG
18	The first story floor-to-floor height of any new building on Fayetteville Street should be a minimum of twenty (20) feet.	
19	If ceilings must be lowered below the height of ground level windows, provide an interior, full-height, three (3) foot minimum deep space immediately adjacent to the window before the drop in the ceiling.	FG
20	The use of deep awnings and canopies on the first story is recommended to help mitigate wind, reduce glare, and shade ground level spaces.	FG
21	Arcades, colonnades, and galleries are discouraged within the public right-of-way.	FG
22	Stairs and stoops in the public right-of-way are discouraged along Fayetteville Street in order to make entries more accessible.	FG



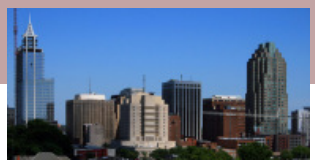
#	Guideline	Also a Facade Grant policy
23	An outdoor ground plane that abuts or is adjacent to the public right-of-way should be paved with terrazzo, concrete pavers, concrete, stone, brick, tile, or another high quality hardscape material. Asphalt and loose paving materials such as gravel are discouraged. The paving design and materials should complement the building or storefront architecture.	FG
24	In larger courtyard style spaces visible from the public right-of-way, use groundcovers, shrubs, and flowers to accent and fill blank areas with interest. Minimize the use of bare mulch and rocks. Areas of bare earth are discouraged.	
Building Form		
25	Walls of buildings should parallel the orientation of the street grid.	FG
26	Towers or high rise buildings should have three zones: a streetwall or base zone, a tower transition zone, and a tower top zone. Cornices should be considered to separate base zone from tower transition zone.	FG
27	Distance between towers on different blocks should be a minimum of 100 feet to ensure access to light and air.	
28	Public art, performance facilities, and/or civic monuments should be an integral part of any building plan.	
29	Fences, railings, and walls are discouraged except to screen surface parking lots and unimproved lots, to protect pedestrians from grade changes, and to delineate a private courtyard. Fences are preferred over walls except where designed to hold grade.	

#	Guideline	Also a Facade Grant policy
30	Fences should be a minimum of 36 inches and a maximum of 42 inches tall and a minimum of 70 percent open. Railings should be 42 inches tall. Solid walls should be a minimum of 18 inches and a maximum of 32 inches tall.	
31	Fences, railings, and walls should be designed to complement the adjacent architecture through the use of similar materials, colors, finishes, and architectural details.	
32	Designs should be contextual to adjacent buildings, including their cornice lines and horizontal banding.	FG
33	Innovative design and unusual lighting of the exterior of the building is important to emphasize the monumentality of government buildings.	
34	The principal building entrance should be easily identified by building features and landscape elements; additional public entrances should be provided at every street face.	FG
35	Building materials should be of stone, brick, or similar durable, high quality materials. Building form, articulation, and materials should respect and be sympathetic to the major governmental and institutional buildings in the area.	FG
36	Preferred materials (other than glass) include metal, brick, stone, concrete, plaster, and wood trim; discouraged materials include vinyl siding, pressed wood siding, and exterior insulated finishing systems (EIFS).	FG



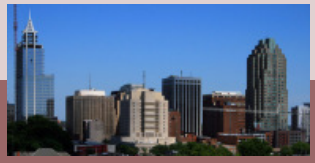
#	Guideline	Also a Facade Grant policy
37	Materials covering original architectural features of historic or architecturally significant buildings are discouraged.	FG
38	A minimum of 35 percent of each upper story should be windows.	FG
39	Building corners that face an intersection should strive for a distinctive form and high level of articulation.	FG

#	Guideline	Also a Facade Grant policy
40	Buildings may step back further at intersections in order to articulate the corners.	FG
41	Buildings downtown and in Pedestrian Business Overlays should have stepbacks and articulated facades to mitigate wind effects and increase light and air. Buildings should step back 10 to 15 feet at the 60-foot point above the ground on a wide street and 15 feet on a narrow street . A wide street is 75 feet in width or more.	



#	Guideline	Also a Facade Grant policy
42	Flat roof buildings should have decorative parapets with elements such as detailed cornices, corbeling, applied medallions, or other similar architectural treatments.	FG
Signage		
43	Signage should be compatible in scale, style, and composition with the building or storefront design as a whole.	FG
44	Diverse graphic solutions are encouraged to help create the sense of uniqueness and discovery found in an urban, mixed-use environment.	FG
45	All mechanical and electrical mechanisms should be concealed.	FG

#	Guideline	Also a Facade Grant policy
46	Signs should not obscure a building's important architectural features, particularly in the case of historic buildings.	FG
47	Signs should be constructed with durable materials and quality manufacturing.	FG
48	Sign bands above transom and on awnings are preferred signage locations.	FG
49	Only the business name, street address, building name, and logo should be on an awning or canopy. The lettering should not exceed 40 percent of the awning area.	FG
50	Illuminated signs should avoid the colors red, yellow, and green when adjacent to a signal controlled vehicular intersection.	FG
51	Allowed sign types: channel letter signs, silhouette signs (reverse channel), individualized letter signs, projecting signs, canopy/marquee signs, logo signs, awning signs, and interior window signs.	FG
52	Discouraged sign types: signs constructed of paper, cardboard, styrofoam-type materials, formed plastic, injected molded plastic, or other such materials that do not provide a sense of permanence or quality; signs attached with suction cups or tape; signs constructed of luminous vacuum-formed plastic letters; signs with smoke-emitting components. Changeable copy signs are prohibited.	FG



Overview of Area Plans

Overview of Area Plans

Area Plans were created as part of the 1989 Comprehensive Plan. Area plans address unique issues specific to particular locations within the city that can only be addressed through policies and actions more specific than those proposed citywide. Since 1989, numerous Area Plans have been prepared in response to identified needs, and have been adopted into the Comprehensive Plan.

Area Plans prepared since 1989 have historically been divided into groupings—Neighborhood, Small Area, Corridor, Watershed Plans—based on the plan's focus. For example, Corridor Plans apply to either a transportation corridor, such as a roadway or rail line, or to a natural corridor such as a river. Watershed Plans provide policies and guidelines for protecting our drinking water supply.

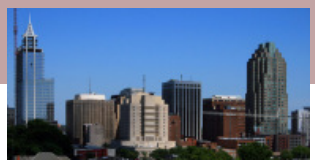
Neighborhood Plans are the only type of Area Plan referenced directly in the City's zoning ordinance, and have typically been undertaken in part to create the basis for adopting a Neighborhood Conservation Overlay District (NCOD), a special set of neighborhood-specific zoning standards. Unlike other Area plans, Neighborhood Plans have specific requirements regarding their scope and process set forth in the City code. However, after a recent zoning text amendment, all NCOD standards have been adopted into the zoning code, and the link between Neighborhood Plans and NCODs has been made optional.

With the exception of Neighborhood Plans, there has never been any adopted policy or ordinance describing the purpose and content of the different types of Area Plans. The division between plans has been a matter of convention. For simplicity, and in keeping with the new framework for Area Planning, the existing Area Plans brought forward in this latest update to the Comprehensive Plan are simply referred to as Area Plans, and are listed alphabetically.

All area specific plans have been evaluated during this Comprehensive Plan Update and, based on that evaluation, some plans have been carried forward and others have been retired. The plans carried forward contained specific policies that could not be brought forward through the Future Land Use Map, or contained specific action items that could not be covered appropriately in a citywide Plan element. Plans were retired primarily because they contained policies that had been implemented through development or city action, were included in a citywide element, or were fully incorporated into the Future Land Use Map. A number of policies in the retired plans were simply no longer relevant to current situations.

Existing Area Plans were written using a different style of policies and actions, and a different vocabulary with regards to land use and urban form, than is used elsewhere in the updated Comprehensive Plan. Area Plans with land use recommendations did not employ a consistent typology of land uses, and the land use categories used were not the same as the categories employed in the new Land Use Element. In order to bring the Area Plans into conformance with the updated Comprehensive Plan, they have been rewritten consistent with the following parameters:

- All policies in the Area Plans pertaining to permitted uses, building bulk and height, and other aspects of development typically regulated by zoning, are intended to be implemented through zoning. Until such time as zoning reflects the Plan policies, however, the applicable current zoning standards shall continue to control the fundamental parameters determining the development potential of particular sites.
- Older land use maps have been replaced with the new Future Land Use Map.
- Written land use policies have either been removed and replaced by the Future Land Use Map; or have been rewritten to focus on area-specific guidance with regards to transitions, etc.
- Policy statements and action items, many of which were strung together to form paragraphs, have been separated and rewritten to read more like the simple, one- and two-sentence formulations employed elsewhere in the Comprehensive Plan. This

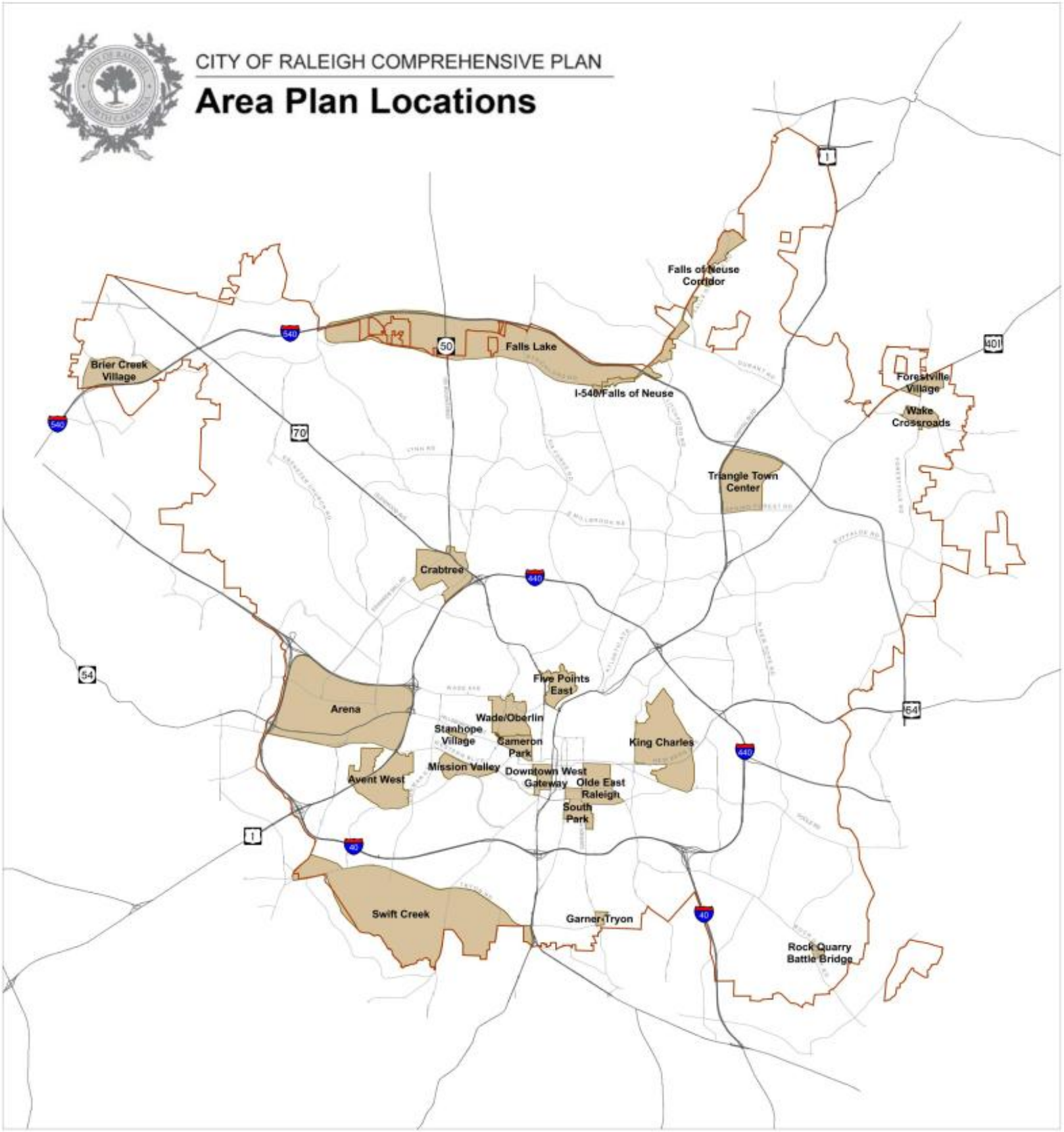


has not been possible for all policies and actions, however.

- Where policies and actions have been rewritten for greater clarity and ease of interpretation, the revisions have been mindful of the need to preserve the intent of the original policy language.

CITY OF RALEIGH COMPREHENSIVE PLAN

Area Plan Locations



MAP AP-1

Area Plans

ETJ

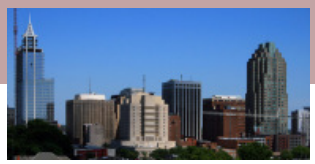
Highway

Major Streets

N

0 0.5 1 2 Miles

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 1: Arena

The plan area is bounded on the north by Wade Avenue, on the east by the I-440 Beltline, on the south by Western Boulevard and Hillsborough Street, and on the west by I-40. The area contains approximately four square miles. Several State agencies have a significant presence in the area: North Carolina State University owns the Veterinary School campus, J.C. Raulston Arboretum, University Club, Carter-Finley Stadium, the land on which the Arena is situated, as well as 159 vacant acres at the southeast corner of I-40 and Wade Avenue. The North Carolina Department of Agriculture owns the State Fairgrounds and 144 acres of vacant land just to the west of the Fairgrounds. Smaller parcels are owned by the North Carolina Department of Transportation and the State Surplus Property Office. The Westover, Nowell Pointe, and Lincolnville communities are located in the area, as is Raleigh Corporate Center and Westchase Office Park.

This part of Raleigh had no development pressure for many years; however, the construction of the RBC Arena and extension of Edwards Mill Road opened the area up for development. The State of North Carolina sold their 159-acre agricultural research facility at the corner of I-40 and Wade Avenue, thus opening this property for development. In addition, there was a perception in the community that the type of development happening without policy guidance in the area was not supportive of the Arena, Carter- Finley Stadium, or State Fairgrounds.

The following policies address specific geographic subsets of the study area, listed below, and illustrated on the **Map AP-A-1**:

- The 159-acres at the corner of I-40 and Wade Avenue, also referred to as the 159-acre site, and which is a subset of the I-40 West Employment Area;
- Existing Single-Family Neighborhoods;
- The Westover Retail Area, consisting of the concentration of retail uses along Hillsborough Street south of the Westover neighborhood;
- Areas of Focus including the Hotel and Entertainment District; a proposed mixed-use center at the confluence of Jones Franklin Road, Western Boulevard, and Hillsborough Street; and the Hillsborough Street/Chapel Hill Road/North Carolina Rail Road (NCRR) corridor; and
- The I-40 West Employment Area.

The 159 Acres at the Corner of I-40 and Wade Avenue

Policy AP-A 1

Open Space Reservation at Wade-I-40

A minimum 30 percent of the land should be left in open space that is kept in a natural state. This would include an undisturbed 75-foot buffer along the northern and western perimeter adjacent to Wade Avenue and I-40.

Policy AP-A 2

Parking Visibility from Wade-I-40

No surface parking lots should be visible from either I-40 or Wade Avenue.

Policy AP-A 3

Medlin Creek Conservation

Floodplains and slopes steeper than 15% within 200 feet of Medlin Creek should be preserved.

Policy AP-A 4

Medlin Creek Crossings

No more than two stream crossings should be allowed over Medlin Creek, and these crossings should be bridges and not culverts.

Policy AP-A 5

Medlin Creek Pedestrian Amenities

Medlin Creek and the meadow located on the eastern half of the property should be used as pedestrian-oriented amenities, with pedestrian connections to the Richland Creek greenway and across Trinity Road at Medlin Creek.

Policy AP-A 6

Building Orientation at Wade-I-40

Buildings should be designed to present a finished face to Medlin Creek, Wade Avenue, and I-40.

Policy AP-A 7

Structured Parking Preference at Wade-I-40

Parking decks that are architecturally-related to the surrounding buildings and integrated into the landscape are strongly encouraged over surface parking lots.

Policy AP-A 8

Development Vision for Wade-I-40

This property should develop as a planned, unified project incorporating urban design features and public amenities such as greenways, plazas, parks, unified signage, and public art integrated into the building arrangement.

Policy AP-A 9

Pedestrian Circulation at Wade-I-40

Excellent internal pedestrian circulation should be provided, including pedestrian connection to adjacent properties, with special emphasis on pedestrian access to the proposed Edwards Mill Road bus line.

Policy AP-A 10

Placement of Taller Buildings at Wade-I-40

Buildings over four stories should be located away from any existing adjoining residences and should complement, in size and scale, the treescape along Wade Avenue and I-40.

Existing Single-Family Neighborhoods

Policy AP-A 11

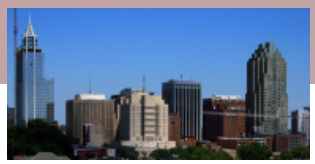
Buffering Arena Area Neighborhoods

New development adjacent to neighborhoods in the Arena area, including nonresidential and high-density residential uses, should include buffers and stepping down of land development intensity to protect these lower density enclaves.

Policy AP-A 12

Housing North of Chapel Hill Road

Additional single family development north of Chapel Hill Road should be confined to completing the existing residential street system in the Nowell Point area. Additional new low-density, single-family development north of Chapel Hill Road is inappropriate.



Policy AP-A 13

Chapel Hill Road Street Connections

Any street connection to Chapel Hill Road should be built in a manner to maintain the residential character of the neighborhood.

Westover Retail Area

Policy AP-A 14

Strengthening Westover

The unique village-like character of the area should be retained and strengthened through redevelopment.

Policy AP-A 15

Respecting the Context of Westover

Development should respect the existing context, particularly that provided by the Westover neighborhood.

Policy AP-A 16

Westover Parking

Parking in the Westover area should be minimized along the street frontage and contained within decks. Required parking should be relocated off Hillsborough Street.

Policy AP-A 17

Zoning Conditions in the Westover Area

At the time of rezoning any property in the Westover retail area, zoning conditions should be offered that would limit buildings to no more than 4 stories in height, reflect the character of the area in terms of architecture and scale, and should feature ground-floor retail.

Other Areas of Focus

Policy AP-A 18

Arena Hotel and Entertainment District

Development in the Hotel and Entertainment District area should have a distinct character and facilitate pedestrian access to the Fairgrounds, Carter-Finley Stadium, and the Arena.

Policy AP-A 19

Western-Jones Franklin

Western Boulevard-Jones Franklin Road Mixed-use Center: Currently there are several small retail uses in the northern portion of this focus area. This area should develop more intensely as retail, with an emphasis on combining small land parcels, improving access, appearance, and pedestrian orientation.

Policy AP-A 20

Hillsborough-Chapel Hill-NCRR

Hillsborough Street-Chapel Hill Road-NC Railroad Corridor: Between Chapel Hill Road and the railroad, west of the Westover

Neighborhood, redevelopment should be largely multi-family interspersed with a dense grid of public streets to create a village atmosphere. Adjacent to the proposed West Raleigh Triangle Transit station is the State Surplus Property Office, which could be redeveloped as a component of the transit-oriented urban village surrounding the regional rail station.

Policy AP-A 21

Bridge Maintenance Yard

The NCDOT property on Beryl Road, commonly called the Bridge Maintenance Yard, is adjacent to the Fairgrounds Triangle Transit stop. This is the only sizeable parcel that could support intense, mixed-use, transit-oriented development within walking distance of that Triangle Transit stop. As this property redevelops, pedestrian access should be designed to connect to adjacent neighborhoods and to the north into the various entertainment areas.

Urban Design

Policy AP-A 22

Chapel Hill Road Design

The design of Chapel Hill Road should take on a boulevard character in the vicinity of the West Raleigh transit station, where transit-oriented development is encouraged.

Policy AP-A 23

Arena Area Parking Lot Siting

No large parking lots should be sited in front of the buildings or along the streets in the Arena area, unless heavily buffered.

Policy AP-A 24

Reducing Surface Parking Impacts

Every attempt should be made to make surface parking areas less dominant through plantings and buffers, and more efficient and better utilized to prevent the need for additional future parking. The large surface parking lots in the area should be designed to improve pedestrian access during events.

Policy AP-A 25

Sidewalks in the Arena Area

All block faces throughout the Arena Plan area should have sidewalks. Exceptions may be made for areas south of the rail line that are not within easy walking distance to the rail stop.

Policy AP-A 26

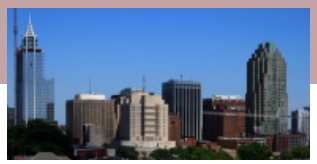
Arena Area Station Access

Both rail transit stations should be designed to permit unabated pedestrian circulation, possibly in the form of a bridge, to the south across the railway line. The Fairgrounds station should also provide for pedestrian circulation over Hillsborough Street.

Policy AP-A 27

Maintaining an Evergreen Landscape

Large groupings of native pines should be retained or planted to enhance the evergreen, wooded landscape that currently exists.



Policy AP-A 28

Arena Area Signage

Low profile site identification signs should be utilized for the entire Arena area.

Policy AP-A 29

Trinity Road Streetscape

The streetscape along Trinity Road should be enhanced, with consideration given to design elements that give the Arena area some identity, such as banners and a unified signage system.

Pedestrian Access to the State Fairgrounds

Policy AP-A 30

Arena Area Sidewalk Width

Extra-wide sidewalks of 14- to 18-feet should be constructed on both sides of Trinity Road, on the east side of Youth Center Drive, and along Blue Ridge Road to accommodate the large crowds that will be walking in this area before and after major events.

Policy AP-A 31

Corporate Center Drive

Sidewalks are also needed along Corporate Center Drive to facilitate the eventual use of this road as a bus transit corridor.

Policy AP-A 32

Fairgrounds to Westover Connection

A strong pedestrian connection should be made between the Fairgrounds Triangle Transit stop and the Westover commercial area.

Action AP-A 1

Hillsborough Street Streetscape Improvements

A City streetscape improvement project should be undertaken for the Hillsborough Street corridor from Blue Ridge Road to just west of the Hillsborough-Chapel Hill Road crossover. This project should be done in conjunction with roadway improvements and construction of the Triangle Transit stop in front of Dorton Arena.

Action AP-A 2

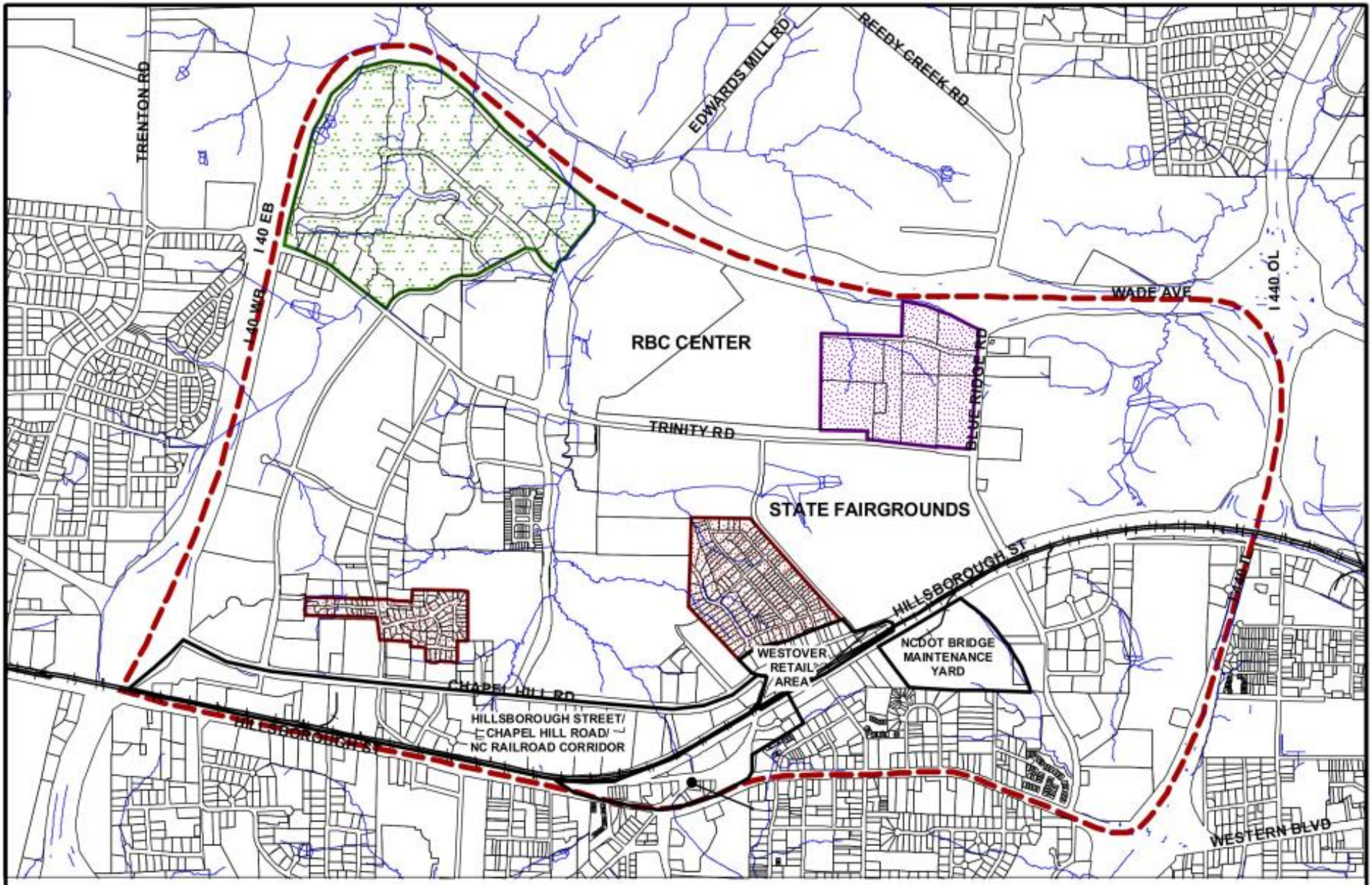
Trinity Road Streetscape Plan

A streetscape plan should be prepared for Trinity Road. The plan should include bicycle, pedestrian, and access improvements, building and parking locations to provide consistent character along the street, and tree plantings and design features to give the corridor definition. A unified directional signage system should be included.

Action AP-A 3

Arena Area Bus Line

In an attempt to better serve special events with transit, a bus line is recommended to run up Youth Center Drive from the State Fairgrounds Triangle Transit station. The line should then access Carter-Finley Stadium, the Arena, and the Edwards Mill Road bus corridor. As the need arises, the route could continue westward and southward to serve development in the western portion of the plan area, and terminate at the West Raleigh regional rail stop. At least the portion of the route east of Edwards Mill Road should be planned as an eventual fixed guideway, that is, with the buses moving in their own dedicated right of way, with grade separation at Trinity Road. During events, Youth Center Drive may be closed to vehicular traffic except for bus transit and pedestrian access. A traffic signal may be required at the intersection of Youth Center and Trinity Roads to facilitate bus movement.



MAP AP-A1

Arena Plan - Sub-Areas

PLAN BOUNDARY

ARENA REDEVELOPMENT AREAS

159 ACRES

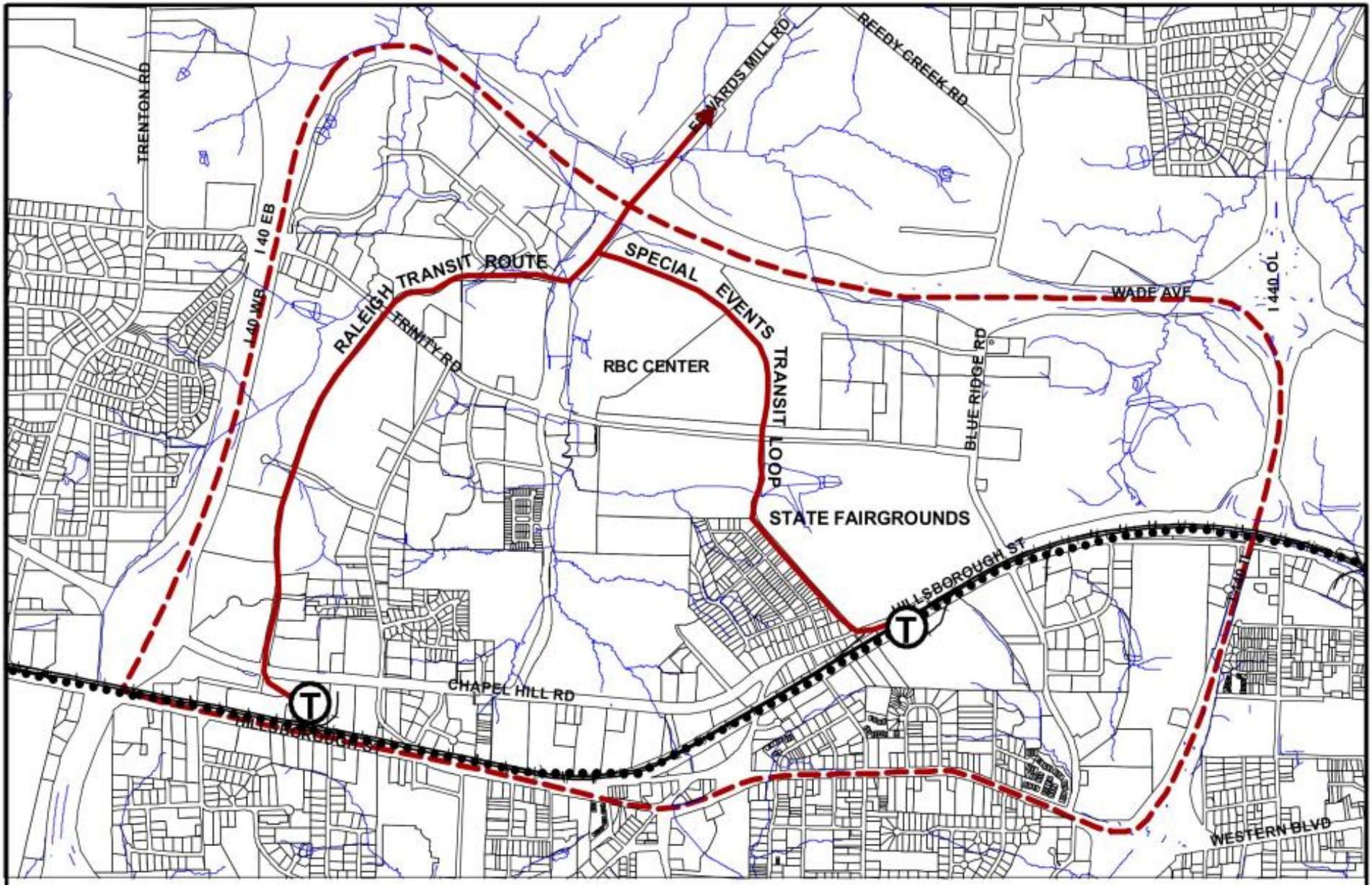
HOTEL/ENTERTAINMENT DISTRICT

SINGLE-FAMILY NEIGHBORHOODS

N

Feet
0 500 1,000 2,000

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



MAP AP-A2

Arena Plan - Transit

PLAN BOUNDARY

TRANSIT STOPS

ARENA TRANSIT ROUTES

TTA TRANSIT CORRIDOR

N

0 500 1,000 2,000 Feet

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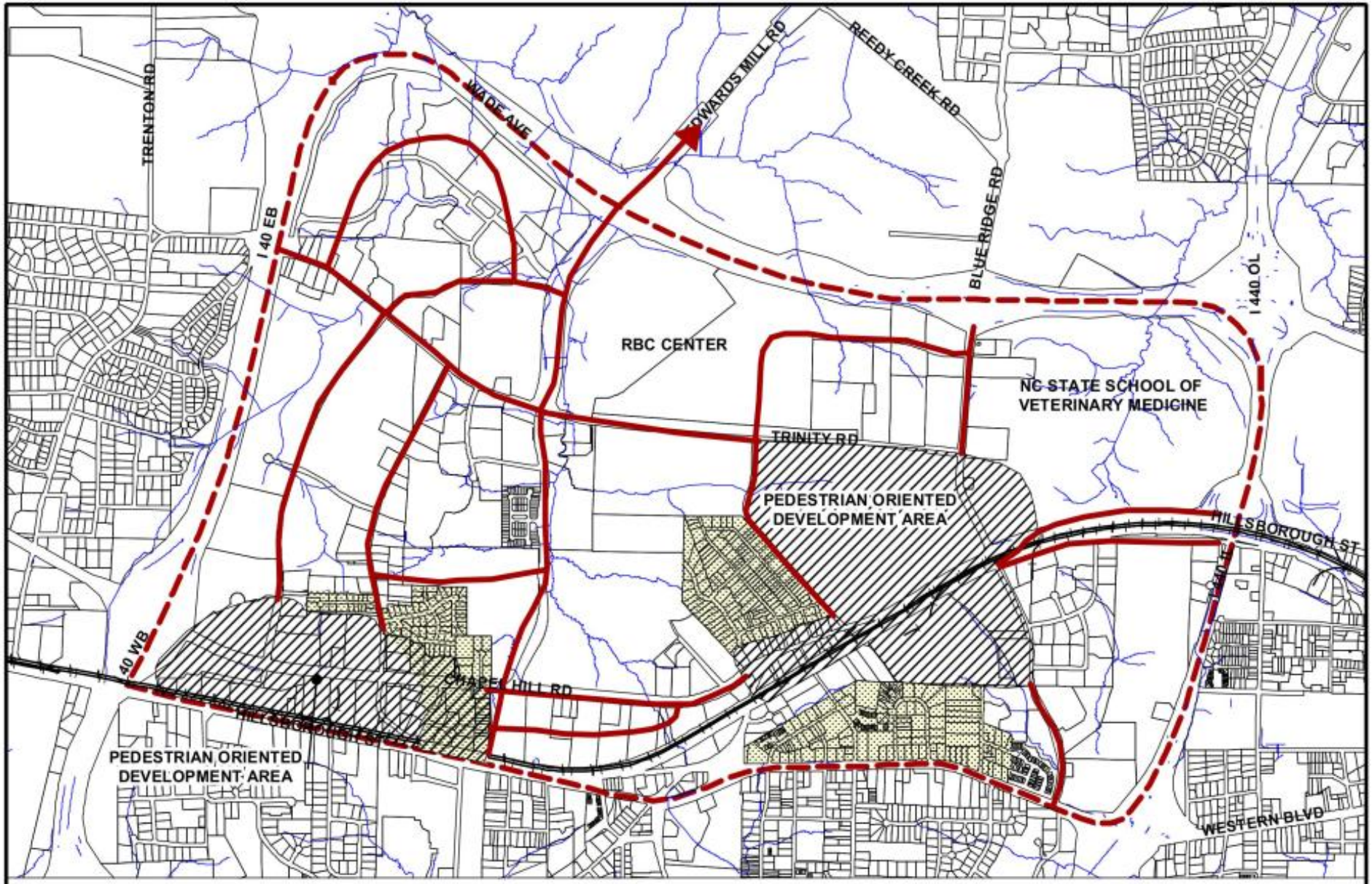


MAP AP-A3

Arena Plan - Pedestrian Access

PLAN BOUNDARY

RESIDENTIAL

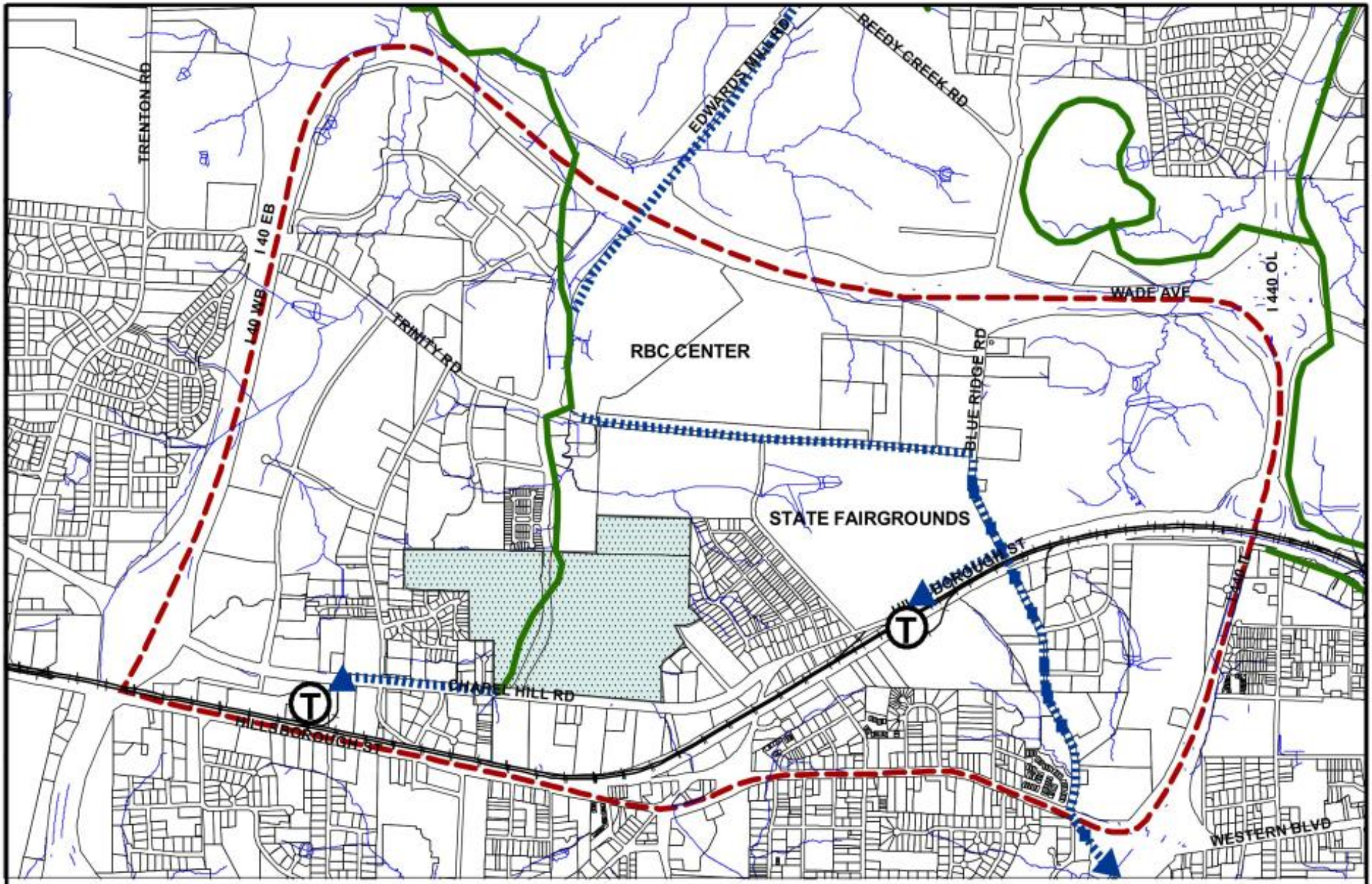
SIDEWALK CORRIDORS

PEDESTRIAN ORIENTED DEVELOPMENT AREA

N

0 500 1,000 2,000 Feet

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



MAP AP-A4

Arena Plan - Parks and Greenways

PLAN BOUNDARY

TRANSIT STOPS

GREENWAY CORRIDOR CONNECTOR

GREENWAY CORRIDOR

PARK STUDY AREA

Feet
0 500 1,000 2,000

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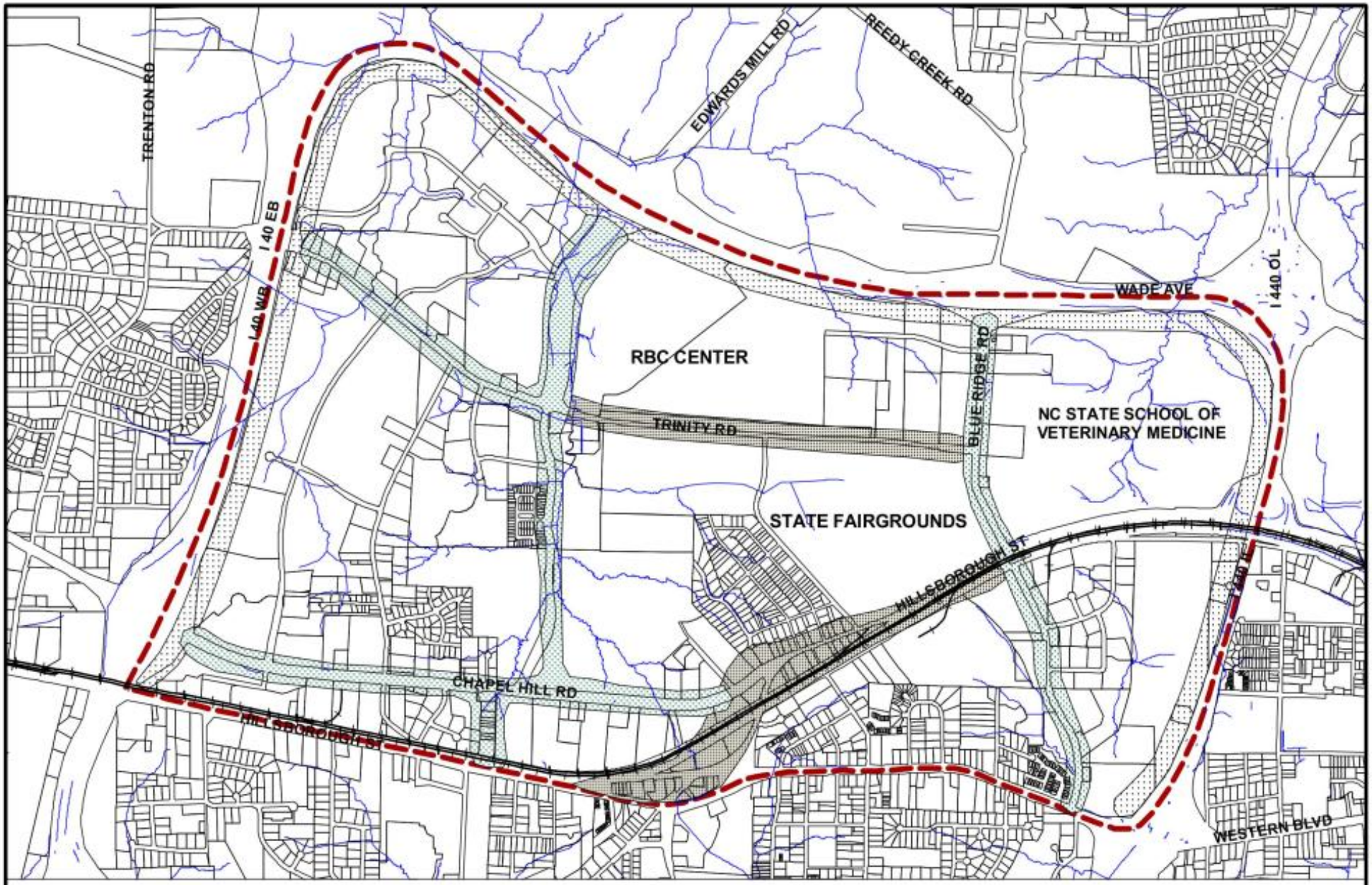

MAP AP-A5

Arena Plan - Appearance

PLAN BOUNDARY

SHOD BUFFER

STREET TREE CORRIDORS

STREETSCAPE PROJECT AREA

N

0 500 1,000 2,000 Feet

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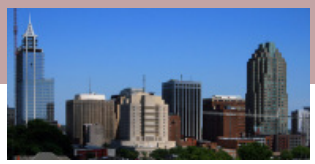


Area Plan 2: Avent West

The purpose of this Plan is to communicate to the City of Raleigh the unique and valuable characteristics of the Avent West neighborhood with the intent of getting the City's support in preserving, stabilizing, improving, and promoting this established and valuable area. The Plan also will serve as a guide for neighborhood initiatives that will take place outside of the authority of the City of Raleigh.

In addition, this Plan served as the basis for adopting a Neighborhood Conservation Overlay District for the Avent West neighborhood to better ensure the realization of its goals and objectives.

The Avent West neighborhood is conveniently located inside and bordering the Raleigh I-440 Beltline, west-southwest of downtown Raleigh and the NCSU main campus and due west of the new and growing Centennial Campus. The neighborhood is generally bounded on the north by Western Boulevard, on the east by Kent Road and properties adjacent to Brent Road, on the south by Avent Ferry Road and Athens Drive, and on the west by Powell Drive and Ravenwood Drive.

Policy AP-AW 1

Western-Avent Ferry Beautification

Improve and beautify the stretch of Western Boulevard and Avent Ferry Roads that border the Avent West neighborhood.

Policy AP-AW 2

Avent West Rezoning

All properties within the Avent West neighborhood Plan area should be zoned R-4 including the following:

- The properties at 4004, 4008, and 4012 Brewster Drive and at 914 Deboy Street should be changed from their current R-6 zoning to R-4 zoning;
- The R-10 properties on Cyanne Circle that abut R-4 properties should be changed to R-4 zoning; and
- The property at 1405 Onslow Road that is split-zoned with approximately two-thirds of the property zoned R-4 and one-third zoned R-10 should be entirely zoned R-4.

Policy AP-AW 3

Avent West Zoning Exceptions

The following two exceptions should be made to Policy AP-AW 2:

- The current R-10 zoned properties along Kent Road that are on the eastern side of the Avent West neighborhood boundary should remain zoned R-10.
- The area adjacent to the I-440 Beltline, behind the Western Boulevard Presbyterian Church, should remain zoned for business unless its use should change, at which time it would revert to R-4 zoning. This business zoning is for an advertising sign on I-440 only and would remain for the existing signage only.

Policy AP-AW 4

Avent West Parking Lot Screening

For existing businesses (such as those on Western Boulevard) and for future business in the area, improved landscaping and screening of parking lots from the street view are encouraged. Wherever possible, parking lots should be located behind the building.

Policy AP-AW 5

Melbourne Road Bridge

The Melbourne Road bridge should be retained in the future as changes such as widening of the I-440 Beltline occur.

Policy AP-AW 6

Simmons Branch Dam

As part of future Beltline widening, NCDOT should be encouraged to repair or rebuild the dam per the Simmons Branch study.

Action AP-AW 1

Traffic Calming on Beltline Accessways

Consider reducing speed limits and/or implementing traffic calming on I-440 Beltline access streets such as Kaplan Drive, Melbourne Road, Pineview Drive, Swift Drive, and DeBoy Streets.

Action AP-AW 2

Kent Road Parking

Consider prohibiting parking on the southwest corner of Kent Road from the intersection at Garland to the south end of the bus stop.

Action AP-AW 3

Avent West Stop Signs

Consider creating all-way stops at the following intersections where there are safety concerns and when in agreement with the City's traffic calming measures: Octavia Street and Merrie Road; Pineview Drive and Swift Drive; and Lorimer Road and Woodlinks Drive.

Action AP-AW 4

Avent Ferry Crosswalk

Create a crosswalk across Avent Ferry Road at the intersection of Merrie Road.

Action AP-AW 5

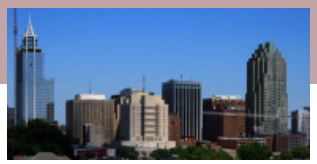
Avent West Greenway Links

Provide sidewalk/paved access from the Avent West neighborhood to the Raleigh Greenway system.

Action AP-AW 6

Athens Drive School Crossing

Consider establishing a protected pedestrian crossing on Avent Ferry Road at Athens Drive School.



Action AP-AW 7

Athens West Sidewalks

Consider sidewalks or multipurpose paths for the following: Merrie Road from Octavia Street to Avent Ferry Road; segments of Swift Drive and Merwin Road; and almost all of Pineview Drive, particularly where it has sharp curves.

Action AP-AW 8

Lake Dam Road Crosswalk

Create a crosswalk at the footbridge on Lake Dam Road near Avent Ferry Road.

Action AP-AW 9

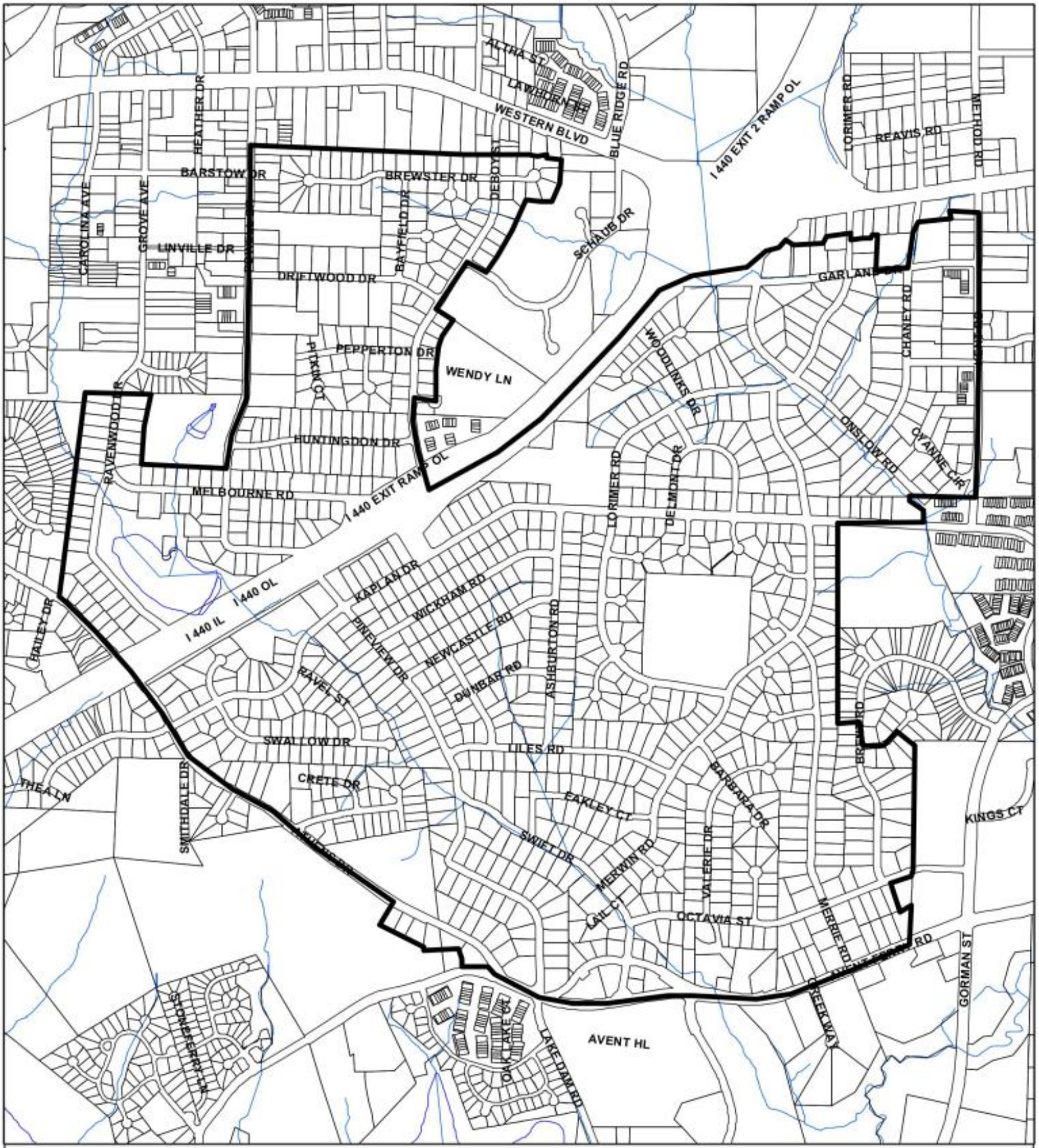
Western Boulevard Median Replacement

Request that DOT replace the median on Western Boulevard east of the Beltline and West of Kent Road.

Action AP-AW 10

Avent West Zoning Map Amendment

Undertake an Official Zoning Map Amendment to apply the Avent West Neighborhood Conservation Overlay District (NCOD) by July 1, 2012 before the Built Environmental Characteristics and Regulations in the Zoning Code sunset.



MAP AP-AW1

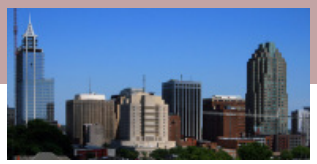
Avent West Plan

Avent West Boundary

Hydrology

Feet
0 375 750 1,500

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Area Plan 3: Brier Creek Village

This plan includes roughly 300 acres located south of Brier Creek Parkway, between Aviation Parkway and Lumley Road, and north of I-540. The goal of this plan is to expand upon the Triangle Regional Center Plan and Center of the Region Enterprise (CORE) recommendations with consideration of private property interests and market conditions to provide a design concept that will be implemented through zoning and a development Master Plan for the area.

The Village Center plan addresses the following objectives:

- Recommend land use patterns and development intensities;
- Coordinate public infrastructure elements including an interconnected street system, pedestrian network, transit corridor, and public open space;
- Incorporate an urban public school/park site into the overall design;
- Physically integrate buildings and activities within the Village Center through a network of pedestrian-oriented streets, walkways, and public spaces; and
- Functionally integrate development within the Village Center to create cohesion among between the various uses.

The Village Center urban design concept is organized upon a centrally-located pedestrian-oriented street (Bruckhaus Street) along which three activity nodes are identified and spaced about 1/4-mile apart. This Village Main Street generally parallels Brier Creek Parkway and extends east from Globe Road into the eastern activity node adjacent to Lumley Road. The western activity node includes the Brier Creek Elementary School-Community Center and a medium-density residential area. The central activity node is to serve as a commercial center and transportation network connection. The eastern activity node is envisioned as a concentration of retail and office services and a principal point of access to the Capital Area Greenway.

Policy AP-BC 1

Bruckhaus Street Design

The Bruckhaus Street cross-section should consist of a 68-foot public right-of-way including 2 travel lanes, parallel parking on each side, and a minimum 12-foot public landscape/sidewalk area on each side.

Policy AP-BC 2

Bruckhaus Street Promenade

A maximum ten-foot wide private promenade zone should be provided on the commercial or north side of Bruckhaus Street to accommodate business-related activities or green space for housing.

Policy AP-BC 3

Bruckhaus Street Residential Setback

The residential streetscape yard on the south side of Bruckhaus Street should include a maximum 20-foot building setback.

Policy AP-BC 4

Bruckhaus Street Public Realm

On both sides of Bruckhaus Street, buildings and landscaping should frame the public space area and orient primary entryways to the sidewalk and street.

Policy AP-BC 5

Alm Street Design

Alm Street between Globe Road and Brier Creek Parkway should consist of a 100-foot right-of-way and include two travel lanes and a median reserved for future transit use. Six-foot sidewalks and a six-foot planting zone between the curb and sidewalk on both sides of the roadway should be provided. Parallel parking should be included on the street if adjacent land uses warrant the need.

Policy AP-BC 6

Alm Street Driveways

Individual driveways onto Alm Street should be minimized by using internal residential streets to serve housing units.

Policy AP-BC 7

Pedestrian-Friendly Design

Pedestrian-oriented building facades and landscaping should define the street edge. Provide private sidewalk connections to the public sidewalk along Bruckhaus and Alm streets to aid pedestrian circulation.

Policy AP-BC 8

CORE Transit Loop Location

A segment of the Center of the Region (CORE) transit loop should extend through the Brier Creek Village Center to provide a convenient and time-efficient travel option through the region by connecting recommended mixed-use centers with two regional rail stops and the RDU Airport. Expanding upon the CORE transit loop concept, a Bus Rapid Transit (BRT) system is envisioned initially that could transition to other technologies as development intensities increase and funding is allocated.

Policy AP-BC 9

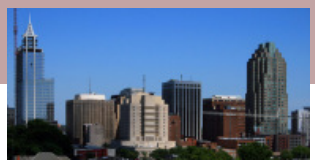
CORE Transit Loop Regional Connections

A transit corridor separated from street traffic should extend through the Brier Creek Village Center with passenger stops located for convenient access from activity nodes and residential areas. The transit corridor enters the Village Center from the RDU Airport on the east side of Globe Road. From Globe Road the transit corridor turns east and runs down the middle of the collector street in a median through the central activity node. It then turns west to parallel the south side of Brier Creek Parkway (using an easement to be located within the 50-foot thoroughfare yard) to Aviation Parkway and into Durham County.

Policy AP-BC 10

Brier Creek Village Greenway Access

The Capital Area Greenway intersects the plan area extending north of the Village Center through an existing underpass beneath Brier Creek Parkway into the existing Brier Creek development and south of the Village Center through an existing underpass beneath I-540. Access points to the greenway within the Village Center should be provided at Brier Creek Parkway and at the Village Main Street adjacent to the eastern activity node.



Action AP-BC 1

Brier Creek Parkway Transit Easement

Establish a transit easement in the thoroughfare buffer yard along the south side of Brier Creek Parkway from the collector street to Aviation Parkway. The easement from the collector to Globe Road has been established. Remaining section is from Globe Road to Aviation Parkway.

Action AP-BC 2

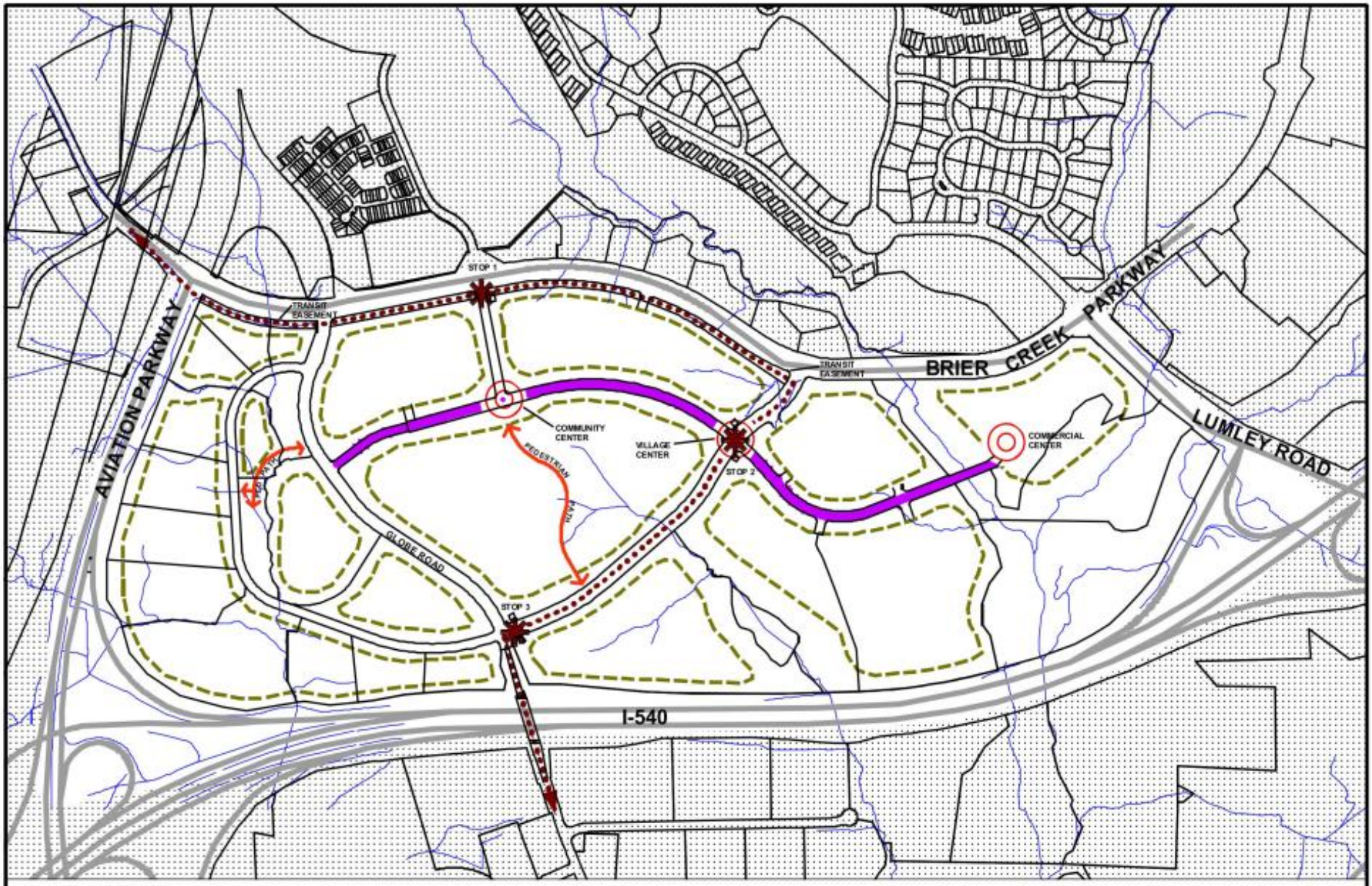
CORE Transit Loop Coordination

Coordinate with Triangle J COG and CORE municipality/county representatives on the regional transit system design identified in the CORE Report.

Action AP-BC 3

Brier Creek Village Center Traffic Planning Coordination

Coordinate the location and design of traffic calming devices, pedestrian/bicycle systems, and pedestrian crosswalks through the Brier Creek Village Center with the review and approval of development site plans.



MAP AP-BC1

Brier Creek Plan - Master Plan

TRANSIT STOPS

ACTIVITY NODES

PLAN AREA

PEDESTRIAN PATHWAY

TRANSIT LINE

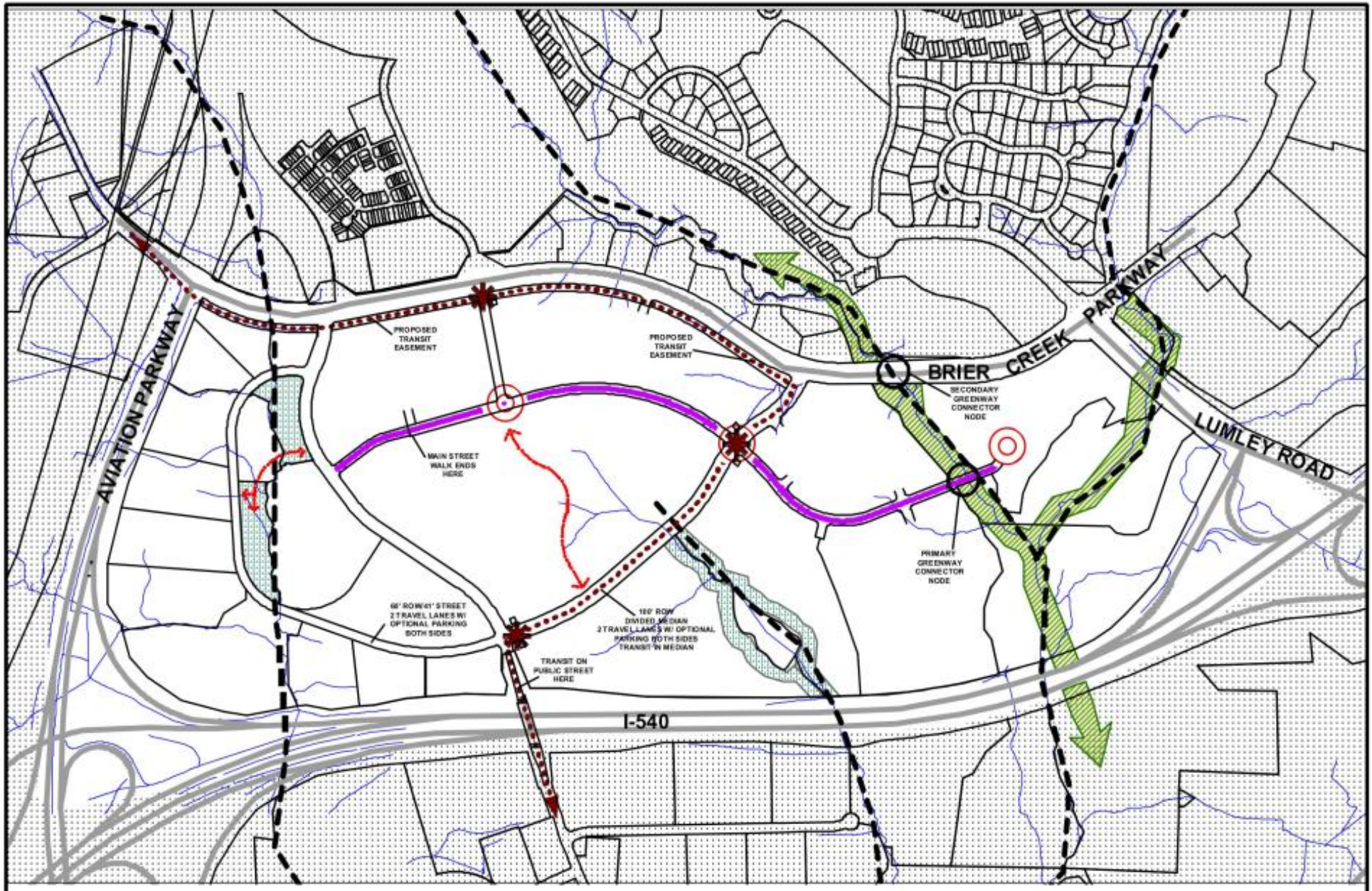
LAND USE AREAS

BRIER CREEK VILLAGE MAIN STREET

N

Feet
0 250 500 1,000

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



MAP AP-BC2

Brier Creek Plan - Parks and Greenway

TRANSIT STOPS

ACTIVITY NODES

TRANSIT LINE

BRIER CREEK VILLAGE MAIN STREET

PEDESTRIAN PATHWAYS

GREENWAY CORRIDOR

OPEN SPACE

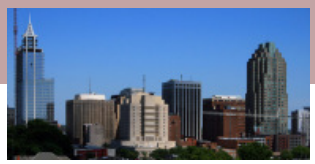
RESERVED GREENWAY

GREENWAY CONNECTOR NODES

N

Feet
0 250 500 1,000

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 4: Cameron Park

Cameron Park is located 12 blocks west of downtown Raleigh. The neighborhood boundaries are Clark Avenue and Peace Street on the north, St. Mary's Street on the east, Hillsborough Street on the south, and the rear lot lines of properties fronting the west side of Oberlin Road on the west. Cameron Village Shopping Center and Broughton High School are both one block to the north and the NCSU campus begins one block to the west. The area contains approximately 160 acres.

The neighborhood contains a diverse mix of housing types and styles, with a remarkable representation of houses built in the early 20th century, especially between 1910 and 1940. The houses have large footprints in relation to lot size resulting in relatively small yards giving this area a fairly urban, dense building pattern. The neighborhood's mature landscape helps to separate properties and adds to a feeling of privacy. More than half of the residences back up to a series of alleys adding to the uniqueness of this downtown neighborhood. Three fairly large-size linear parks serve as a natural common open space.

This plan was prepared to protect and perpetuate the unique historic aspects of the neighborhood.

Policy AP-CP 1

Cameron Park Historic Character

Enhance and preserve the historic character and scale of the Cameron Park neighborhood.

Policy AP-CP 2

Pedestrian-Orientation in Cameron Park Area

Encourage pedestrian-orientation along Hillsborough Street, Saint Mary's Street, Oberlin Road, Clark Avenue and Peace Street. Discourage automobile-oriented uses and drive-throughs.

Policy AP-CP 3

Non-Residential Parking

New non-residential and mixed-use development on the edges of the single-family neighborhood core should include internally-configured parking.

Policy AP-CP 4

Cameron Park Transition Areas

New development in the Cameron Park Transition Areas shown on the attached map should be designed to complement the residential neighborhood context in terms of scale, character, and setback.

Action AP-CP 1

Hillsborough Streetscape Improvements

Streetscape improvements should be made to Hillsborough Street from Morgan Street to Oberlin Road. This is one of the few remaining unimproved streetscapes left in the Hillsborough Street corridor. Opportunities for on-street parking along this section of Hillsborough Street should be included as well as relocating or undergrounding overhead utility lines.

Action AP-CP 2

Cameron Park Neighborhood Conservation Overlay District

The City code sections involving the Neighborhood Conservation Overlay District zoning should be amended for lots of less than one half acre in area to

permit an increase in maximum lot coverage in Transition Area A (along Hillsborough Street) to allow structures to occupy up to seventy-five percent (75%) of the lot if the structures are a mixture of office and residential uses, are no taller than 40 feet in height (within 75 feet of the Core Area noted on map), and provide a 20-foot front yard setback.

Action AP-CP 3

Cameron Park Mixed-Use Zoning

Request changes to the City zoning code to allow mixed-use structures in Transition Area A (along Hillsborough Street); for instance, ground floor offices with dwellings on upper floors.

Action AP-CP 4

West Park Drive Curb

Add a curb on West Park Drive between Park Drive and Peace Street as part of a future CIP project. The City should also enforce sidewalk obstructions related to the on-street parking.

Action AP-CP 5

College Place Parking Study

Additional on-street parking areas should be evaluated on College Place from East Park Drive to St. Mary's Street.

Action AP-CP 6

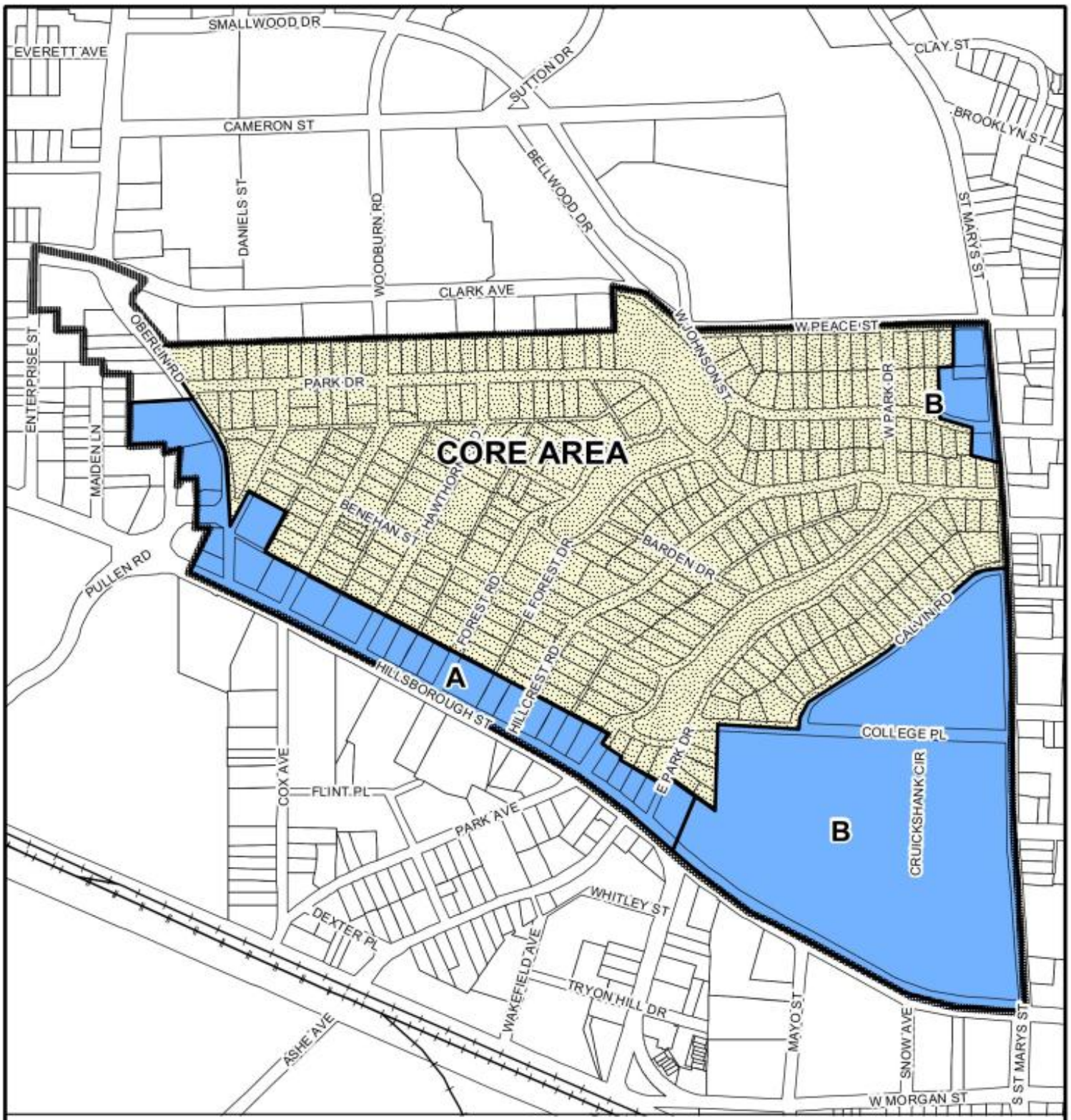
Oberlin Road Lane Study

Within the existing Oberlin Road right-of-way, evaluate the reduction of travel lane widths as required to provide bike lanes and city-standard sidewalks on each side of the street.

Action AP-CP 7

Cameron Park Zoning Map Amendment

Undertake an Official Zoning Map Amendment to apply the Cameron Park - Transition Area A Neighborhood Conservation Overlay District (NCOD) by July 1, 2012 before the Built Environmental Characteristics and Regulations in the Zoning Code sunset.



MAP AP-CP1

Cameron Park Plan - Core/Transition Areas

PLAN BOUNDARY

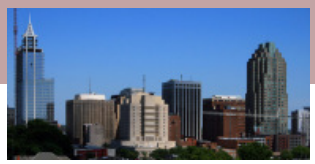
CORE AREA

TRANSITION AREA

N

0 200 400 800 Feet

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 5: Crabtree

The Plan area includes Crabtree Valley Mall and surrounding properties. The Plan goal is for the area to develop more as a mixed-use environment, with people living, working, and shopping within a walkable urban community that serves as the core of this major regional mixed-use area. The area will see an increase in development intensity. New development will feature mixed-uses focusing particularly on offices and medium-density housing. Additional retail should remain limited to the Kidds Hill, Kidds Hill Plaza, and Pinnacle Apartment and Crabtree Valley Mall sites, with the exception of small-scaled, neighborhood-oriented retail encouraged within the residential area to the southwest of the Mall. Stand alone "big box" retail and strip malls will not be allowed.

There will be limited roadway capacity improvements, though Crabtree Valley Avenue will be extended westward to Glenwood Avenue and eastward to join the Beltline. Access to Ridge Road will remain unchanged. Transit services and pedestrian amenities will be greatly enhanced. Interconnectivity, both pedestrian and vehicular, will be encouraged wherever feasible.

Due to the terrain and flood-prone areas, a new emphasis on pedestrian circulation will be placed on what is now the Mall's upper level, which coincides with the level of Kidds Hill Plaza shopping center. Kidds Hill should be developed without extensive grading of the site. Open space has been set aside along Crabtree Creek and a greenway will run along its tributary that connects to Laurel Hills Park to offset the increase of development intensity.

This plan was prepared with the anticipation that development in the area will intensify over time and that infrastructure improvements, particularly for pedestrian and vehicular circulation, should be coordinated with private sector development activity.

Policy AP-C 1

Crabtree Parking Structures

New parking structures in the Crabtree area should be designed with careful attention given to their street faces.

Policy AP-C 2

Crabtree Area Hillsides

Hillsides in the Crabtree area should be retained and not graded down for incongruous, large-footprint buildings. New structures on hillsides and hilltops should fit into the terrain.

Policy AP-C 3

Crabtree Creek

Crabtree Creek and its tributaries should be left in a natural state with floodways, water quality, and steep slopes protected from further environmental degradation.

Policy AP-C 4

Crabtree Mall Connections

A two level circulation system is proposed for the Crabtree Mall area. The lower level, which corresponds to the lower level of the Mall, should include vehicular, transit, and pedestrian circulation (including greenways). The upper circulation level corresponds to the upper level of the Mall but ground level of Kidds Hill Plaza and the hotel areas to the north and east of the Mall and requires that pedestrian bridges be accommodated as sites adjacent to the Mall are developed.

Policy AP-C 5

Design Unity in the Crabtree Area

Where possible, contiguous tracts throughout the Crabtree area should have some sense of overall design unity. In areas where upper-level pedestrian access is developed, creative structural expression of these circulation elements would serve to engage the users and give the area character. The use of glass and transparent materials should be encouraged in order to keep the area from appearing closed in, like a tunnel.

Policy AP-C 6

Crabtree Area Pedestrian Circulation Plan

The focus of the Crabtree Valley Pedestrian Circulation Plan is to create a primary loop around the mall, which is the key activity center in the area. This loop will be comprised of the Capital Area Greenway Crabtree Trail on the south and east, Glenwood Avenue on the north, and an upper level mall connection on the west (connecting the proposed pedestrian bridge from Marriott Drive to the mall and the planned pedestrian bridge from the Promenade over Crabtree Valley Avenue and Crabtree Creek to the mall). Also identified are the key connections from the surrounding hotel/office/residential activity centers to the primary pedestrian loop. Marriott Drive is designated as the preferred Glenwood Avenue street level crossing. Pedestrians from the east (Lead Mine Road and Holiday Inn areas) would be directed to cross under Glenwood Avenue using the greenway trail.

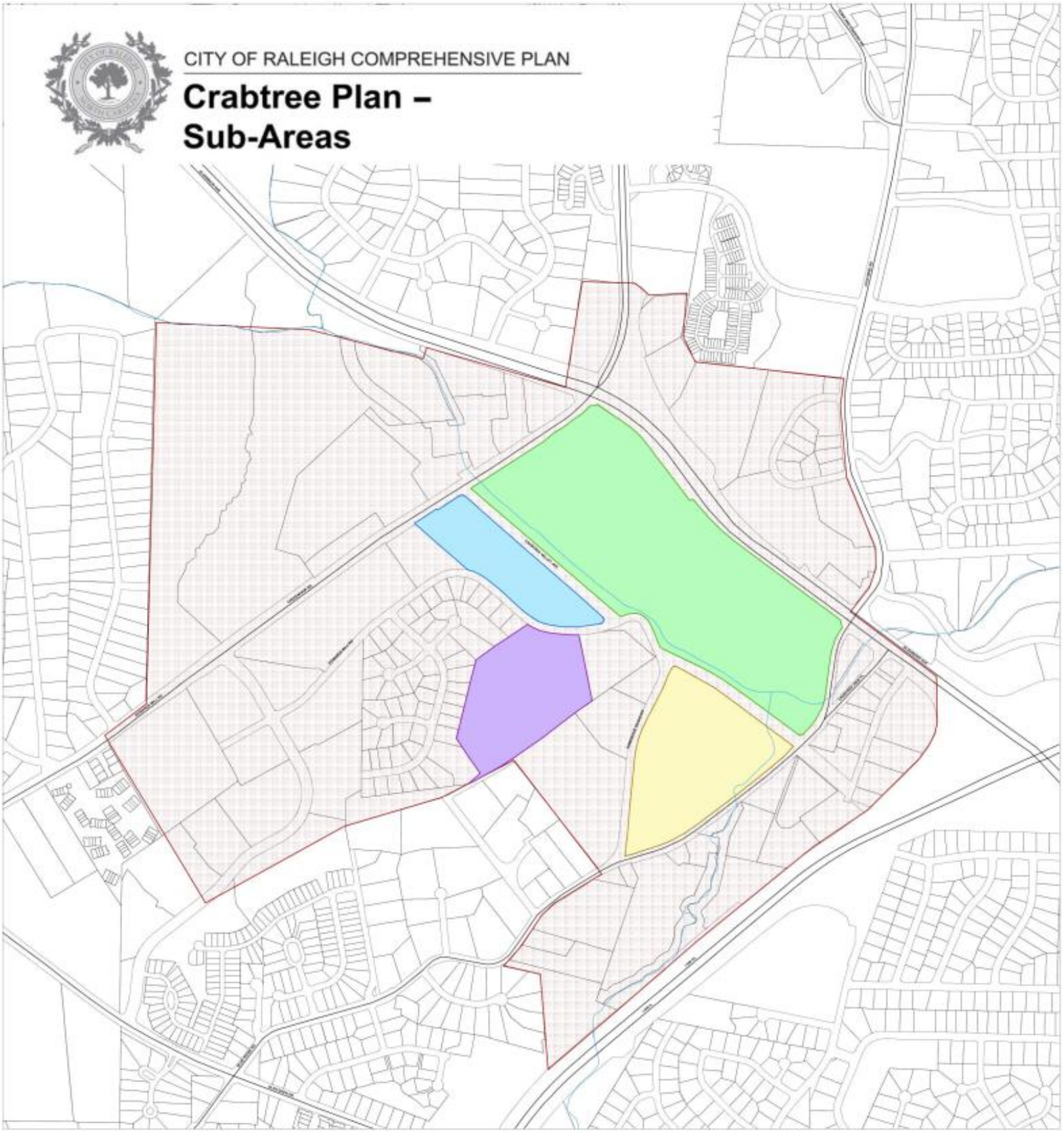
Action AP-C 1

Glenwood Avenue Pedestrian Bridge

A pedestrian bridge over Glenwood Avenue should be built to provide an upper-level link to the hotels and other buildings on the hillsides to the north.

CITY OF RALEIGH COMPREHENSIVE PLAN

Crabtree Plan – Sub-Areas



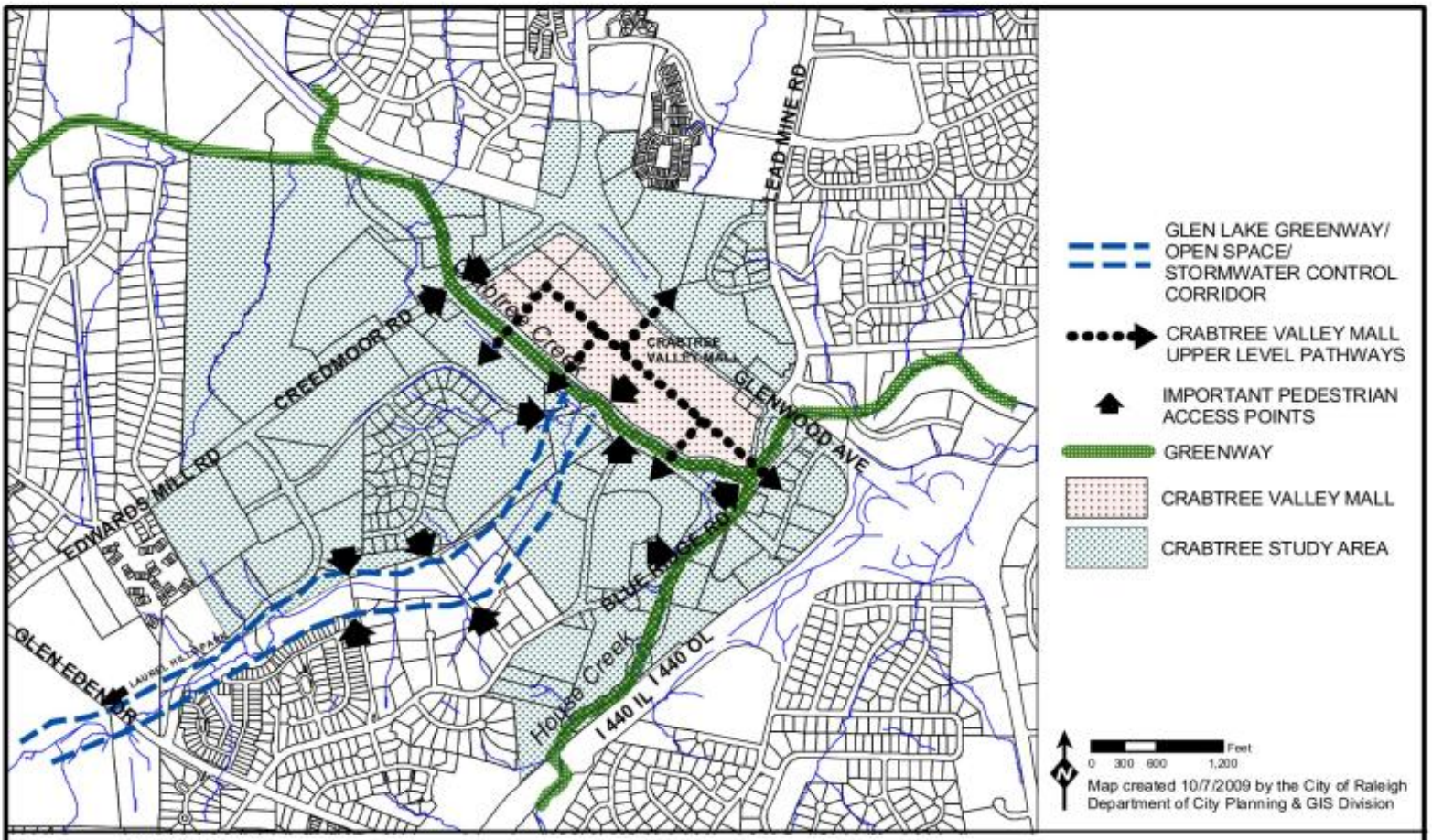
MAP AP-C1

- Crabtree Study Area
- Crabtree Valley Mall
- Kids Hill
- Kids Hill Plaza
- Pinnacle Apartments
- Major Roads
- Streams
- Buildings

N

0 250 500 1,000 Feet

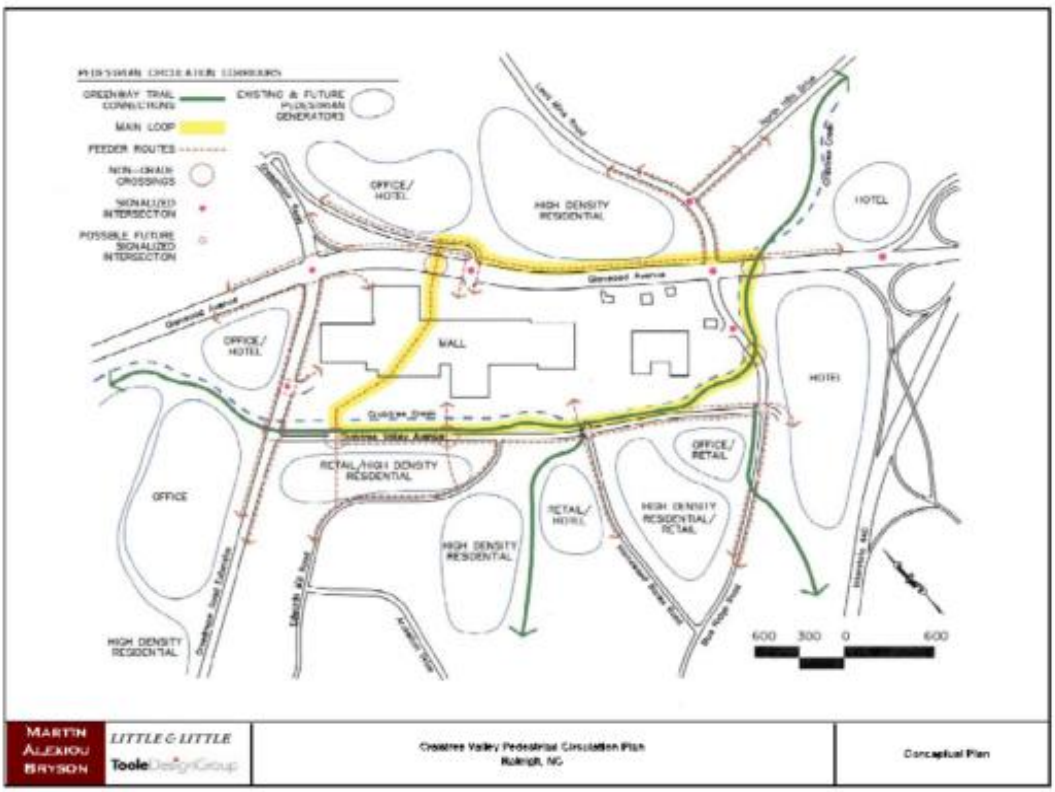
Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division

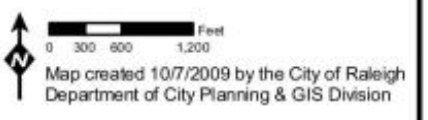


MAP AP-C2

Crabtree Plan - Pathways, Greenways, Open Space

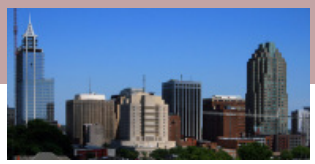
NOTE - See Future Land Use map for current land use designations





MAP AP-C3

Crabtree Plan - Pedestrian Circulation



Area Plan 6: Downtown West Gateway

The purpose of this plan is to provide specific policies and actions to guide redevelopment within an area west of Downtown Raleigh located between the Raleigh Convention Center and the Boylan Heights residential neighborhood. The plan encompasses an area expected to experience significant redevelopment and is situated to serve as a connection between existing downtown entertainment and employment centers, residential areas and future park and open space opportunities. The major catalysts for change in the Downtown West Gateway include the Raleigh Convention Center, a planned Multi-Modal Transit Center that will serve as a regional gateway to downtown, and redevelopment activities associated with the Jamaica Drive and Saunders North Redevelopment Areas. The area includes a unique built character contributed to by the Depot National Register Historic District and the Boylan Heights Historic Residential District.

Overall Plan Area

The following policies generally apply to the overall plan area and help to identify some of the major themes addressed in the area plan.

Policy AP-DWG 1

Zoning Consistency

Map AP-DWG-1 shall be used alongside the Future Land Use Map to evaluate the consistency of all proposed zoning maps amendments within the Downtown West Gateway plan boundaries. Where there is a conflict regarding preferred densities, the guidance in this Area Plan shall control.

Policy AP-DWG 2

Mixed-Use Development

Mixed-use development should be the primary form of development in the area with an emphasis on significant new residential growth and a vertical mix of uses in multi-story buildings.

Policy AP-DWG 3

Transportation Network Connectivity

Improve the connectivity of the transportation network through additional street connections (both inside and outside of the plan area), pedestrian, greenway, bicycle linkages, and bus/rail transit connections especially to the Multi-Modal Transit Center area.

Policy AP-DWG 4

Historic Preservation

Historically significant and contributing structures should be preserved and renovated wherever feasible and not in conflict with other major plan goals. New construction should use the existing architectural and historic character within the area as a guide.

Policy AP-DWG 5

Parks and Open Space

Create urban parks and open spaces throughout the area with connections to existing greenways and broader pedestrian systems.

Station Area Core

The Station Area Core includes several blocks surrounding the planned Multi-Modal Transit Center that will house existing and future rail and bus services and provide a new rail transit connection for downtown Raleigh as well as for the region. A high level of development intensity and residential density is planned for the area including a vertical mix of service retail, office and residential uses. Civic uses and buildings as well as public open space should be included in this future urban setting as the area evolves not only as a transit hub, but also as a unique downtown destination.

Policy AP-DWG 6

Public Facilities

Major public facilities, such as regional libraries, schools, civic buildings and other public/government buildings should be located in the Station Area Core. Urban open space that is available for public use should be incorporated into this district.

Policy AP-DWG 7

Hargett and Martin Street Connector

Hargett Street and Martin Street should be used to provide a connection between the Multi-Modal Transit Center, Downtown and the Moore Square Transit Center.

Policy AP-DWG 8

Building Height Transition

Taller buildings are encouraged within the Station Area Core provided that a transition to lower heights is included along the area perimeter where in close proximity to existing single family neighborhoods.

Policy AP-DWG 9

Boylan Heights Traffic

Discourage significant increases in transit related traffic on nearby neighborhood streets, such as S. Boylan Avenue. Traffic generated by the Multi-Modal Transit Center should be accommodated using the Dawson/McDowell Corridor from the east and the Glenwood Avenue Corridor from the north to limit traffic impacts in Boylan Heights.

Policy AP-DWG 10

Air Rights

Encourage the use of air rights for private development and/or public infrastructure over the existing rail property.

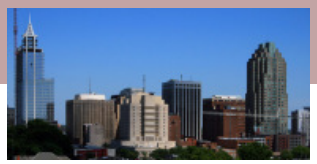
Depot Historic District

The Depot District is listed in the National Register of Historic Places and is being studied for designation as a local Raleigh Historic District. The contributing buildings from the area's earlier importance as a transportation and distribution hub from the late nineteenth century through the middle of the twentieth century provide a unique character and an opportunity for adaptive reuse of the building spaces for specialty shops, residential loft units, entertainment and boutique hotels with shared parking facilities.

Policy AP-DWG 11

Development Character and Design

New development and redevelopment should reflect the existing scale, character, design, and building to street setbacks found in this historic industrial warehouse area with increased development intensities along Dawson Street. Existing vacant lots and parking lots should



be in-filled with appropriate new construction that complements this historic industrial character. Modern buildings that incorporate the flavor of the existing design character of the district are encouraged.

Policy AP-DWG 12

Streetscape Design

Streetscape improvements should be sensitive to the context of the Historic District and make use of existing materials and design standards including granite curbing, sidewalk relationships, alleyways, street trees and pedestrian lighting.

Convention Center District

This fifteen acre area generally bounded by W. Cabarrus, S. Dawson, S. West, and W. South streets has been identified as a High Density Mixed-Use District, supporting the highest intensity development as a transition from the South Saunders neighborhood to the Convention Center and Downtown.

Policy AP-DWG 13

Development Intensity

Encourage higher intensity development along Dawson Street with a reduction in scale and intensity along S. West Street as a transition to the Saunders North Redevelopment Area.

Policy AP-DWG 14

Convention Center Service Uses

Mixed use development with an emphasis on hotel and service retail to support the Convention Center is encouraged along with office, residential and structured parking.

Boylan Transition District

This nineteen acre area south of the NC Railroad corridor and adjacent to a historic single family neighborhood has been identified as a Medium Density Mixed-Use District with an emphasis on residential uses, historic structures and transitional building scale.

Policy AP-DWG 15

Building Scale

The area between the railroad and Cabarrus Street east of the Boylan Heights neighborhood should include a mix of residential and office uses scaled to establish a transition to the adjacent single family historic district. Residential uses should increase adjacent to the historic district and building heights should be reduced.

Policy AP-DWG 16

North Boylan Heights

Development in the area north of Boylan Heights and west of the Multi-Modal Transit Center should be limited to a mix of office and residential uses.

Saunders North Retail District

The seven acre commercial area facing S. Saunders and W. South Streets has been identified as a retail service area for the neighborhood. The area is included in the Saunders North Redevelopment Plan to establish mechanisms for the removal of substandard conditions and incompatible uses, as well as set forth tools for redevelopment, revitalization, stabilization and new economic development and investment opportunities.

Policy AP-DWG 17

Neighborhood Commercial Center

Encourage the revitalization and redevelopment of the W. South Street/S. Saunders Street commercial area as a neighborhood retail/mixed-use center serving not only the area residents, but also visitors to the nearby Convention Center and Performing Arts Center.

Policy AP-DWG 18

Live/Work Opportunities

Encourage Live/Work opportunities in the area through mixed use buildings with office and residential above retail uses.

Saunders North Residential District

This fifteen acre area has been identified for primarily residential redevelopment and along with the adjacent Retail District is included in the Saunders North Redevelopment Plan. The Redevelopment Plan and associated actions will provide a more secure and stable environment for continued investment in this section of the City, and will contribute to the continued growth and stabilization of Downtown Raleigh to the east and the historic neighborhoods to the west and north.

Policy AP-DWG 19

Neighborhood Conservation

The northern section of the South Saunders Street neighborhood should be conserved through single family rehabilitation and sensitive detached single family infill.

Policy AP-DWG 20

Community Landmark

Encourage the expansion of the existing church facility or otherwise compatible institutional/residential uses within the southwest quadrant of S. Saunders and W. Lenoir Streets as a community landmark.

Implementation Items

The following actions are included to implement the policies of this Area Plan.

Action AP-DWG 1

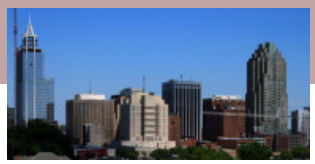
Downtown Overlay District

Extend the Downtown Overlay District south to DuPont Circle and Mountford Street and west to the Boylan Heights Historic District, and support specific rezoning recommendations to facilitate and support the desired land uses and redevelopment objective. *See **Map AP-DWG 2** for this and other zoning actions.*

Action AP-DWG 2

Industrial-2 Rezoning

Rezone much of the existing Industrial-2 (I-2) classification to Business (B) classification as noted on the plan zoning map.



Action AP-DWG 3

South Saunders Rezoning

Rezone properties along W. Lenoir and S. Saunders to Residential Business to support the recommended Residential/Office/Retail mix of uses.

Action AP-DWG 4

Two-Way Traffic Conversions

Convert Dorothea Drive, W. South Street, W. Lenoir Street and W. Morgan street to two-way traffic to improve connectivity and encourage storefront retail development. *See **Map AP-DWG 3** for this and other transportation actions.*

Action AP-DWG 5

Streetscape Improvements

Develop streetscape plans and other public realm enhancements to improve pedestrian connectivity and the general appearance of the area consistent with downtown streetscape design standards. Plans should be prepared for the following streets within the plan area: Cabarrus, South, Hargett, Martin, West, Glenwood (Morgan to Hillsborough) and generally within the Depot District. *See **Map AP-DWG 4** for this and other public realm improvements.*

Action AP-DWG 6

Air Rights

Determine the feasibility of utilizing air rights over the Railroad Wye area to maximize development potential within the Station Area Core.

Action AP-DWG 7

Railroad Wye Rail Yard

Evaluate alternative locations for the existing rail yard and develop strategies to improve the visual quality of the Railroad Wye.

Action AP-DWG 8

S. West Street Extension

Study the extension of S. West Street to W. Davie Street or Cabarrus Street as a key opportunity to improve north/south connectivity.

Action AP-DWG 9

Street and Pedestrian Connections

Improve street and pedestrian connections to provide convenient access from the Multi-Modal Transit Center area to Glenwood South, Downtown Core, Convention Center and Downtown neighborhoods.

Action AP-DWG 10

Boylan Avenue Pedestrian Connection

Explore the feasibility of a pedestrian connection from Boylan Avenue through the Multi-Modal Transit Center to S. West Street.

Action AP-DWG 11

Rosengarten Greenway

Implement the Rosengarten Urban Greenway from Dorothea Drive to Cabarrus Street connecting to the Rocky Branch Greenway. Improve and expand the existing park on the north side of Lenoir Street as part of the Rosengarten Urban Greenway explore the feasibility of an expanded open space in the DuPont Circle area.

Action AP-DWG 12

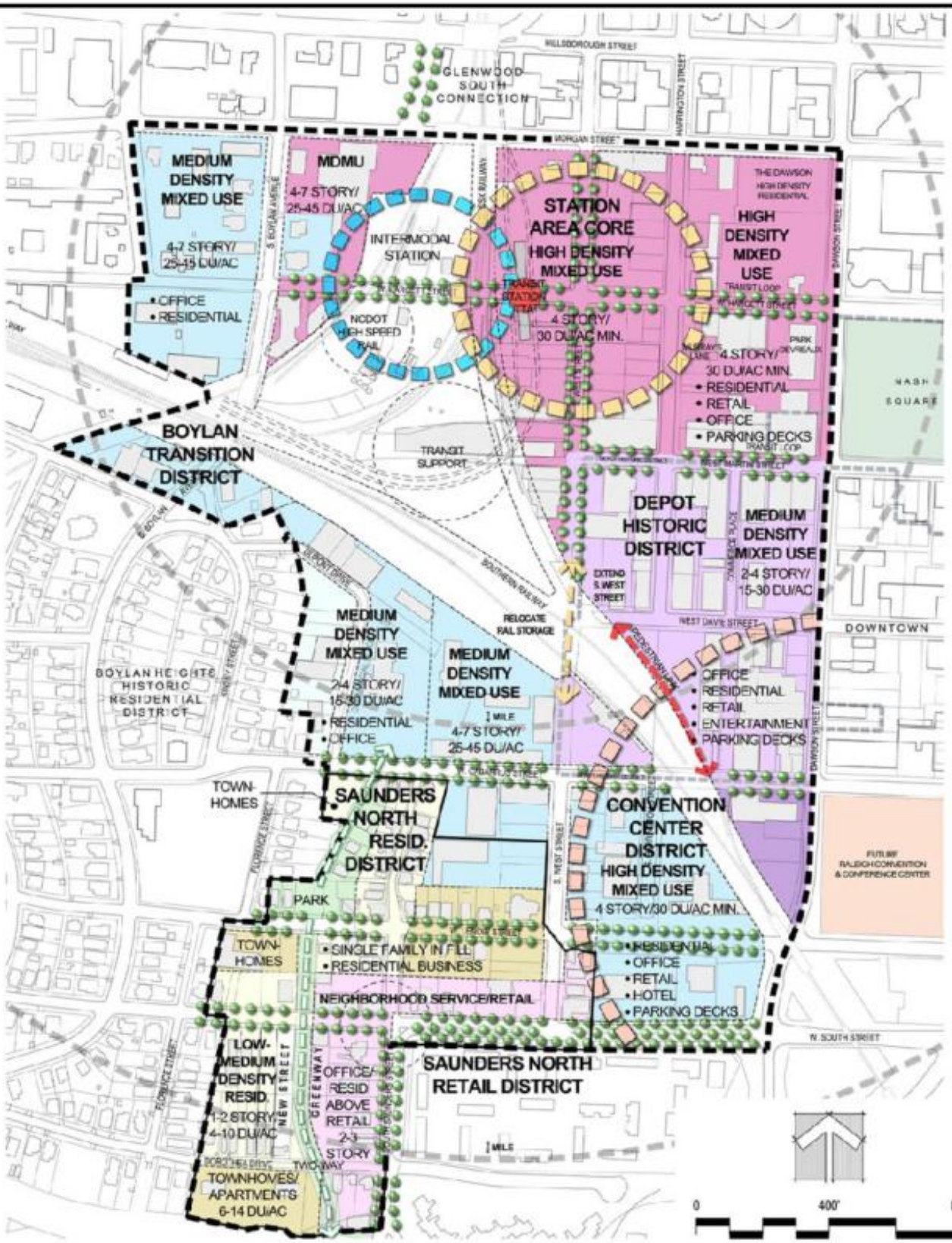
Rosengarten Street Extension

Study the feasibility of extending Rosengarten Lane as a new street between W. South Street and Dorthea Drive to support development with single family infill.

Action AP-DWG 13

Saunders North Redevelopment Plan Funding

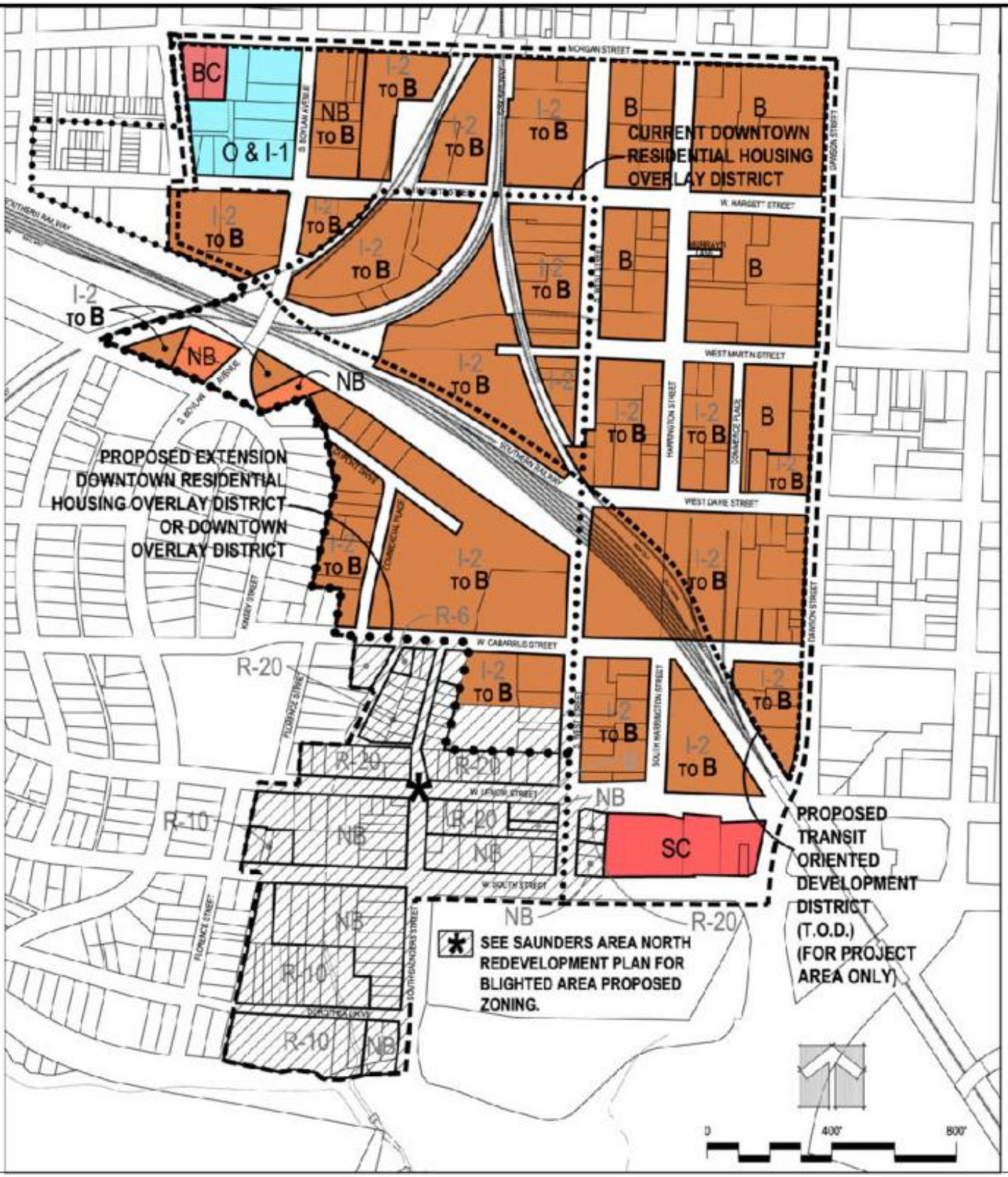
Pursue funding sources to implement the Saunders North Area Redevelopment Plan as quickly as possible.



MAP AP-DWG1

Downtown West Gateway Land Use and Urban Form

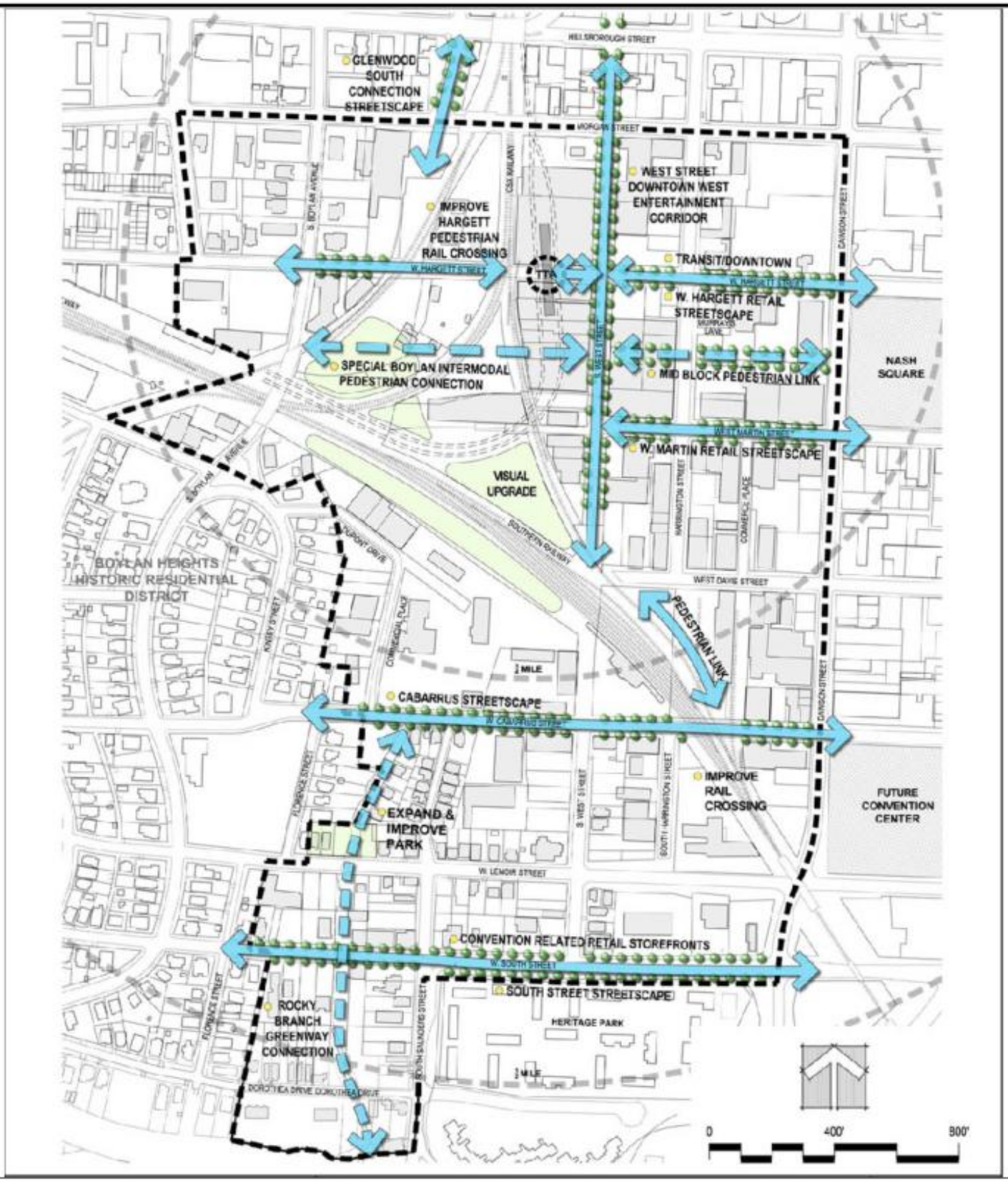
Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



MAP AP-DWG2

Downtown West Gateway Proposed Zoning

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



MAP AP-DWG3

Downtown West Gateway Pedestrian and Open Space

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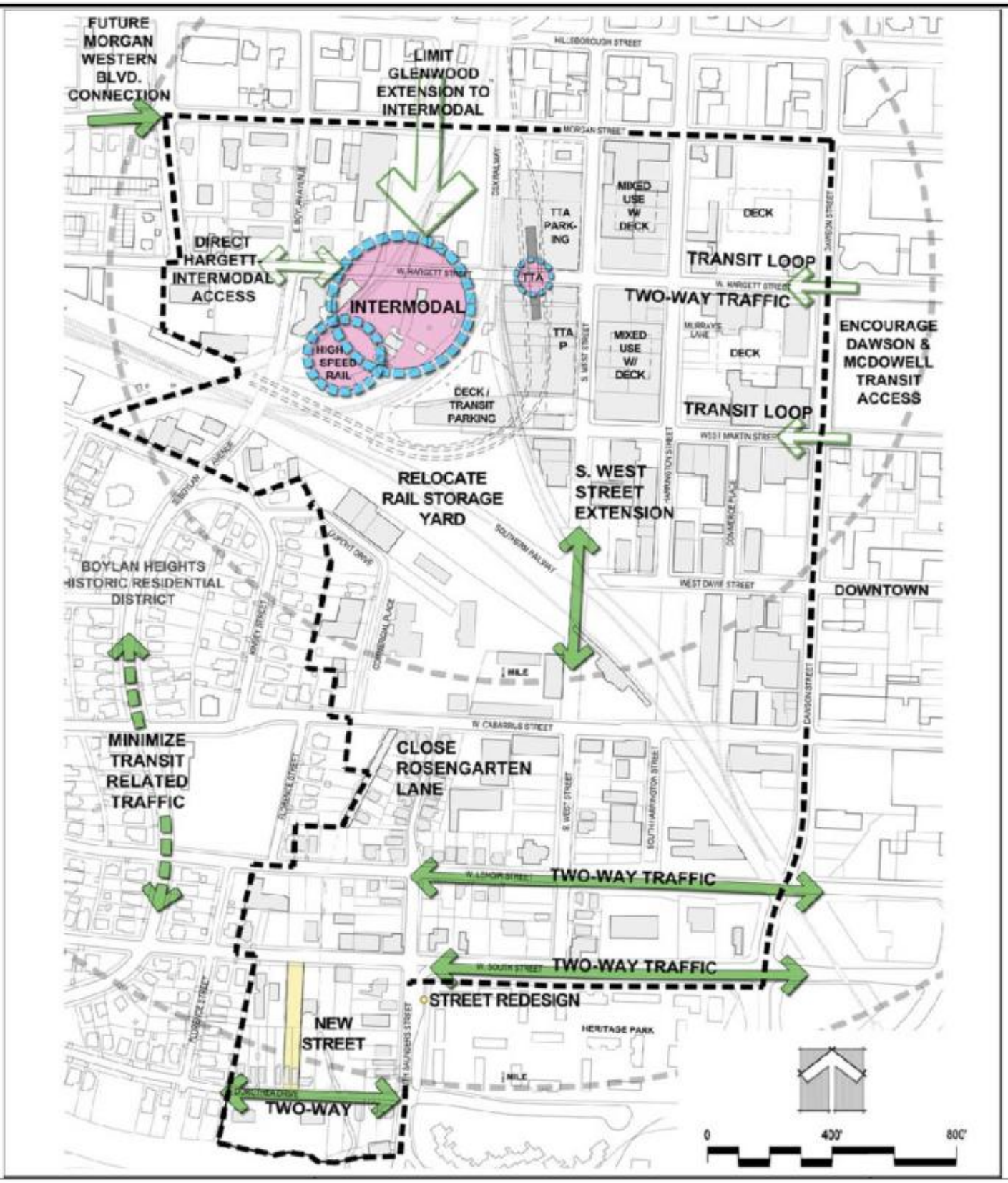
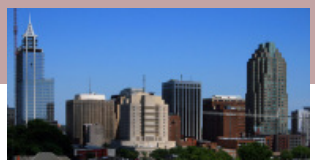
Department of City Planning & GIS Division



MAP AP-DWG4

Downtown West Gateway
Transit, Streets, and Parking

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Area Plan 7: Falls Lake

This plan covers an area within the Falls Lake watershed bounded generally by Strickland and Falls of Neuse Roads on the south and east, and the I-540 right-of-way on the north. These roadways merely approximate the watershed boundary, which is subject to revision as more precise topographic data become available. The Falls Lake watershed is divided into a primary (or critical) watershed protection area and a secondary watershed protection area. The northern right-of-way line of I-540 serves as the boundary between these two areas. There is a large amount of natural, forested land and very low density residential uses which offer good protection for the watershed. There are no major areas of nonresidential uses. A primary goal is to keep the area as natural as possible. It is essential that public and private improvements in the watershed be designed to have the least negative impact on water quality.

Secondary Watershed Protection Area Policies

Policy AP-FL 1

Falls Lake Secondary Watershed Zoning

In the Falls Lake Secondary Watershed Protection Area, no new nonresidential zoning or land uses should be permitted.

Policy AP-FL 2

Falls Lake Secondary Watershed Density

In the Falls Lake Secondary Watershed Protection Area, there should be an average density of one dwelling unit per acre. In those cases where extensions of public utilities will allow clustering of housing, a density of up to four units per acre should be allowed only where compensating permanent open space is set aside resulting in an overall development average of one unit per acre.

Policy AP-FL 3

Falls Lake Secondary Watershed Impervious Surface

In the Secondary Watershed Protection Area, impervious surfaces should be limited to 12 percent, unless public utilities are available, in which case a 30 percent maximum may be allowed.

Policy AP-FL 4

Falls Lake Secondary Watershed Utilities

In the Secondary Watershed Protection Area, public utility extensions are allowed when the following conditions are met:

- The capacity of water and sewer facilities is adequate for an extension;
- An extension is deemed appropriate to promote the orderly provision of public services and facilities in the Raleigh area;
- There will be no reduction in water quality or degradation of the watershed as a result of public utility extension or the more intense development which may result;
- It is determined that annexation of a proposed development would be in the best interest of the City of Raleigh.

Primary Watershed Protection Area Policies

Since Raleigh has no jurisdiction over private property in the Primary Watershed, these policies would apply only to those properties within the primary areas where emergency public utility extensions may be necessary to protect the public health, safety and welfare and to protect Raleigh's drinking water supply.

Policy AP-FL 5

Falls Lake Primary Watershed Land Use

In the Falls Lake Primary Watershed Protection Area, only residential uses will be permitted, and no new nonresidential zoning or land uses should be allowed.

Policy AP-FL 6

Falls Lake Primary Watershed Density & Impervious Surfaces

In the Falls Lake Primary Watershed Protection Area, a minimum lot size of two acres shall apply. Impervious surfaces should be limited to 6 percent on any lot.

Policy AP-FL 7

Falls Lake Primary Watershed Utilities

In the Falls Lake Primary Watershed Protection Area, no extensions of public utilities should be allowed, with the exception of emergency extensions deemed necessary to protect the public health, safety and welfare and to protect Raleigh's drinking water supply.

Policy AP-FL 8

Falls Lake Primary Watershed Emergency Utility Extensions

Public utilities may be extended outside Raleigh's jurisdiction in either the Primary or Secondary Watershed Protection Area when a finding is made by City Council that there is a threat to public health, safety and welfare and to Raleigh's drinking water supply. Such extensions would be considered on a case by case basis and would require concurrence from the Wake County Commissioners prior to approval when the land is subject to Wake County development regulations. Properties connecting to these facilities would be expected to bear the full cost of any capital facilities needed to provide the utility services and agree to the operating and maintenance fees normally applied to properties outside the City limits. Emergency service to properties would also be subject to the following:

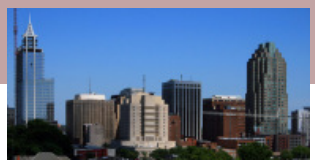
- Only existing development posing a specific threat to the public health, safety and welfare and to Raleigh's drinking water supply would be allowed to connect to emergency utility extensions;
- Owners of existing development seeking to connect to emergency utility extensions shall file a petition of annexation to be considered by the City Council on a case by case basis;
- No increase in the density of development will be allowed beyond that already approved by the governing jurisdiction at the time of the provision of the utility service;
- The development would provide for adequate retention facilities to capture effluent in the event of sewer system failure in addition to any stormwater retention facilities that are necessary to protect the water quality in Falls Lake.

Other Watershed Policies

Policy AP-FL 9

Falls Lake Watershed Effluent Retention Facilities

In the event of sewer system failure, development should provide adequate retention facilities to capture effluent in addition to stormwater retention facilities that are necessary to protect water quality in Falls Lake.



Policy AP-FL 10

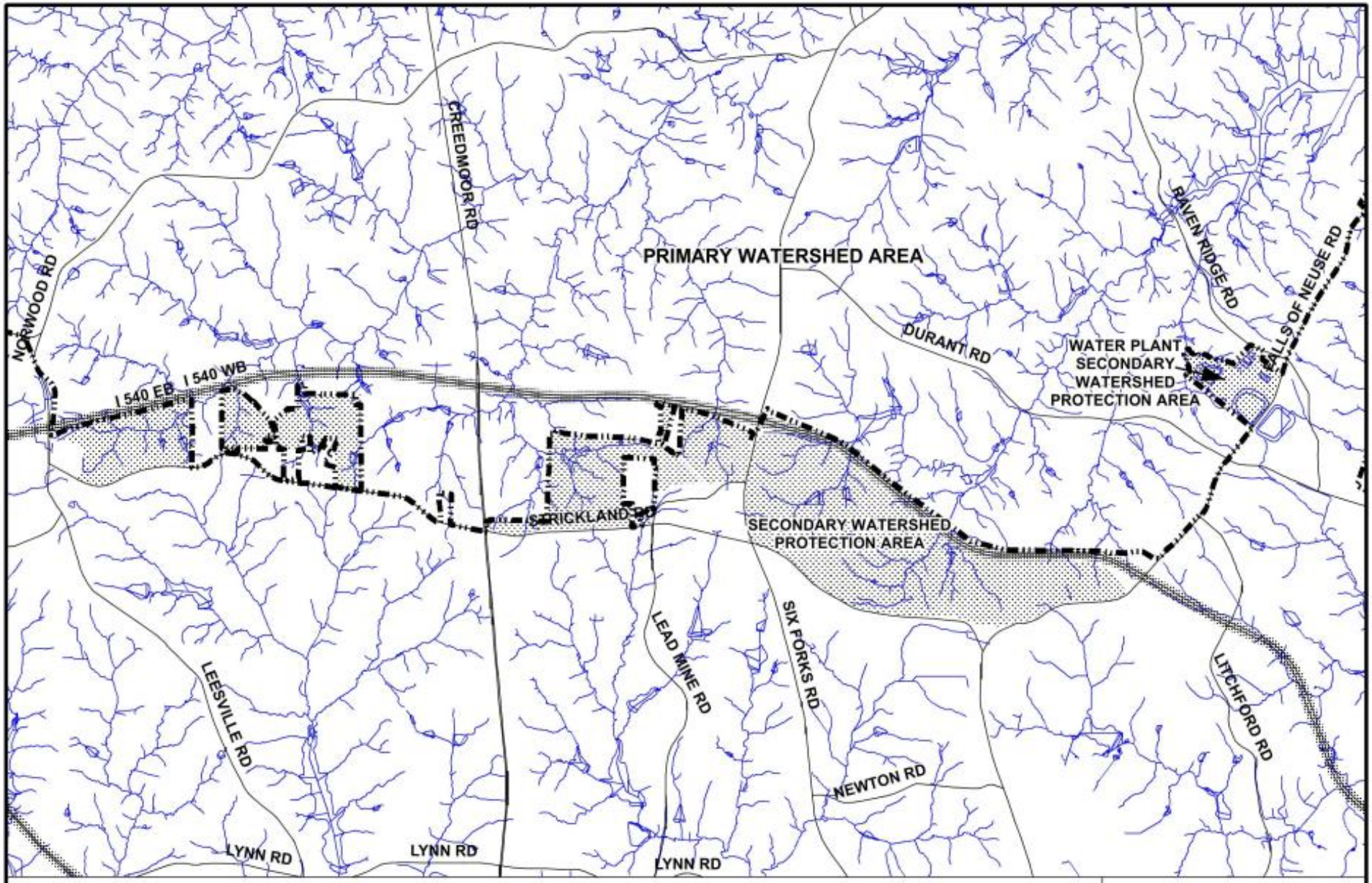
Falls Lake Watershed Street Design

Thoroughfares and streets in the Falls Lake watershed should be designed to sensitive area standards.

Policy AP-FL 11

E. M. Johnson Water Treatment Facility

A portion of the City's E. M. Johnson Water Treatment Facility lies within the critical area of the Falls Lake Watershed, and should not be subject to the zoning regulations enacted to carry out the primary watershed protection policies contained within this Plan. Rather, the design of the facility itself should address the objectives served by these policies and regulations.



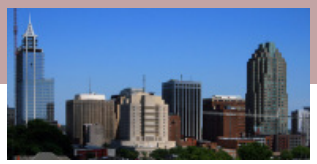
Falls Lake Plan

SECONDARY WATERSHED PROTECTION AREA

ETJ

I-540

3,200 1,600 0 3,200 Feet



Area Plan 8: Falls of Neuse Corridor

The Plan area includes properties fronting the Falls of Neuse corridor between Durant Road and the Neuse River and the area fronting the extension of New Falls of Neuse Boulevard to the New Falls of Neuse Boulevard bridge.

The intent of the plan is to provide guidance for future zoning and development that will preserve the character of the corridor in relation to the Falls Lake Water Supply Watershed, the Falls Lake Dam and park, and the historic Falls community.

Falls of Neuse Road north of Durant Road transitions from a rural area to a suburban, green corridor. Most of the property west of the Falls of Neuse Corridor is in Wake County's jurisdiction and in the Falls Lake Water Supply Watershed. The properties east of Falls of Neuse Road are in the City of Raleigh Extraterritorial Jurisdiction. Frontage properties are developed with rural and low-density residential uses and include extensive roadside vegetation, creating a "green corridor." This development pattern respects the rural character of the Falls Lake Water Supply Watershed and the Falls Mill village (circa 1850), which still exists on the northern end of the corridor along Fonville Road.

Policy AP-FON 1

Falls of Neuse Corridor Character

Protect the character of the corridor. Maintain the sense of place created by the extensive roadside vegetation, the Falls Lake dam, and Falls Community.

Policy AP-FON 2

Fonville Community Conservation

The character and the design of new development or redevelopment in the historically-significant Falls community (Fonville Road, Area 4 on map) should reflect in material and character the unique enclave of existing homes in the neighborhood.

Policy AP-FON 3

Fonville Retail

Additional future retail catering to river activities in the Falls community (area 4 on Map AP-FON-1) should be in the style and character of the existing homes in the area and maintain the sense of place created from the old mill town and the future white water park.

Policy AP-FON 4

Dunn Road Retail Area

The Dunn Road/Falls of Neuse Neighborhood Retail Mixed Use Area (Area 2 on Map AP-FON-1) should be developed in context with the surrounding single-family neighborhood and with a walkable development pattern.

Policy AP-FON 5

Falls of Neuse Area Conservation

Protect environmentally significant areas including the Falls Lake watershed, the Neuse River, slopes greater than 15%, and the 100-year floodplain along the Neuse River. Environmentally significant areas in close proximity of the Neuse River should be protected and incorporated as an amenity with development plans. Cross Reference Policy EP 3.2 'Neuse River Protection'.

Policy AP-FON 6

Falls of Neuse Road Residential Access

New detached single-family residences fronting Falls of Neuse Road are discouraged.

Policy AP-FON 7

Falls of Neuse Road Frontage Lots

Small frontage lots on Falls of Neuse Road should be recombined for development rather than redeveloped individually.

Policy AP-FON 8

Falls/Durant Pedestrian & Bicycle Facilities

Site designs within the Falls/Durant Neighborhood Retail Mixed-Use area should plan for and accommodate bicycle and pedestrian travel between development sites (excluding the water treatment plant).

Policy AP-FON 9

Falls of Neuse Corridor Parking Lots

Parking lots are encouraged to be located behind or beside buildings along the Falls of Neuse corridor.

Action AP-FON 1

Falls of Neuse Multi-Purpose Path

Include an eight-foot wide multi-purpose path/sidewalk and wide outside lanes in the cross-section details for the widening of Falls of Neuse Road to accommodate access to the numerous parks in the area and the high concentration of families with children in the area.

Action AP-FON 2

Durant/Shadowlawn Drive Connections

Falls/Durant Neighborhood Retail Mixed-Use area: A new-location public street should connect Durant Road to Shadowlawn Drive and provide connectivity to Rio Springs Drive.

Action AP-FON 3

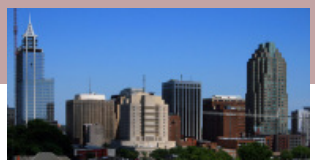
Dehijuston/Raven Ridge Road Connection

Area 1: A new-location public street should connect Dehijuston Court with Raven Ridge Road. There is an existing stream crossing shortly before the end of Dehijuston Court.

Action AP-FON 4

Dunn/Falls of Neuse Access

Area 2: Evaluate vehicular access options for the Dunn Road/Falls of Neuse Neighborhood Retail Mixed-Use area as part of the Falls of Neuse Road widening project or as part of a private development plan on this property.



Action AP-FON 5

Falls of Neuse/Wide River Drive Connection

Area 5: Connect Falls of Neuse Road to Wide River Drive at New Falls of Neuse Boulevard with a new-location Sensitive Area Major Thoroughfare as shown on Figure 5 of the Streets, Sidewalks, and Driveway Access Handbook.

MAP AP-FON1

Falls of Neuse Plan

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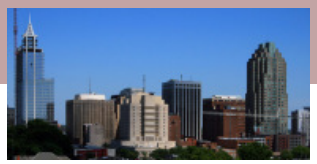


Area Plan 9: Five Points East

The Plan area lies between Glenwood Avenue and Capital Boulevard just north of downtown Raleigh. The area is bisected by Whitaker Mill and Fairview roads.

The Plan area contains one of the largest concentrations of early- to mid-20th century middle class housing in Raleigh, with the majority of houses constructed between 1920 and 1940. The houses are generally modest and are on relatively small lots, but display a diversity of architectural styles. This plan was prepared to preserve and perpetuate the unique character of the Five Points neighborhoods.

All policies in the Five Points East Neighborhood Plan pertaining to permitted uses, building bulk and height, and other aspects of development typically regulated by zoning, are intended to be implemented through the rezoning of property. Until such time as zoning reflects the Plan policies, however, the applicable zoning standards shall continue to control these fundamental parameters determining the development potential of particular sites.

Policy AP-FPE 1

Preserving the Five Points Street Grid

The existing Five Points East street pattern, which is a modified grid, should be respected and perpetuated. Cul-de-sacs are strongly discouraged.

Policy AP-FPE 2

Five Points Transition Area B

In Transition Area B (see Map AP-FPE-1) new structures should not tower over adjacent low-density housing. Trees should be preserved where possible and at least a portion of the site should be retained in its current park-like setting.

Policy AP-FPE 3

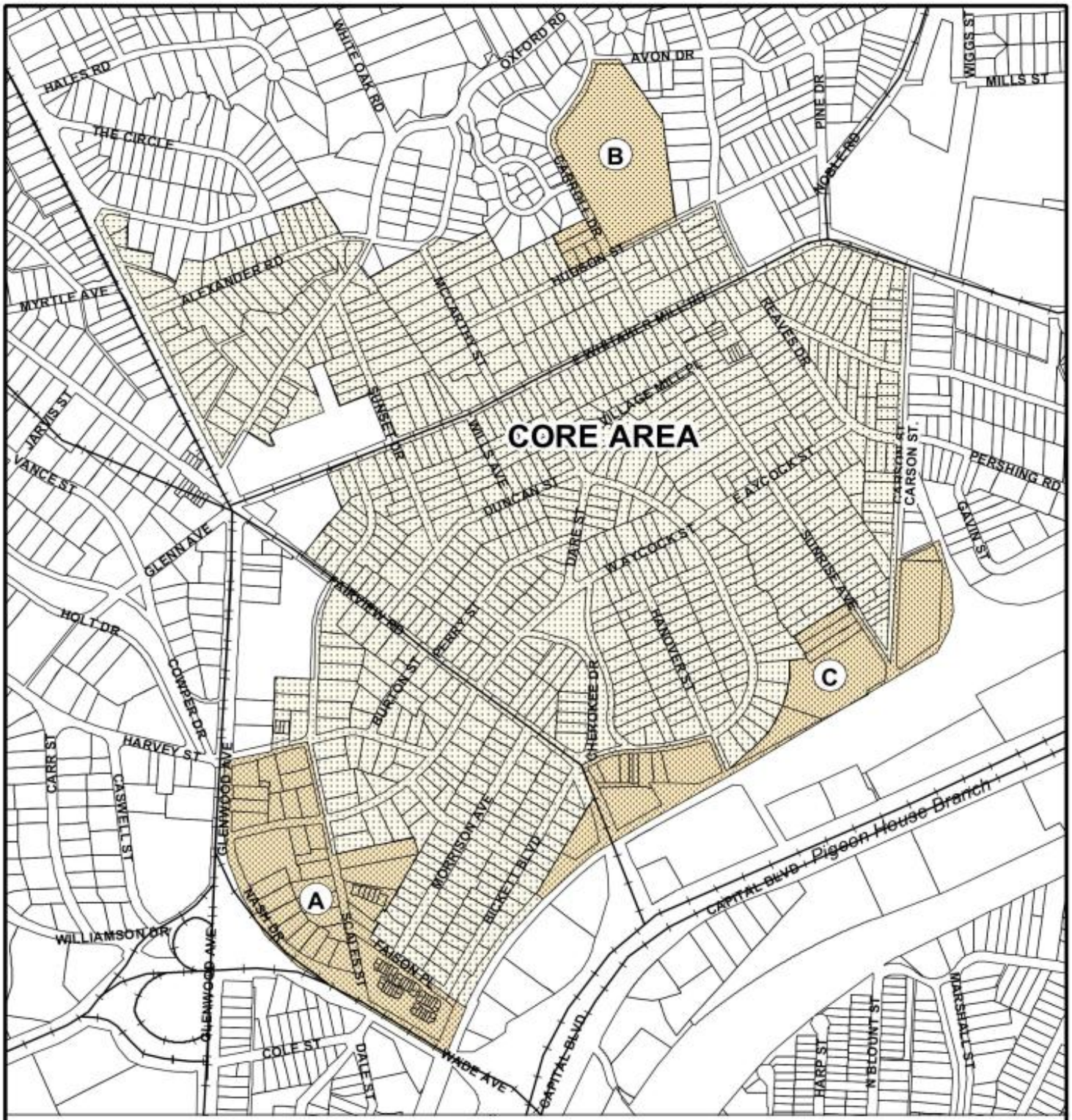
Five Points Transition Area C

In Transition Area C (see Map AP-FPE-1), new street yards and heights of new buildings adjacent to low-density housing should be of the same scale as the housing. More intense development and taller buildings are encouraged to be away from existing housing and closer to the railroad corridor. Vehicular traffic from redevelopment in this area should be directed to Fairview Road and Carson Street and not to other, narrower streets in the existing neighborhood.

Action AP-FPE 1

Five Points Zoning Map Amendment

Undertake an Official Zoning Map Amendment to apply the Five Points East - Transition Area A Neighborhood Conservation Overlay District (NCOD) by July 1, 2012 before the Built Environmental Characteristics and Regulations in the Zoning Code sunset.



MAP AP-FPE1

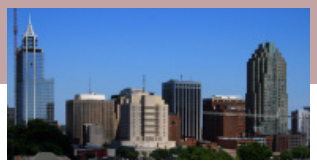
Five Points East Plan - Core/Transition Areas

CORE AREA

TRANSITION AREAS

Feet
0 250 500 1,000

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 10: Forestville Village

The Forestville Road Village Center is located on the south side of U.S. 401 with a core area on the east and west side of Forestville Road. The Village Center Plan provides urban design policies (adopted as zoning conditions in case Z-20-04 for the East Village and Z-36-03 for the West Village) to establish a pedestrian-oriented street system that interconnects with surrounding existing and future residential neighborhoods. The intent of the plan is to guide development patterns in order to create a walkable streetscape with buildings and their principal entry fronting a public sidewalk along the street system identified on the attached map.

East Village Center Urban Design Guidelines

Policy AP-FV 1

Forestville Village East - Street A

A commercial street (Street A on Map AP-FV-1) should extend east from Forestville Road and be designed according to Figure 14b., Secondary Pedestrian Way, as noted in the Guidelines for Mixed-Use Centers in the Streets, Sidewalks, and Driveway Access Handbook.

Policy AP-FV 2

Forestville Village East - Street B

Another commercial street (Street B on map) should extend south from U.S. 401 and be designed according to Figure 14b., Secondary Pedestrian Way, as noted in the Guidelines for Mixed-Use Centers in the Streets, Sidewalks, and Driveway Access Handbook. Street B will continue south beyond the Core as a Transitional Pedestrian Way (Figure 14a.).

Policy AP-FV 3

Forestville Village East - Street A Extension

Street A should extend east of Street B as a Transitional Pedestrian Way as noted in Figure 14a. of the Streets, Sidewalks, and Driveway Access Handbook.

Policy AP-FV 4

Forestville Village East - Street C

Street C (as noted on map) should extend south from U.S. 401 as a Transitional Pedestrian Way (Figure 14a.) and continues south through the Transition Area to a proposed Collector Street.

Policy AP-FV 5

Forestville Village Pedestrian Amenities

The streetscape along the Forestville Village pedestrian streets should include the placement of buildings adjacent to the sidewalks on the streets, regularly spaced trees between the sidewalk and street curb, as well as seating, bike racks, trash receptacles, and pedestrian-scaled light fixtures.

Policy AP-FV 6

Forestville Village Window & Entry Locations

Building windows and entry locations along Forestville Village sidewalks should conform to the recommendations in the Urban Design Guidelines (see Table UD-1 in Urban Design Element) as well as the articulation of building facades greater than 64 feet in width.

Policy AP-FV 7

Forestville Village East Core & Transition Areas

The Core Area of the East Forestville Village, as identified on the attached map, establishes the area of greatest retail and office development intensity. Beyond the Core Area is a Transition Area that should provide a reduction in scale and intensity of development to blend with the surrounding and future residential areas. Streetscapes in the Transition Area should also include building fronts with entries and on-street parking. Uses that are appropriate within the Transition include multi-family and townhouse residential, office, and retail sales-personal service uses.

Policy AP-FV 8

Forestville Village East Pedestrian Connectivity

Pedestrian connectivity to future development on the north side of U.S. 401 should be coordinated with NCDOT. Connections across Forestville Road will be accommodated by appropriately spaced and marked crosswalks with pedestrian median havens. Connections to future greenway trails should be provided as development occurs with access through the Transition Area to the Core Area of the Village Center.

West Village Center Urban Design Guidelines

Policy AP-FV 9

Forestville Village West - Street A

A commercial street (Street A on Map AP-FV-1) extends east off U.S. 401 to Forestville Road through the Core Area of the development. Application of the site, street, and building design recommendations of the Urban Design Guidelines (see Table UD-1 in the Urban Design Element) is appropriate within the Core with the exception of on-street parking within the first block off U.S. 401. Street A should be designed according to Figure 14b., Secondary Pedestrian Way, as noted in the Guidelines for Mixed Use Centers in the Streets, Sidewalks, and Driveway Access Handbook.

Policy AP-FV 10

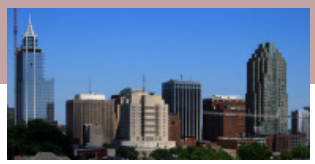
Forestville Village West - Street B

Street B extends south from Street A and serves as a transitional street to the adjacent residential neighborhood and should be designed according to Figure 14a.,Transitional Pedestrian Way, as noted in the Guidelines for Mixed-Use Centers in the Streets, Sidewalks, and Driveway Access Handbook. While maintaining a strong pedestrian-orientation through streetscape design and building placement, a development transition using architectural design to reduce the height and massing of buildings should be incorporated as proximity to the neighborhood increases. Housing should also transition in density with the highest in the Core.

Policy AP-FV 11

Forestville Village West - Street B Extension

The extension of Street B north of Street A is proposed as a private commercial street. This area is also included in the Core and should extend the streetscape of Street A with the exception of the percentage of parking lot frontage allowed on the street to accommodate a major tenant. The impact of the parking lot on the street may be mitigated through streetscape improvements including the continuation of sidewalks and tree plantings on both sides of the street as well as placing buildings on the corners.



Policy AP-FV 12

U.S. 401 Frontage in Forestville Village

The Urban Design Guidelines do not apply to the frontage of Forestville Village on U.S. 401 since the pedestrian orientation is to an internal street system. This roadway frontage should include thoroughfare yard landscape buffers.

Policy AP-FV 13

Forestville Road Building Frontage

While Forestville Road is also a major thoroughfare with landscape buffers and minimized building orientation onto the street, application of the Urban Design Guidelines is appropriate in relation to streetscape design, sidewalks, and pedestrian crossings especially at street and driveway intersections leading into the development to provide connectivity to the residential areas east of the street. Buildings should frame the Forestville Road entry onto Street A.

Policy AP-FV 14

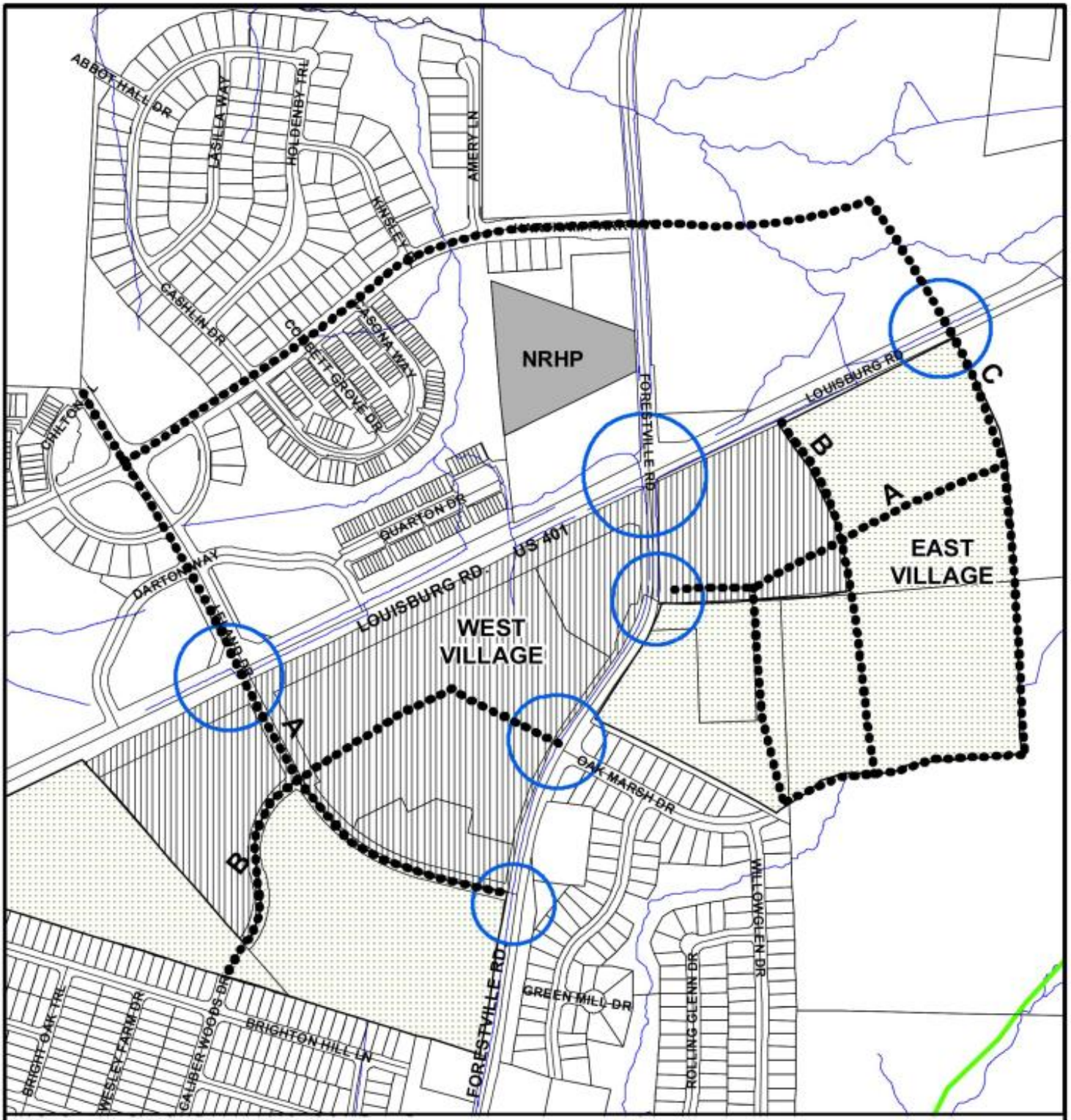
Medians at Forestville Road Intersections

A median is recommended at entry #2 and Street A access points onto Forestville Road as shown on the Concept Plan dated 2/17/04 to provide a safe pedestrian haven in crossing the thoroughfare. Additional right-of-way may be necessary at these locations to provide the median.

Policy AP-FV 15

U.S. 401/Forestville Road Historic Preservation

The Rogers-Whitaker-Haywood House historic property on the north side of U.S. 401 at Forestville Road should be preserved to retain elements of historical rural character and community identity.



MAP AP-FV1

FORESTVILLE VILLAGE PLAN

PEDESTRIAN CROSSINGS

TRANSITION AREA

GREENWAY CORRIDOR

CORE AREA

PROPOSED STREET GRID

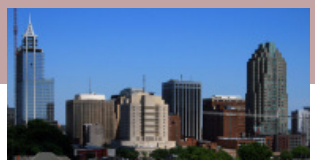
NATIONAL REGISTER HISTORIC PROPERTY

N

Feet

0 200 400 800

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 11: Garner-Tryon Neighborhood

The Garner-Tryon Neighborhood Center is located on the northeast quadrant of land at the intersection of Garner Road and Tryon Road, and includes several individual properties for which property owner coordination will be required to achieve the goals of this plan.

The Neighborhood Center Plan provides urban design policies (adopted as zoning conditions in case Z-12-04) to establish a pedestrian-oriented street system that interconnects with surrounding existing and future residential neighborhoods. The intent of the plan is to guide development patterns in order to create a walkable streetscape with buildings and their principal entry fronting a public sidewalk along a street. A primary street system within the Neighborhood Center is shown on the attached map with street extensions north and east to adjacent residential areas.

Policy AP-GT 1

Garner-Tryon Core Area

The Core Area is recommended to focus on several proposed intersecting streets in the northeast quadrant of the Garner Road/Tryon Road intersection. Streets A and B extend east off Garner Road and intersect with Street C that extends north from the future extension of Tryon Road. Streets A and C continue east and north respectively through the Transition areas and into the surrounding neighborhoods.

Policy AP-GT 2

Garner-Tryon Non-Residential Prohibitions

Non-residential uses should be prohibited east of Street C and north of the southern property lines for lots fronting Wilson Street.

Policy AP-GT 3

Garner-Tryon Pedestrian-Oriented Design

The site, street, and building design recommendations of the Urban Design Guidelines (see Table UD-1 'Design Guidelines for Mixed-Use Developments' in Element I: 'Urban Design') should apply to Streets A, B, and C within the Core and Transition Areas. Within the Core Area, Streets A, B, and C shall be designed as Secondary Pedestrian Ways as detailed in Figure 14b. of the Guidelines for Mixed-Use Centers in the Streets, Sidewalks, and Driveway Access Handbook and should include on-street parking where not in conflict with transportation objectives.

Policy AP-GT 4

Garner-Tryon Transition Areas

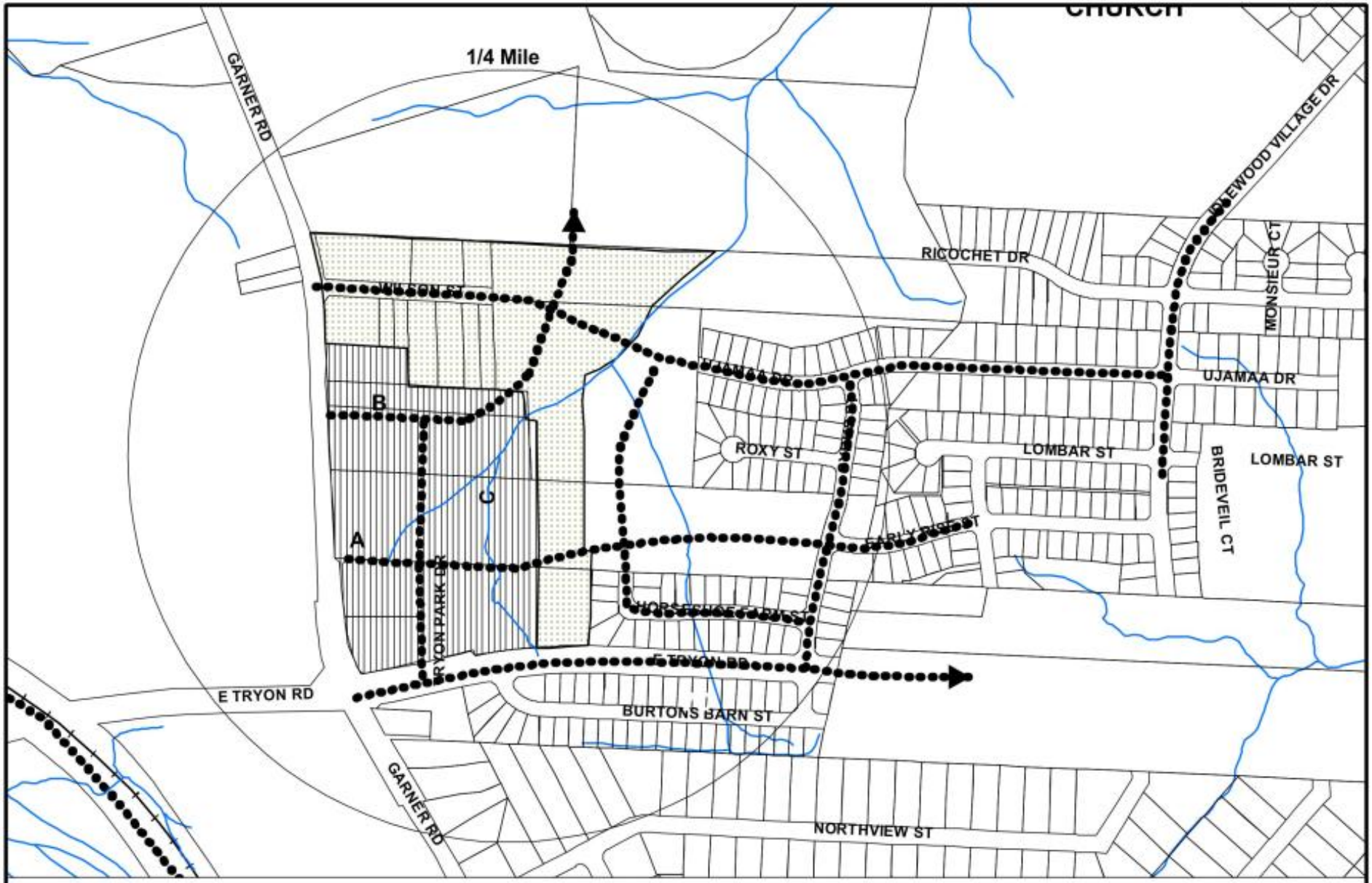
Beyond the Core Area on Streets A and C, a development transition using architectural design should be incorporated to reduce building height and massing as proximity to single-family residential uses is approached. Appropriate commercial uses in the Transition are office and retail sales-personal services. A transition in housing density should also be provided with the highest densities occurring in the Core. Within the Transition Area, streets shall be designed according to Figure14a. in the Streets, Sidewalks, and Driveway Access Handbook with on-street parking where appropriate.

Policy AP-GT 5

Frontage on Garner & Tryon Roads

The Urban Design Guidelines do not apply to the frontage of the Neighborhood Center on Garner Road and Tryon Road since the

pedestrian orientation is to an internal street system. This area should include landscape buffers adjacent to parking lots.



MAP AP-GT1

Garner-Tryon Plan

STREET GRID

PARCELS

CORE AREA

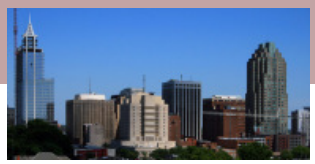
TRANSITION AREA

STREETS

HYDROLOGY

Feet
0 125 250 500

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Area Plan 12: I-540/Falls of Neuse

The plan area includes properties fronting the Falls of Neuse corridor between two Focus Areas: Strickland-Falls of Neuse and Durant-Falls of Neuse. An interchange with I-540 is located in the center of the plan area. A portion of the plan area north and west of Falls of Neuse Road is located within the Falls Lake watershed.

The intent of the plan is to provide guidance for future zoning and redevelopment along the corridor that will provide visual cohesion and identity to the corridor, protect the Falls Lake Watershed and adjacent single family neighborhoods from development impacts, and minimize traffic circulation impacts.

Policy AP-540F 1

Development Character on Falls of Neuse Road

Development along Falls of Neuse Road should not adversely impact adjacent residential properties due to bulk, scale, mass, fenestration or orientation of structures, stormwater runoff, noise caused by high levels of activity in service areas, or on-site lighting.

Policy AP-540F 2

Residential Access on Falls of Neuse Road

New single-family residences fronting the thoroughfare are discouraged. *See also Policy AP-FON 6 in Area Plan 8: 'Falls of Neuse Corridor'.*

Policy AP-540F 3

Frontage Lots on Falls of Neuse Road

Small frontage lots should be recombined rather than redeveloped individually. *See also Policy AP-FON 7 in Area Plan 8: 'Falls of Neuse Corridor'.*

Policy AP-540F 4

Falls of Neuse Low Intensity Appearance

Non-residential frontage lots outside of mixed-use and retail centers along Falls of Neuse Road should have a low intensity appearance accomplished through landscaping, combining lots, building design, and shared access.

Policy AP-540F 5

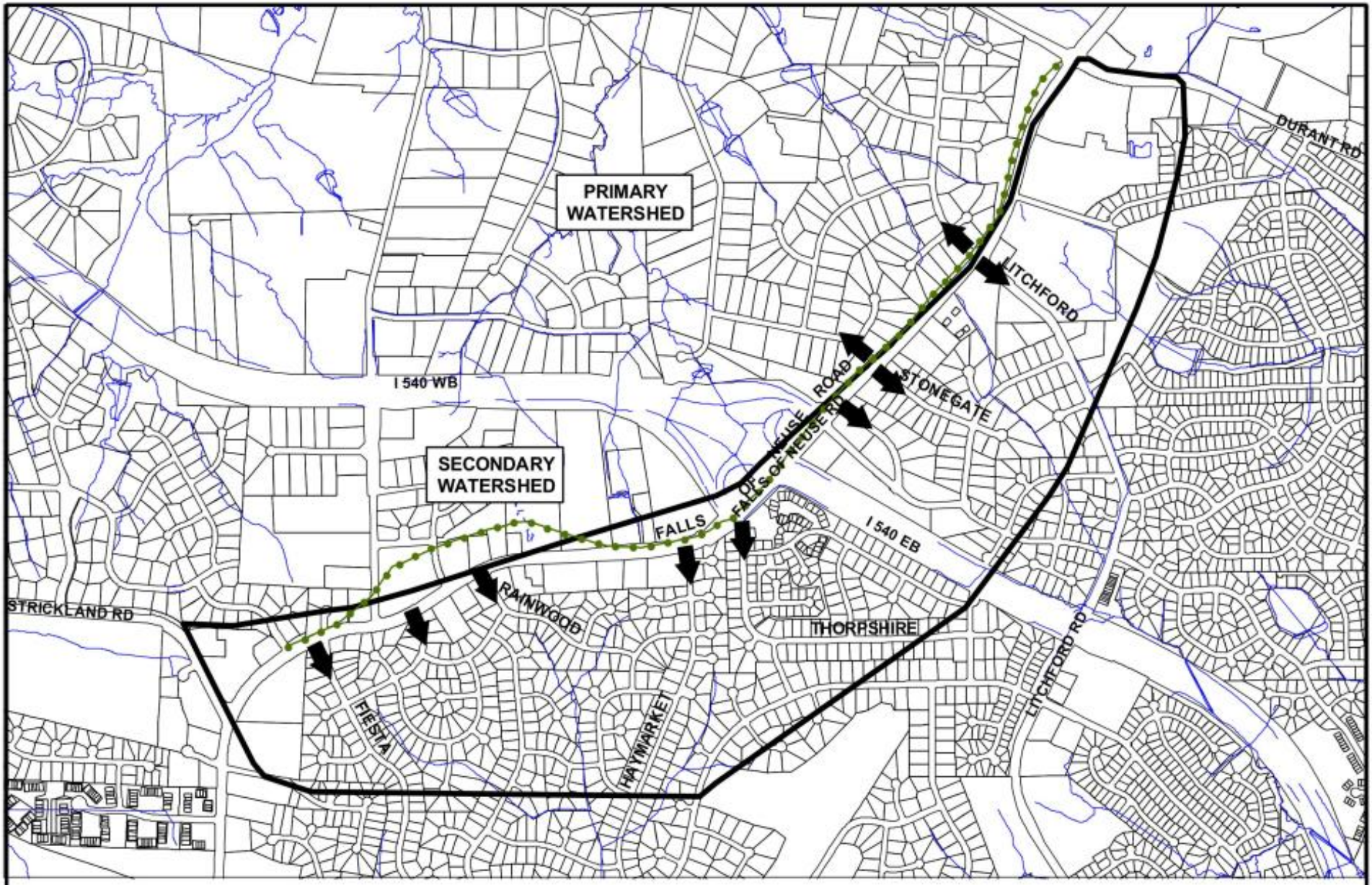
Falls of Neuse Road Access

Adequate access should be provided to Falls of Neuse Road without causing undue congestion or placing excessive traffic or parking loads on adjacent local residential streets.

Policy AP-540F 6

Falls of Neuse Access Spacing

Direct access points onto Falls of Neuse Road should be no closer than 400 feet apart except where existing topographic conditions require an exception to the 400 feet rule. Cross access and shared parking should be used whenever possible.



MAP AP-540F1

I-540/Falls of Neuse Plan

RIDGELINE

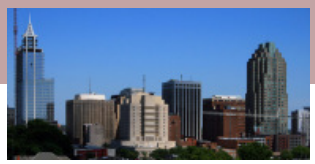
NEIGHBORHOOD ENTRY

I-540/FALLS OF NEUSE BOUNDARY

HYDROLOGY

Feet
0 375 750 1,500

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 13: King Charles

The King Charles Neighborhood Plan area is located just east of downtown Raleigh and is generally bounded by Raleigh Boulevard, Poole Road, Peartree Lane, and Crabtree Boulevard. The plan derives its name from King Charles Road, which runs the entire length of the plan area. The plan area is approximately 890 acres and is divided into three sections: south, central, and north.

The King Charles Plan area is composed of many varied neighborhoods with respect to age, size, and neighborhood characteristics. These neighborhoods began developing in the 1940s with the Longview Gardens, Longview Park, and Windsor Park neighborhoods. The Longview communities are legacies of Clarence Poe, editor and publisher of *The Progressive Farmer* magazine and the founder of *Southern Living* magazine. "Long View" as a name in Raleigh dates back to the early 1920s when Mr. Poe began assembling land for his home and farm along New Bern Avenue. After World War II, the family's 800-acre farm was developed into a residential development called Longview (Long View Center, 2001).

Today the upkeep and maintenance of properties in the plan area is generally good; however, deterioration is a growing neighborhood concern with an increase in absentee property ownership. While commercial developments are not included in the plan boundary, these areas affect the neighborhoods of King Charles. Longview Shopping Center on New Bern Avenue and the Lockwood Shopping Center on Glascock Road are adjacent to the plan boundary. The intent of this plan is to provide a vision for future growth, preserve the unique character of the neighborhoods, protect and enhance property values through stabilization of neighborhood assets, and increase the sense of community among residents.

Policy AP-KC 1

Neighborhood Character

Protect the residential integrity and historic character of the neighborhood.

Policy AP-KC 2

Appearance

Improve the appearance of neighborhood streets and entry ways.

Action AP-KC 1

King Charles Rezoning

Rezone the properties in the central and north sections from R-10 to Special R-6 to make the zoning more compatible with actual development.

Action AP-KC 2

Longview Gardens Preservation

Explore National Register Historic District designation for the Longview Gardens neighborhood.

Action AP-KC 3

King Charles Park Revitalization

Revitalize existing parks in the King Charles area, especially the greenway and the traffic circle on Culpepper Drive.

Action AP-KC 4

Raleigh Boulevard-New Bern Streetscape Improvements

Improve aesthetics through streetscape improvements and landscape plans for Raleigh Boulevard and New Bern Avenue.

Action AP-KC 5

New Bern Corridor Plan

Begin corridor planning process for New Bern Avenue from downtown to the I-440 Beltline.

Action AP-KC 6

King Charles Traffic Circle

Improve King Charles traffic circle through landscaping.

Action AP-KC 7

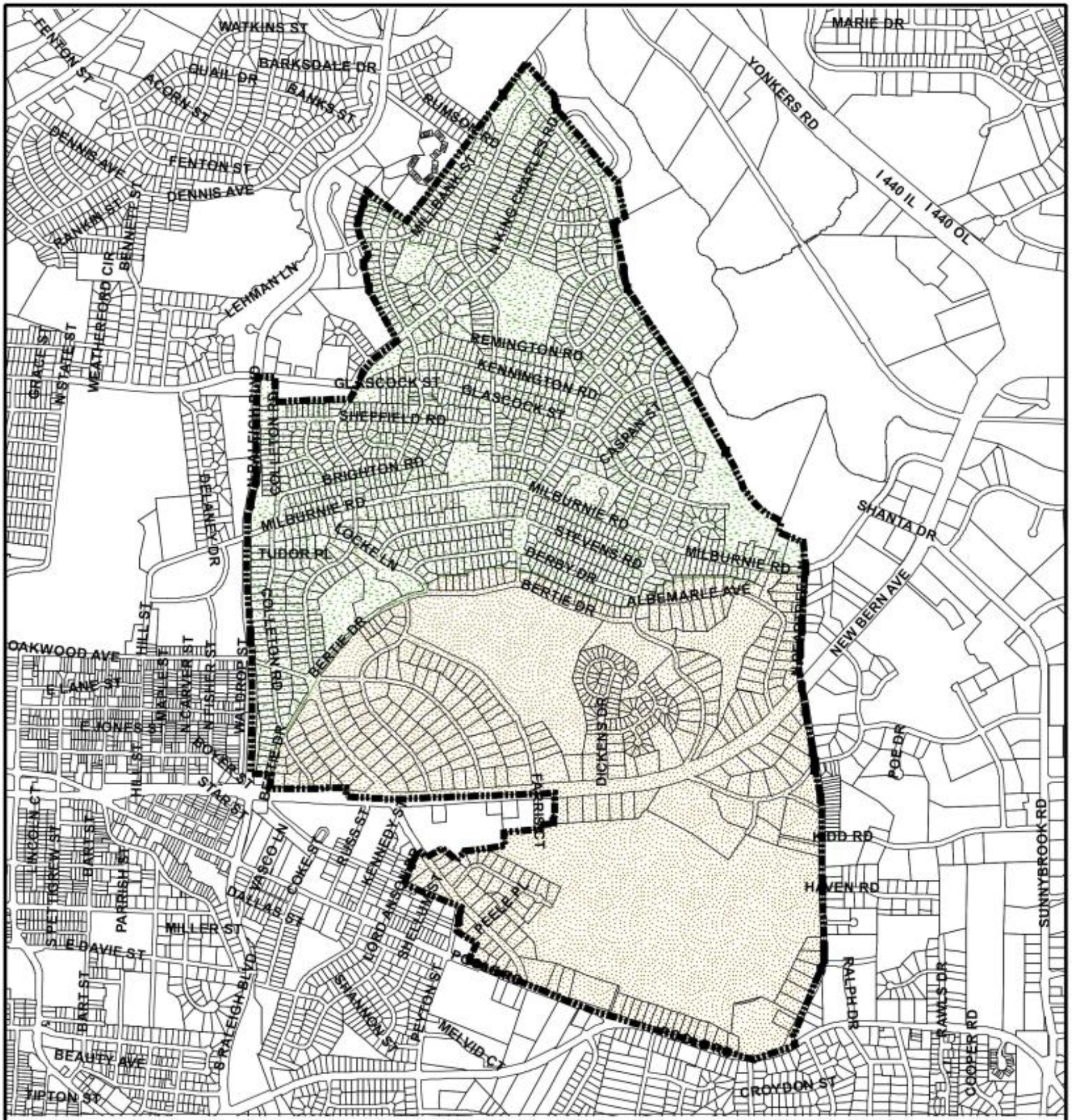
New Bern Bus Stop Improvements

Enhance appearance of bus stops on New Bern Avenue by adding shelters, benches, and trash receptacles.

Action AP-KC 8

King Charles Zoning Map Amendment

Undertake an Official Zoning Map Amendment to apply the King Charles North/Central Neighborhood Conservation Overlay District (NCOD) by July 1, 2012 before the Built Environmental Characteristics and Regulations in the Zoning Code sunset.



MAP AP-KC1

King Charles Plan

Plan Boundary

North Central Section Parcels for Rezoning

South Section Parcels for Rezoning

Feet
0 500 1,000 2,000

Map created 10/7/2009 by the City of Raleigh
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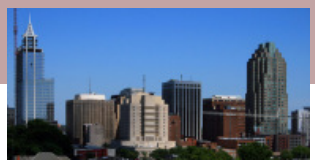


Area Plan 14: Mission Valley

At present, Mission Valley is a University-based service area consisting of retail and businesses mainly in the area of the Western Boulevard and Avent Ferry Road intersection, businesses such as WRAL that have been in the area for many years, ancillary University and other institutional uses, residential enclaves, and University-related residential development.

This plan was prepared in anticipation of development intensifying in the area and the possibility of increased transit service in the area.

Policy AP-MV 1

Mission Valley Targeted Growth

Specific locations within the study area should evolve into a denser mix of uses (see map).

Policy AP-MV 2

Mission Valley Student Housing

Student housing is encouraged in the area, with the exception of the eastern end of the Catholic Diocese property adjacent to Pullen Park Terrace.

Policy AP-MV 3

Avent Ferry-Centennial Streetscapes

Avent Ferry Road and Centennial Parkway should evolve into more urban streetscapes.

Policy AP-MV 4

Western Boulevard Design

Western Boulevard should retain its landscaped "boulevard" character, without a proliferation of curb cuts.

Policy AP-MV 5

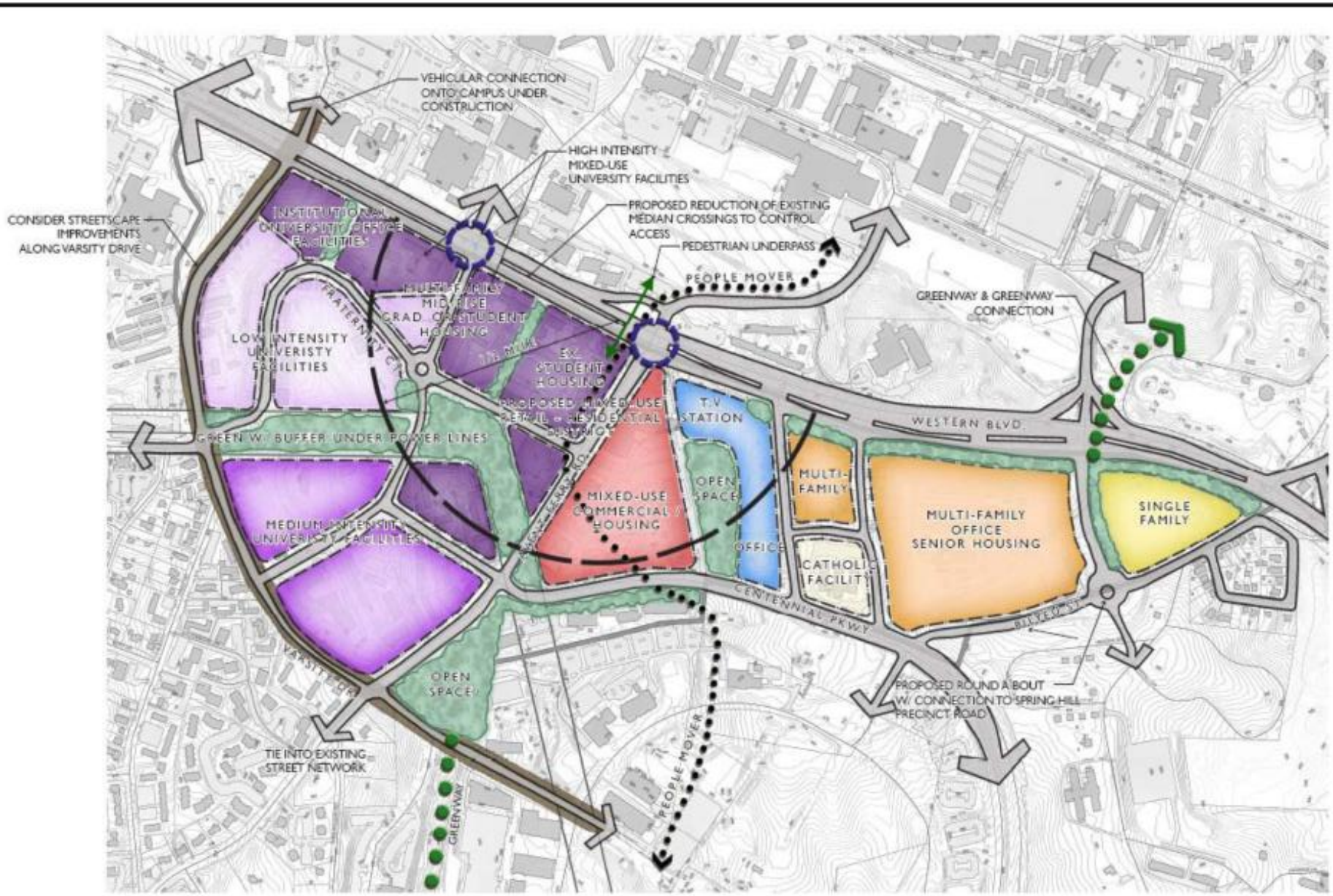
Roman Catholic Diocese Property

The Catholic Diocese property should develop as primarily residential, beginning with lower density single-family residential as an extension of the Pullen Park Terrace neighborhood, and increasing in density in the direction of Avent Ferry Road. A mix of attached and detached residential should be supported in this area, linking the Pullen Park Terrace neighborhood, Pullen Park, and the Dorothea Dix campus.

Action AP-MV 1

Centennial to North Campus Connectivity

The greenway system should connect to the University's open space network to help facilitate pedestrian and bicycle traffic between the North Campus and Centennial Campus. A pedestrian underpass could be built to enable pedestrians to cross Western Boulevard. In addition, the University's concept for a "people-mover" (automated rail) would also facilitate movement of students and faculty between the two campuses.



MAP AP-MV1

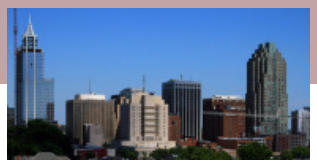
Mission Valley Plan

- MIXED USE COMMERCIAL & HOUSING
- MULTIFAMILY; OFFICE
- SINGLE FAMILY
- INSTITUTIONAL
- LOW INTENSITY UNIVERSITY FACILITIES
- MEDIUM INTENSITY UNIVERSITY FACILITIES
- OFFICE
- OPEN SPACE
- PEOPLE MOVER

N

0 3,000 6,000 12,000 Feet

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 15: Olde East Raleigh

The Plan area is bounded by New Bern Avenue to the north, Tarboro Street and Rock Quarry Road to the east, Martin Luther King Jr. Boulevard to the south, and East Street to the west.

Raleigh's East Gateway neighborhood has long been a destination for the city's African American population. Settled more than 100 years ago, the neighborhood introduced rural African Americans to Southern city life. Anchored by Shaw University and St. Augustine's College, East Raleigh and nearby South Park emerged as a hub of African American business, cultural, educational, and recreational activity. The concentration of young professionals who settled in East Raleigh in the early twentieth century had an enormous influence on Raleigh's black culture. Chavis Park was the center of cultural, recreational, and social life. Limited stores and services in the community were remedied by easy access to downtown by way of streetcars. Adjacent to downtown Raleigh, the East Raleigh residents were able to live a comfortable life during a challenging period in American history. In recent years, as segregation faded, some African Americans left the neighborhood for more prosperous parts of the region.

Today, downtown Raleigh is experiencing rapid growth, and East Raleigh is experiencing intense development pressure for the first time in decades. Years of community development fueled by private revitalization and growth pressures from downtown heightened residents' uncertainty about the future of East Raleigh. The neighborhood now faces the dual challenge of retaining the character and culture of community, while accommodating the growth, change, and lifestyles of new residents. This dynamic is at the core of the renaissance underway in East Raleigh.

Policy AP-OER 1

Olde East Raleigh Rehabilitation Priority

Encourage rehabilitation rather than demolition of housing stock in the Olde East Raleigh study area whenever possible.

Policy AP-OER 2

Olde East Raleigh Infill

Infill residential development in Olde East Raleigh should reflect the existing historic building types in the study area.

Policy AP-OER 3

Olde East Raleigh Lot Mergers

Smaller lots in Olde East Raleigh are encouraged to be combined rather than redeveloped, to accommodate larger homes, whenever possible.

Downtown Transitional Zone

Policy AP-OER 4

Olde East Raleigh Western Edge

Encourage Moderate-Density Residential (townhouse and low-rise multi-family) on Olde East Raleigh's western edge, north of Cabarrus Street.

Policy AP-OER 5

Olde East Raleigh at East and Davie Streets

Encourage two to three story mixed-use development (small-scale Office, Retail, and/or Moderate-Density Residential) at the corner of East Street and Davie Street (known as the Stone Warehouse Site).

Olde East Raleigh "Front Door"

Policy AP-OER 6

Olde East Raleigh Front Door

Encourage mixed-use development (small-scale Office, Retail, and/or Moderate-Density Residential) on the south side of New Bern Avenue from the eastern edge of City Cemetery to State Street.

Historic Core

Policy AP-OER 7

Olde East Raleigh Infill Character

New single-family residential infill development in Olde East Raleigh should reflect the existing National Register of Historic Places historic building types in the study area.

Policy AP-OER 8

Olde East Raleigh Design Guidelines

Maintain the historic character of the Olde East Raleigh area using design guidelines.

Mixed-Income Zone

Policy AP-OER 9

Mixed-Income Zone

Encourage moderate-density residential infill development in the Olde East Raleigh Mixed-Income Zone.

Single-Family Zone

Policy AP-OER 10

Hunter-Ligon Area

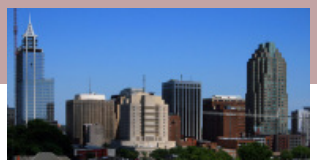
Property south of Hunter Elementary School and east of Ligon Middle School should develop with increased lot sizes and home sizes whenever possible.

Regional Oriented Shopping Center, Mixed-Use

Policy AP-OER 11

MLK Boulevard at Rock Quarry Road

Two- to three-story mixed use development (small scale Office, Retail, and/or Moderate-Density Residential) should be encouraged for properties at the northwest corner of Martin Luther King, Jr. Boulevard and Rock Quarry Road.



All Areas

Action AP-OER 1

Olde East Raleigh NCOD

Consider a Neighborhood Conservation Overlay District to encourage infill residential development in the central sections of East Raleigh that would retain the historic architectural character of the neighborhood.

Action AP-OER 2

Olde East Raleigh Capital Improvements

As Capital Improvement Program (CIP) dollars become available residents of Olde East Raleigh should work with the city to coordinate streetscape and other improvements to create a quality neighborhood image, and to develop and place decorative signage as neighborhood identifiers to celebrate the history and culture of the community.

Action AP-OER 3

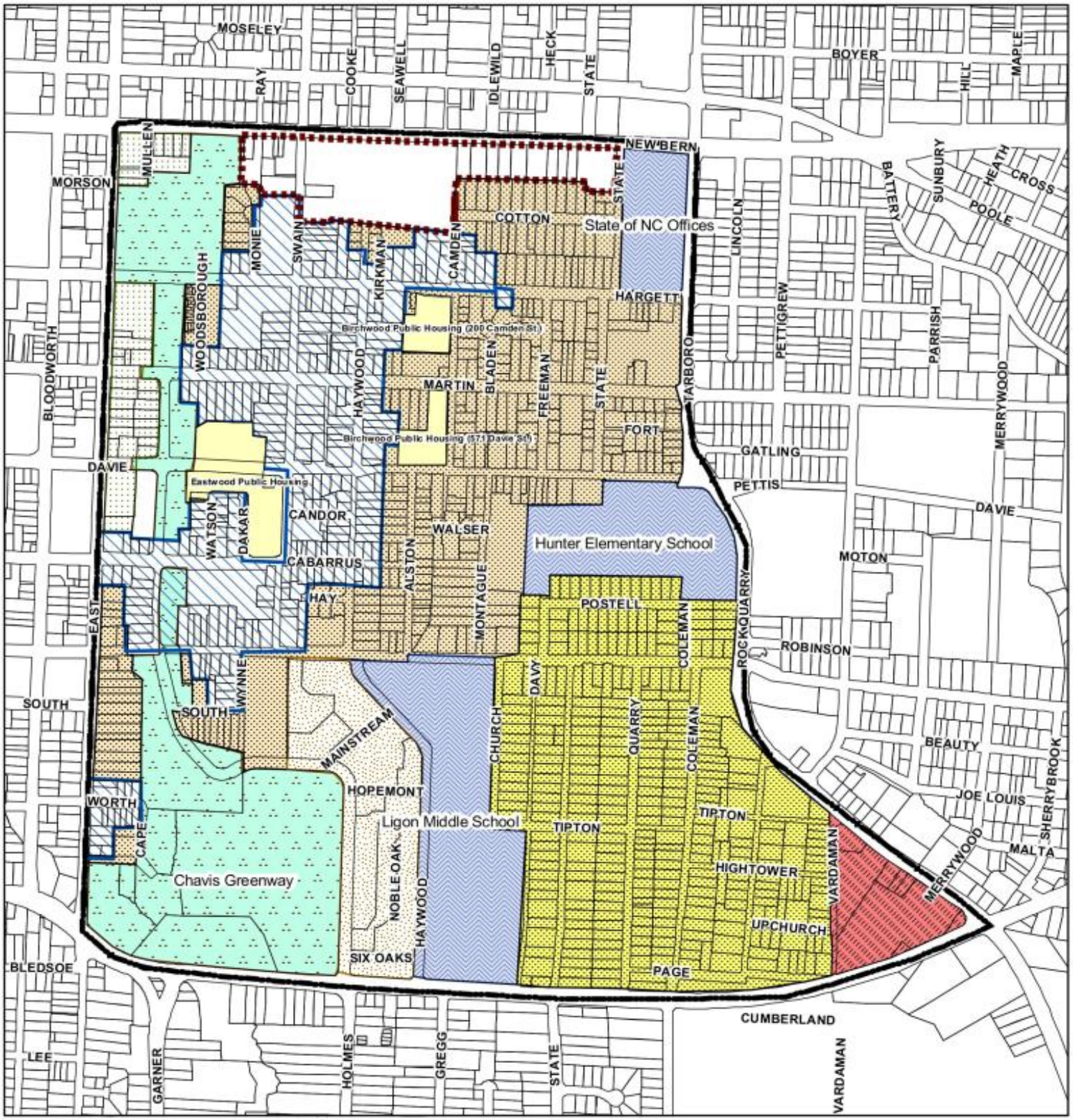
Olde East Raleigh Redevelopment Plan Amendments

Amend existing redevelopment plans and redevelopment strategies for Olde East Raleigh to reflect the land use recommendations in this plan.

Action AP-OER 4

Olde East Raleigh Rezoning

Rezone property in Olde East Raleigh to achieve the land uses as outlined in this Plan. Until such time as the property is rezoned to the recommended land use, the existing zoning shall prevail.



MAP AP-OER1

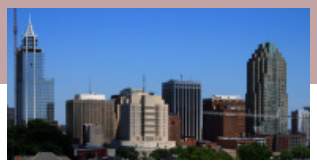
Olde East Raleigh Plan

- Plan Boundary
- Olde East Raleigh "Front Door"
- Regional Oriented Shopping Center; Mixed Use
- Public Housing
- National Register of Historic Places
- Public Facilites
- Single Family Zone
- Mixed Income Zone
- Downtown Transition Zone
- Chavis Greenway
- Chavis Heights

N

Feet
0 250 500 1,000

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Area Plan 16: Rock Quarry-Battle Bridge

The Rock Quarry-Battle Bridge Neighborhood Center is located on the quadrant of land south and east of the intersection of Battle Bridge Road and Rock Quarry Road.

The Neighborhood Center Plan provides urban design policies (adopted as zoning conditions in cases Z-14-04 and Z-44-04) to establish a pedestrian oriented street system that interconnects with surrounding existing and future residential neighborhoods. The intent of the plan is to guide development patterns in order to create a walkable streetscape with buildings and their principal entry fronting a public sidewalk along a street. A primary street system within the Neighborhood Center is shown on the attached map with street extensions north and east to adjacent residential areas.

Policy AP-RQB 1

Rock Quarry-Battle Bridge Design Guidelines

The site, street, and building design recommendations of the Urban Design Guidelines (see Table UD-1 in the Urban Design Element) should apply to an extension of Pearl Road east of Rock Quarry Road as well as to Streets A, B, and C that extend from Battle Bridge Road and intersect on the tract interior to establish the focus of the Core Area. Within the focus of the Core Area, the streets illustrated with a bold dotted-line on the attached map shall be designed as Secondary Pedestrian Ways as detailed in Figure 14b. of the Guidelines for Mixed-use Centers in the Streets, Sidewalks, and Driveway Access Handbook and should include on-street parking where not in conflict with transportation objectives.

Policy AP-RQB 2

Rock Quarry-Battle Bridge Non-Core Area Guidelines

Beyond the focus of the Core Area, Streets A, B, C, and Pearl Road extension as well as a street extension north off Street A into the Z-44-04 site should be designed according to Figure 14a. in the Streets, Sidewalks, and Driveway Access Handbook with on-street parking where appropriate.

Policy AP-RQB 3

Rock Quarry-Battle Bridge Transition Area

The Transition Area begins south of Pearl Road extension and Street C as shown on the attached map. Street B extends south from the traffic circle as a transitional street to the proposed residential area. A development transition using architectural design to reduce height and massing of buildings should be incorporated as proximity to a single-family neighborhood approaches.

Policy AP-RQB 4

Rock Quarry-Battle Bridge Transition Land Uses

Appropriate commercial uses in the Transition are office and retail sales-personal services. A transition in housing density should also be provided with the highest densities occurring in the Core.

Policy AP-RQB 5

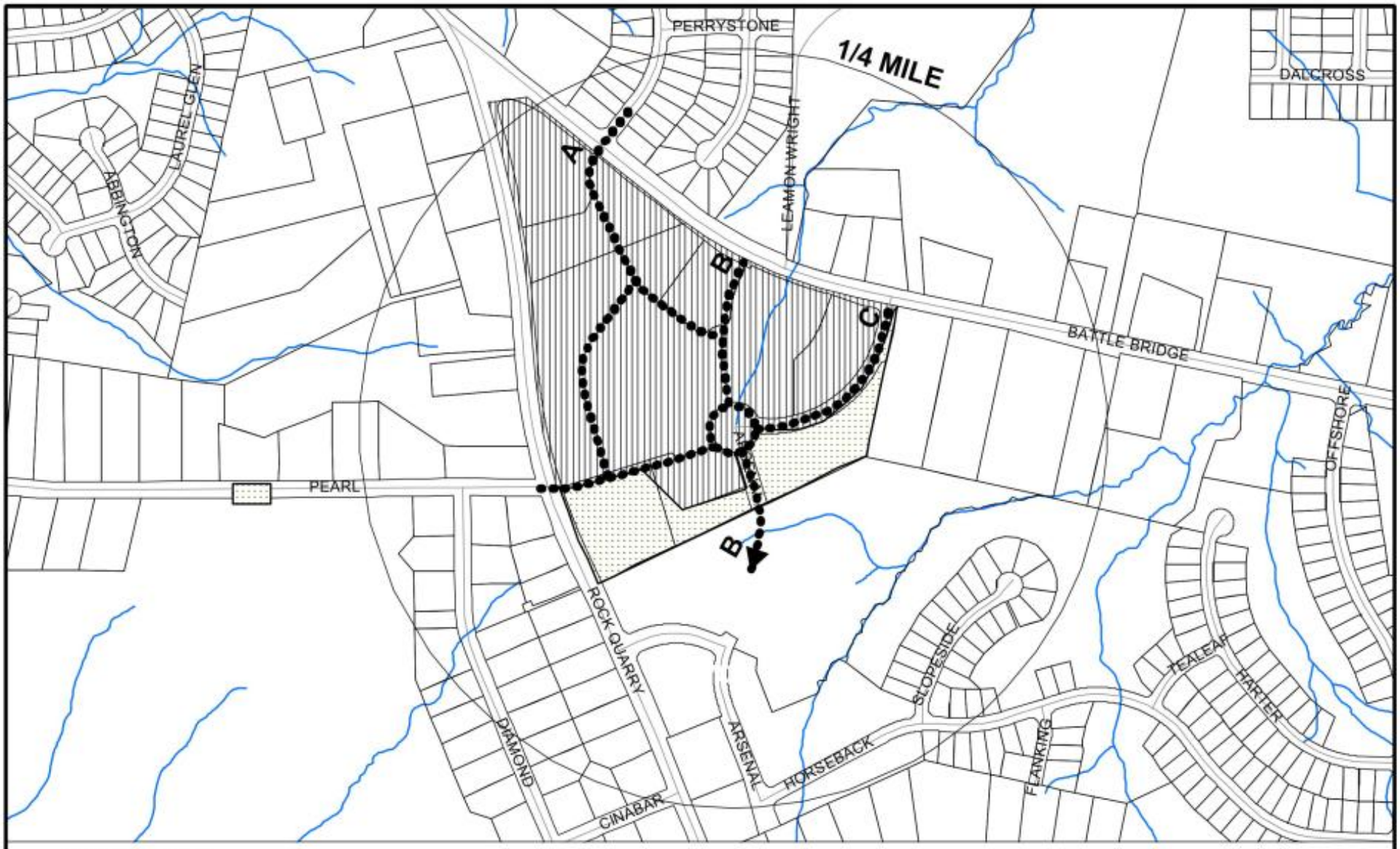
Frontage on Rock Quarry & Battle Bridge Roads

The Urban Design Guidelines do not apply to the frontage of the Neighborhood Center on Rock Quarry Road and Battle Bridge Road since the pedestrian orientation is to an internal street system. This area should include landscape buffers adjacent to parking lots.

Policy AP-RQB 6

Rock Quarry-Battle Bridge Building Orientation

Buildings should frame the intersection of Pearl Road extension as well as Streets A, B, and C with the adjacent thoroughfares.



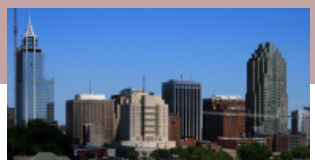
MAP AP-RQBB1

Rock Quarry - Battle Bridge Plan

CORE AREA
TRANSITION AREA
STREETGRID
PARCELS
HYDROLOGY
STREETS

Feet
0 150 300 600

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Area Plan 17: South Park

The intent of this plan is to provide guidance for future zoning and development and to preserve the character of the neighborhood by guiding change as rezoning petitions, infill, and new development occur. South Park is a part of a much larger predominantly African American residential area that includes the southeast quadrant of the original city limits. Rich in local African American history, a number of historic buildings and homes in the South Park neighborhood still stand and are recognized as part of the East Raleigh-South Park National Register Historic District. Character is added to the neighborhood through the homes of notable residents and community leaders.

The approximately 263-acre plan area is east of downtown. The South Park plan boundary noted on the attached map includes Shaw University, the John P. "Top" Greene Community Center, and a portion of Chavis Park. The plan area is bounded by Cabarrus Street to the north; Little Rock Creek, Chavis Park, Holmes Street, and Carnage Drive to the east; Peterson Street and Hoke Street to the south; and Garner Road and Wilmington Street to the west.

The 2007 Neighborhood Plan boundary was expanded northward in this plan to include an area bounded by Wilmington Street, Cabarrus Street, East Street, and Lenoir Street. It was also expanded eastward to include portions of Chavis Park, property bounded by Martin Luther King, Jr. Boulevard, Holmes Street, Bragg Street and Little Rock Creek, and property bounded by Martin Luther King, Jr., Boulevard, Blount Street, Bledsoe Avenue, and Wilmington Street. (See Map AP-SP-1).

Policy AP-SP 1

South Park Downtown Transition

Encourage mixed-use development (small-scale Office, Retail, and/or Residential uses) in the area bounded by Cabarrus, East, Lenoir, and Wilmington streets.

Policy AP-SP 2

South Park Focal Point

Encourage commercial, office, and residential uses in the area defined by Person Street, Bragg Street, Hammond Road, and Hoke Street in order to create a neighborhood focal point and economic development opportunity for the South Park area.

Policy AP-SP 3

South Park Owner Occupancy

Encourage increased owner-occupied housing in South Park by encouraging housing that accommodates a mixture of income levels through public and private housing programs.

Policy AP-SP 4

Character of South Park Infill

Infill residential development should reflect the existing historic building types in the South Park study area.

Policy AP-SP 5

South Park Historic Preservation

Emphasize the historic significance of the South Park neighborhood through the promotion and protection of contributing historic elements.

Policy AP-SP 6

South Park/Downtown Overlay Overlap

Where the South Park plan overlaps the Downtown Overlay District, the intent of the Downtown Overlay District shall prevail.

Action AP-SP 1

South Park Pedestrian Improvements

Allocate Capital Improvement Program (CIP) dollars for pedestrian crossing improvements at the intersection Martin Luther King, Jr. Boulevard and Wilmington/Salisbury streets, and for sidewalks along Bloodworth Street (between Worth Street and Martin Luther King Jr., Boulevard), Blount Street (between Bragg and Hoke streets), Person Street (between Lenoir and Martin Luther King, Jr. Boulevard), Hoke Street, and South Street (between Blount and Person streets).

Action AP-SP 2

Garner Road Pedestrian Improvements

Improve pedestrian safety crossings along Garner Road at McMakin Street and Hoke Street by installing sidewalks and clearly marking crosswalks (CIP implementation item).

Action AP-SP 3

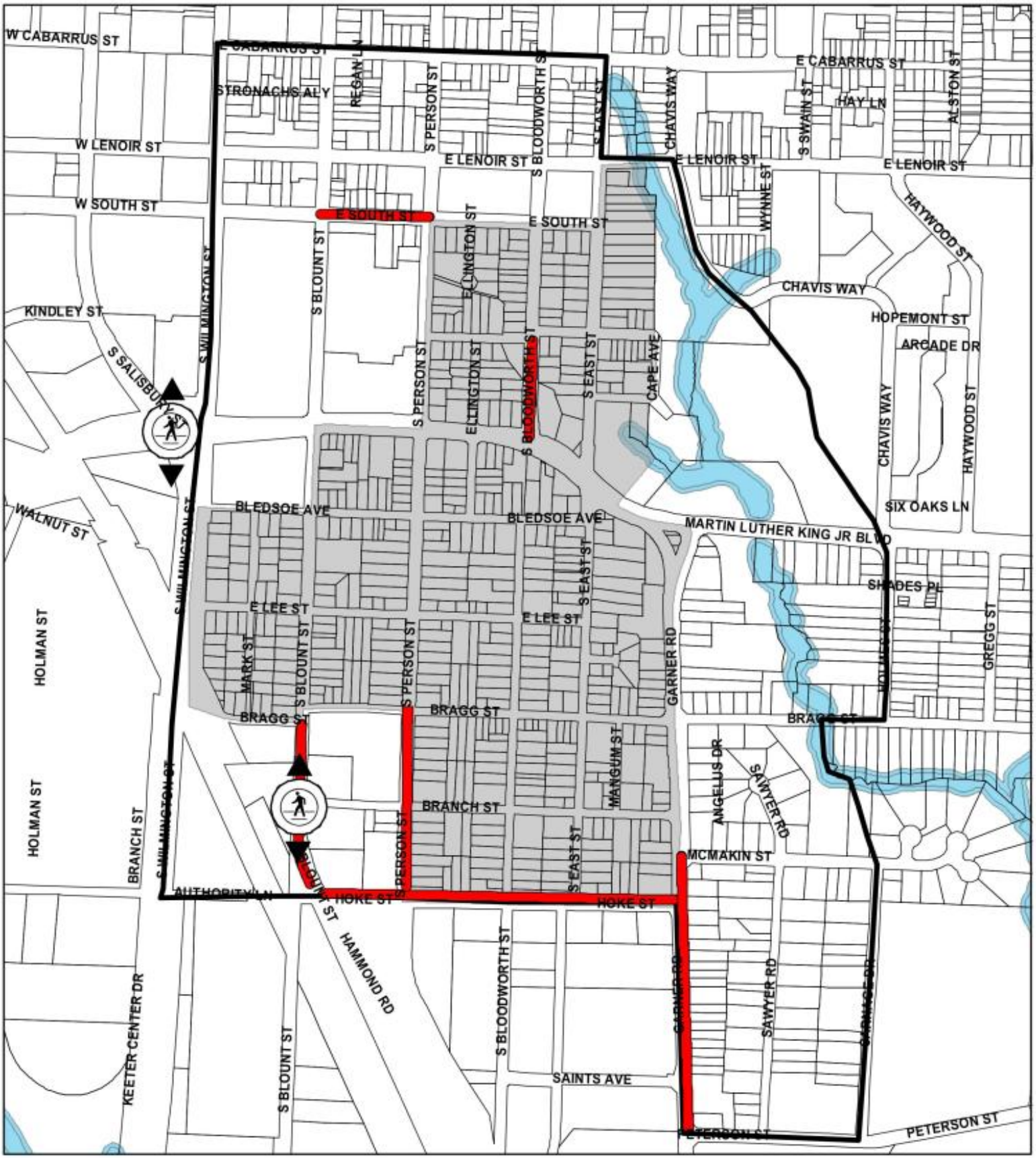
South Park Redevelopment Plan Amendment

Amend the South Park Redevelopment Plan to reflect the lot size and setback requirements of the NCOD, and to include the Residential Rehabilitation Design Guidelines.

Action AP-SP 4

South Park Zoning Amendment

Amend the zoning map to reflect the land use recommendations and policies of the South Park Area Plan.



MAP AP-SP1

South Park Plan

Pedestrian Crossing Improvement

Sidewalk Pedestrian Improvements

South Park Boundary

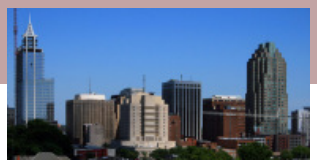
NCOD

Little Rock Creek

Feet

0 250 500 1,000

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 18: Stanhope Village

The plan area lies on the south side of Hillsborough Street between Dan Allen Drive on the east, the Progress Energy facility to the west, and the railroad corridor on the south. The area has significant redevelopment potential and the main goal of the plan is to provide a consensus framework for a compact, diverse, and pedestrian-oriented urban redevelopment – meeting the needs of the adjacent stakeholders, strengthening the surrounding communities, and addressing municipal goals for more sustainable patterns of growth.

Urban Design

Policy AP-SV 1

Hillsborough Street Building Frontages

Hillsborough Street should have an identifiable and relatively continuous building frontage, punctuated by focal point buildings and accessory plazas notched in at mid-block with pedestrian passageways to parking behind.

Policy AP-SV 2

Concord Street as a Public Space

Concord Street should serve as the primary public space and entry feature for the area. This street should include on-street parking and areas for public seating and temporary events, such as markets or festivals.

Policy AP-SV 3

Concord Street Land Uses

Concord Street should be an active pedestrian-oriented street with diverse retail, restaurant, and entertainment uses on the ground floor and with mostly residential and some office uses above.

Policy AP-SV 4

Residential Uses

Residential uses should be predominant, particularly for the upper floors of mixed-use buildings and within the interior of the plan area.

Policy AP-SV 5

Entry Stoops for Stanhope Village Housing

Ground level residential uses in Stanhope Village should provide entry stoops and landscaped stoop yards fronting the street.

Policy AP-SV 6

Stanhope Village Balconies

Upper floor residential units should have balconies.

Policy AP-SV 7

Concord Street Flexible Shoulder Zone

A multi-use zone should be provided on Concord Street between the travel lanes and the sidewalk. This land should serve as convenience diagonal parking that can be incrementally converted into outdoor seating and dining or other periodic uses such as a street fair or a Saturday morning market.

Policy AP-SV 8

Stanhope Village Scale Transitions

A transition in scale should be provided for any redevelopment adjacent to existing single-family neighborhoods along Stanhope Avenue and Rosemary Street. Any parking structure in proximity to the existing neighborhood should be either wrapped by active uses or screened. Parking deck openings visible from nearby occupied structures should contain elements such as louvers to block deck light and noise sources. Exterior lighting fixtures should be shielded so that direct illumination is contained on-site. Vehicular access to structured parking from Stanhope and Rosemary streets should be minimized.

Pedestrian and Bike Access

Policy AP-SV 9

Stanhope Village Commons

An open, pedestrian-oriented commons should be provided within the southeast portion of the Stanhope Village Plan area. This space should create a pedestrian link to NC State and the proposed Reynolds Coliseum rail transit station.

Policy AP-SV 10

Pedestrian Access Within Stanhope Village

Pedestrian and bicycle access to and within Stanhope Village is crucial and should be a central focus of the circulation system. New and existing streets should have narrow travel lanes, very low vehicular speeds, and clear preference given to pedestrians at pedestrian/auto crossings.

Policy AP-SV 11

Stanhope Village Connectivity

A strong connection should be made from Stanhope Village eastward, to NC State's employment and educational centers and the rail transit station to be located near Reynolds Coliseum. An eventual connection to the south, across the railroad corridor, is desirable and should be provided if practical. Pedestrian connections to the Stanhope neighborhood and along Hillsborough Street are very important.

Roadways and Parking

Policy AP-SV 12

Stanhope Village On-Street Parking

Maximize the utilization of curb space for on-street parking in the Stanhope Village area.

Policy AP-SV 13

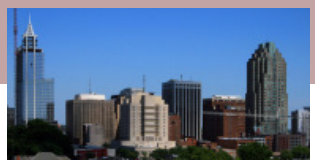
Stanhope Village Parking Design

Structured parking should accommodate most parking demand in the Stanhope Village area. Wherever possible, structured parking should be wrapped with active uses, especially at the street level. Surface parking should be restricted to small lots with minimum street frontage and screened from pedestrian view.

Policy AP-SV 14

Stanhope Village Service Road

A service road should be located behind the buildings facing Hillsborough Street, with the existing McKnight Street right of way to be abandoned.



Policy AP-SV 15

Concord Roundabout Service Road

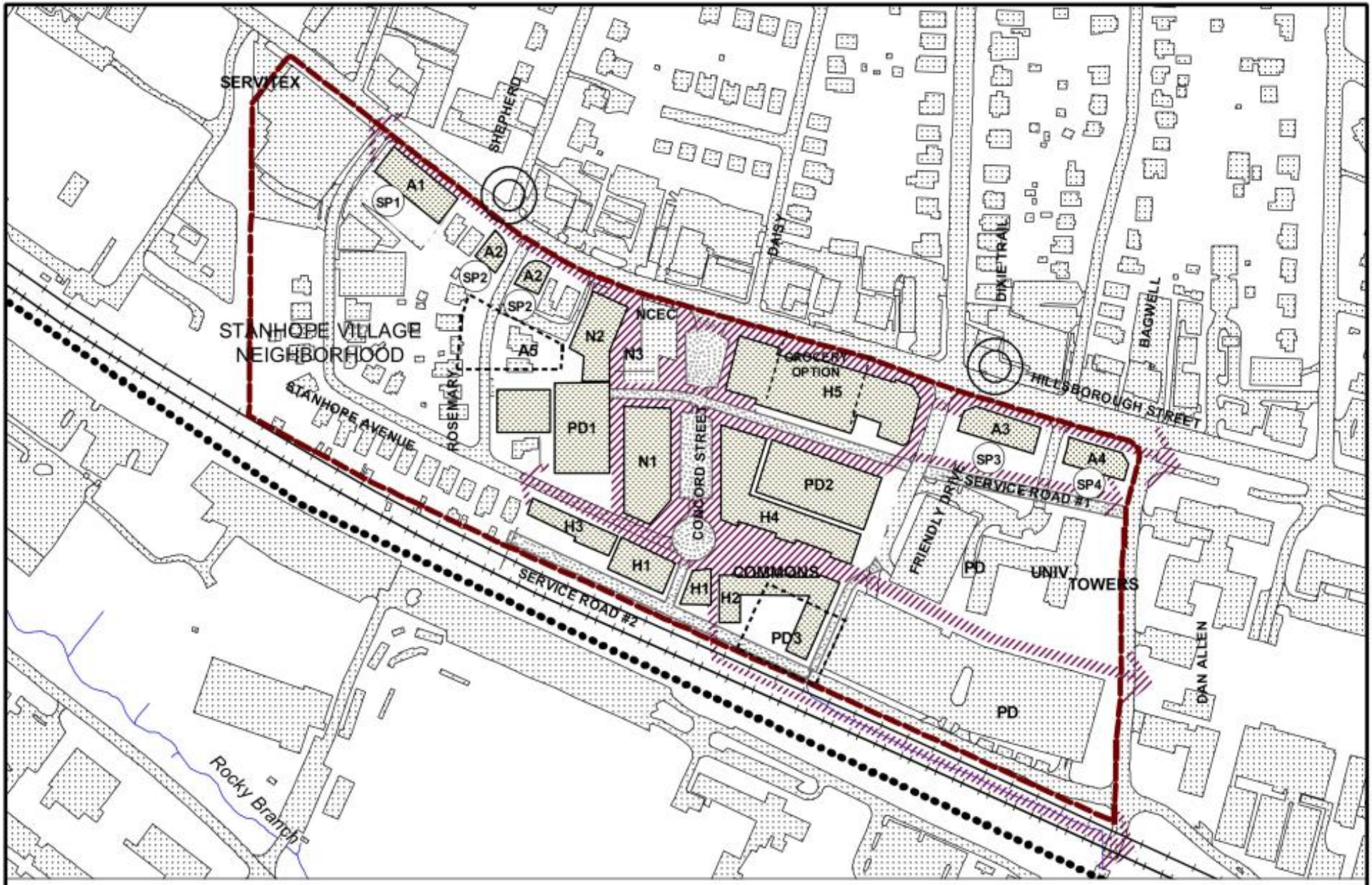
A second service road should be extended east from the Concord roundabout along the rail right-of-way to connect with the Dan Allen parking deck access road.

Construction of Infrastructure

Policy AP-SV 16

Stanhope Village Infrastructure Improvements

In order to encourage completion of phased projects, project infrastructure improvements in Stanhope Village including roads, streetscapes, and other pedestrian and landscape elements should be constructed in the initial project phase.



MAP AP-SV1

Stanhope Village Plan - Pedestrian Circulation

TRAFFIC CIRCLES

SP SURFACE PARKING

PD PARKING DECK

PROPOSED BUILDINGS

PROPOSED STREETS

EXISTING BUILDINGS

PROJECT BOUNDARY

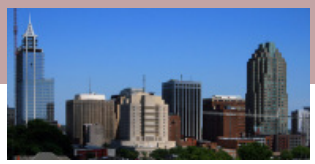
PEDESTRIAN CIRCULATION

TRANSIT CORRIDOR

N

0 100 200 400 Feet

Map created 10/7/2009 by the City of Raleigh
Department of City Planning & GIS Division



Area Plan 19: Swift Creek

Raleigh, Cary, Garner, Apex, Wake County, and the State Division of Water Quality will jointly maintain water quality in the Swift Creek basin in their respective jurisdictions. The Swift Creek Land Management Plan is the jointly-adopted plan that has been accepted by the State Division of Water Quality that identifies how each government proposes to develop its jurisdiction, while maintaining the quality of water in the basin. The Swift Creek Watershed Plan is the City of Raleigh's policy response to the Swift Creek Land Management Plan for that portion of the watershed that lies in Raleigh's jurisdiction.

The City of Raleigh and Wake County continue to impose development controls for the middle portion of the basin. The area is primarily planned for rural residential uses, with the exception of those areas designated for "new urban" uses. The City does not propose to expand its jurisdiction farther into the Swift Creek basin unless emergency utility extensions require annexations of affected properties or developments. However, Raleigh has many interests in this area, including two lakes, a major park, and a new water treatment plant, which reinforce its watershed protection objectives. Lake Wheeler and Lake Benson are impoundments upstream of a new water treatment facility that will distribute water to both Garner and Raleigh.

The 3,465 acres of the Swift Creek basin that lie within Raleigh's jurisdiction are in the upper portions of the watershed, where the secondary watershed protection policies are necessary. This area has a variety of existing land uses including rural and low-density residential, large farms, and industrial uses along U.S. 401 that have been allowed to remain. With these varying conditions in mind, the following policies are provided to guide growth in the watershed.

Policy AP-SC 1

Swift Creek Watershed Land Use

Only residential uses will be permitted in the Swift Creek watershed unless otherwise approved by City Council and specifically indicated in this Plan. No new non-residential zoning or land uses will be allowed in the Swift Creek watershed unless otherwise approved by City Council and specifically indicated in this plan.

Policy AP-SC 2

Swift Creek Watershed Rural Residential Densities

An average density of one dwelling unit per acre should apply to areas designated Rural Residential (see attached map) in the Swift Creek watershed.

Policy AP-SC 3

Swift Creek New Urban Densities

For those portions of the Swift Creek Watershed Plan designated as New Urban Residential on the attached map, up to six dwelling-units per acre should be allowed.

Policy AP-SC 4

Residential Clustering in Swift Creek

In those rural developments where extensions of public utilities will allow clustering of housing, a density of up to four units per acre should be permitted only where compensating permanent open space is set aside resulting in an overall development average of one unit per acre.

Policy AP-SC 5

Agricultural Conversions in Swift Creek

A substantial portion of the land area in Swift Creek watershed is used for agricultural research farms by NCSU, noted as Special Area on the attached map. Should agricultural uses cease and development occur, plans must be prepared to protect the watershed to the maximum extent feasible. Former agricultural property should be used for low-density residential, appropriate institutional, or open space uses that would not adversely affect water quality.

Policy AP-SC 6

Swift Creek Sensitive Area Thoroughfares

Thoroughfares within the Swift Creek watershed protection area should be designed and classified as Sensitive Area Thoroughfares as shown on Figure 5 of the Streets, Sidewalks, and Driveway Access Handbook.

Policy AP-SC 7

Crossroads Mall Transition Area

The intense commercial and office development at Crossroads Mall within Cary's jurisdiction places similar development pressures on the adjacent area in Raleigh's jurisdiction. Low-intensity office uses and/or medium- to low-density residential uses would provide an appropriate transition between the high-intensity land use patterns in Cary and the low-intensity development in the watershed. Any such development within the watershed would have to incorporate appropriate structural and non-structural watershed protection measures.

Policy AP-SC 8

Swift Creek Impervious Surface Limits

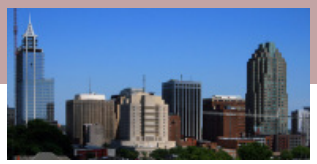
Impervious surfaces in the Swift Creek watershed should be limited to 12 percent unless public utilities are available, in which case a 30 percent maximum may be allowed. The 30 percent maximum may be exceeded up to 70 percent with additional rainfall runoff retainage, in specified areas along U.S. 70/401 at Tryon Road (noted on Map AP-SC-1 as Urban Nonresidential) and the small watershed area on the north side of Tryon Road near Gorman Street. The areas that exceed 30 percent impervious should not exceed 5 percent of the entire Swift Creek watershed within the City's jurisdiction.

Policy AP-SC 9

Swift Creek Watershed Public Utilities

Extensions of public utilities may be allowed in areas designated New Urban Residential as shown on the attached map under the following conditions:

- The capacity of water and sewer facilities is adequate for an extension;
- An extension is deemed appropriate to promote the orderly provision of public services and facilities in the Raleigh area;
- There will be no reduction in water quality or degradation of the watershed as a result of public utility extension or the more intense development that may result;
- It is determined that annexation of a proposed development would be in the best interest of the City of Raleigh.

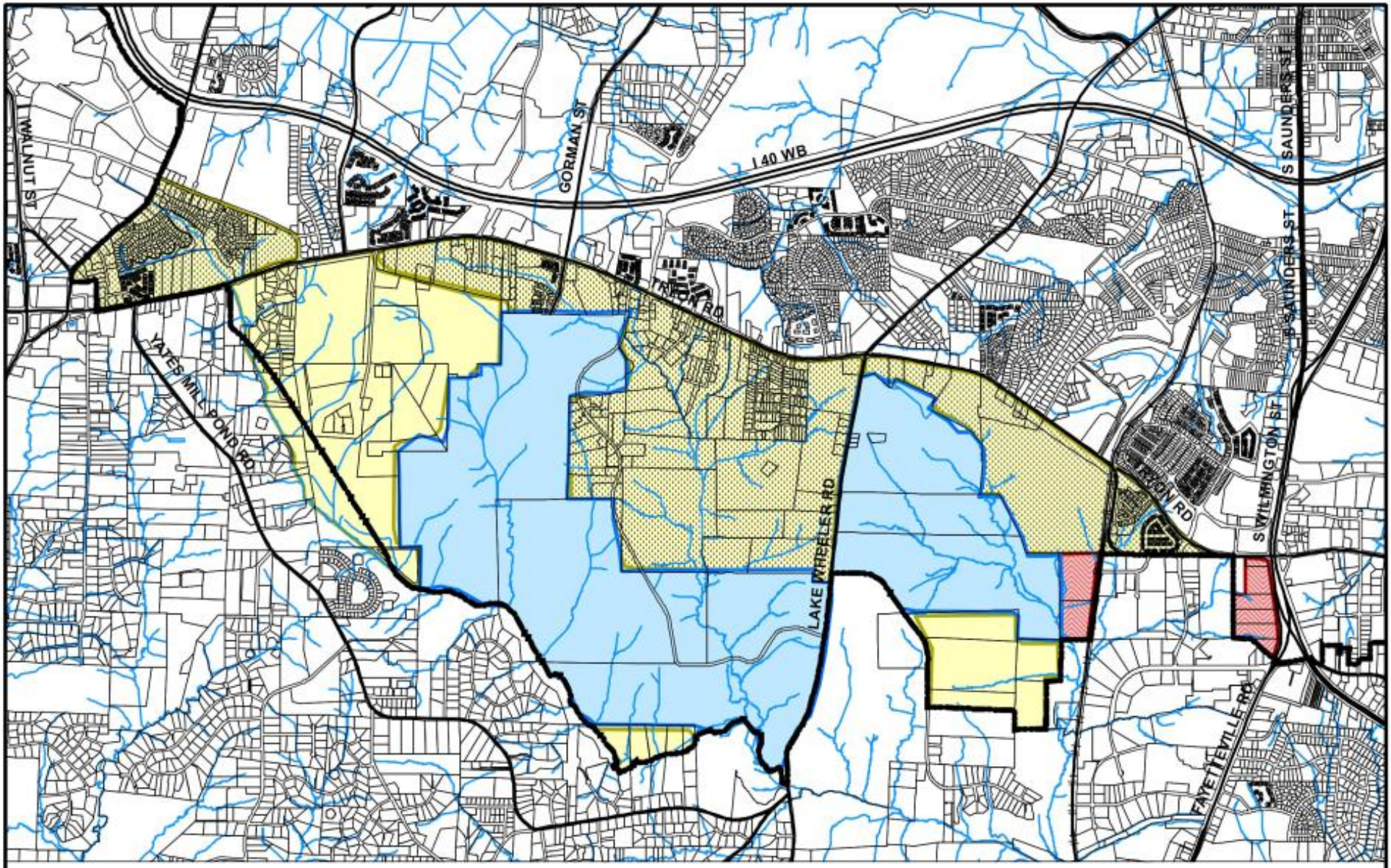


Policy AP-SC 10

Swift Creek Watershed Emergency Utility Extensions

Public utilities may be extended outside Raleigh's jurisdiction and outside the New Urban Residential areas (see Map AP-SC-1) when a finding is made by City Council that there is a threat to public health, safety, and welfare and to Raleigh's drinking water supply. Such extensions would be considered on a case-by-case basis and would require concurrence from the Wake County Commissioners prior to approval when the land is subject to Wake County development regulations. Properties connecting to these facilities would be expected to bear the full cost of any capital facilities needed to provide the utility services and agree to the operating and maintenance fees normally applied to properties outside the City limits. Emergency service to properties would also be subject to the following:

- Only existing development posing a specific threat to the public health, safety, and welfare and to Raleigh's drinking water supply would be allowed to connect to emergency utility extensions;
- Owners of existing development seeking to connect to emergency utility extensions shall file a petition of annexation to be considered by the City Council on a case-by-case basis;
- No increase in the density of development will be allowed beyond that already approved by the governing jurisdiction at the time of the provision of the utility service;
- The development would provide for adequate retention facilities to capture effluent in the event of sewer system failure in addition to any stormwater retention facilities that are necessary to protect the water quality in Swift Creek.



MAP AP-SC1

Swift Creek Plan

URBAN NONRESIDENTIAL

SPECIAL AREA (STATE AGRICULTURE LANDS IN WATERSHED

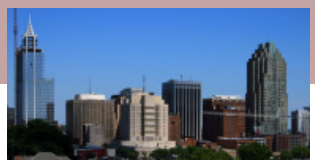
NEW URBAN RESIDENTIAL

RURAL RESIDENTIAL

ETJ

Feet
0 750 1,500 3,000

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 20: Triangle Town Center

The Triangle Town Center plan is bordered by I-540 on the north, Old Wake Forest Road and Fox Road on the east, Oak Forest Road and Spring Forest Road Park on the south, and Capital Boulevard on the west as shown on the attached map. The Triangle Town Center is part of the larger Northeast City Growth Center.

Instead of contributing to a pattern of suburban sprawl, congested roadways, polluted air, and a deteriorating environment, it is envisioned that the development of this area could become a model of efficient development, based on sound environmental and community design principles. This emerging urban center is characterized by mixed-use development, strong pedestrian corridors, utilization of environmental features to shape the pattern of development, and a greatly improved relationship between the use of the land and the transportation systems that serve those uses.

The basic design elements for this quadrant of the Northeast City Growth Center include the following:

- Four clusters of intense development with a mix of commercial, institutional, and residential uses;
- Four centrally located neighborhood centers that provide a public function within each development cluster;
- A pedestrian oriented street within each cluster that links the neighborhood centers and accommodates walking, biking, driving and transit use within and between each cluster and to adjacent neighborhoods; and
- A system of roadways and transit routes that provide access to the region's other activity centers as well as highway and transit systems.

Northeast Quadrant

Policy AP-TTC 1

Triangle Town Center NE Land Uses

The Northeast Quadrant is bounded by I-540 on the north, Triangle Town Boulevard on the west, Old Wake Forest Road on the south, and Fox Road on the east. This area should include a mix of retail, office, hotel, residential, and civic uses arranged in a traditional street block pattern.

Policy AP-TTC 2

Pedestrian Connections Between Triangle Town Center Quadrants

Provide a pedestrian-friendly connection with the adjacent northwest and southeast quadrants of the Triangle Town Center.

Policy AP-TTC 3

Triangle Town Center NE Neighborhood Center

A public square bordered by commercial buildings and a prominent civic function should be centrally located within the quadrant to create a Neighborhood Center.

Policy AP-TTC 4

Triangle Town Center NE Urban Design Character

Create a comfortable and convenient pedestrian environment by fronting buildings on the sidewalk and street area with on-street parking along the collector and local access streets. Multi-storied buildings containing

commercial services and office uses on the lower floors and residential or office above are appropriate along these corridors.

Southeast Quadrant

Policy AP-TTC 5

Triangle Town Center SE Land Uses

The Southeast Quadrant is bounded by Old Wake Forest Road on the north, Triangle Town Boulevard on the west, Spring Forest Road Park on the south, and Fox Road on the east. This area should have a mix of retail, office, hotel, residential, and civic uses arranged in a traditional street block pattern.

Policy AP-TTC 6

Triangle Town/Sumner Neighborhood Retail

In the area east of Triangle Town Boulevard and south of Sumner Boulevard, retail uses should serve as a neighborhood focus for residents of this quadrant and nearby communities.

Policy AP-TTC 7

Triangle Town Center SE Transitions

A transition in scale and use should be provided along Fox Road between the City Growth Center and existing lower density residential neighborhoods.

Policy AP-TTC 8

Spring Forest Park

Spring Forest Park, along the southern edge of the southeast quadrant, should be incorporated as an amenity for development in this area.

Policy AP-TTC 9

Old Wake Forest Road Pedestrian Crossing

Provide a pedestrian friendly crossing of Old Wake Forest Road to the Northeast Quadrant. The crossing should occur generally midway between Triangle Town Boulevard and Fox Road. Roadway design at the pedestrian crossing must include features to calm vehicular traffic and enhance the pedestrian environment.

Southwest Quadrant

Policy AP-TTC 10

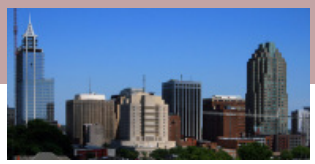
Triangle Town Center SW Land Uses

The Southwest Quadrant is bounded by Old Wake Forest Road on the north, Capital Boulevard on the west, Oak Forest Road on the south, and Triangle Town Boulevard on the east. Retail uses predominate this quadrant with Triangle Town Center Mall being the primary development feature.

Policy AP-TTC 11

Old Wake Forest Road Pedestrian Crossing

A pedestrian connector should extend from the north side of the mall across Old Wake Forest Road into the Northwest Quadrant. Roadway design at the pedestrian crossing



should include features to calm vehicular traffic and enhance the pedestrian environment.

Policy AP-TTC 12

Sumner Pedestrian Crossing

A pedestrian connector should extend from the south side of the mall across Sumner Boulevard.

Policy AP-TTC 13

Sumner-Spring Forest Park Greenway Extension

The greenway system should extend the Triangle Town Center Mall pedestrian connector east along a stormwater facility on the south side of Sumner Boulevard and continue to Spring Forest Park.

Policy AP-TTC 14

Capital Boulevard Development Access

Development sites fronting Capital Boulevard should derive primary access from the private street network around the Mall and not from the thoroughfare.

Northwest Quadrant

Policy AP-TTC 15

Triangle Town Center NW Land Uses

The Northwest Quadrant is bounded by I-540 on the north, Capital Boulevard on the west, Old Wake Forest Road on the south and Triangle Town Boulevard on the east. The area is planned for a mix of smaller-scale retail along with office, hotel, and civic uses concentrated in the north and western part of the quadrant with a large wetland area to the east along Triangle Town Boulevard.

Policy AP-TTC 16

Triangle Town Center NW Pedestrian Crossings

A pedestrian connector should extend north from the Triangle Town Center Mall across Old Wake Forest Road adjacent to the stormwater facility to a pedestrian-friendly collector street. The collector street should then extend to Triangle Town Boulevard where another pedestrian connector crosses the street to the northeast quadrant. Roadway designs at the pedestrian crossings of Old Wake Forest Road and Triangle Town Boulevard should include features to calm vehicular traffic and enhance the pedestrian environment.

Policy AP-TTC 17

Triangle Town Center NW Building Orientation

Buildings should front the collector street with entrances onto the sidewalk and street area. On-street parking should be provided along the collector and local access streets and around the Neighborhood Center to create a comfortable and convenient pedestrian environment.

Policy AP-TTC 18

Triangle Town Center NW Mixed-Uses

Multi-storied buildings containing a mix of uses should be included along the collector street and frame a public square within the Neighborhood Center. Parking should be located behind the buildings.

Policy AP-TTC 19

Triangle Town Center NW Stormwater Feature

An existing stormwater facility and natural area within the Triangle Town Center northwest quadrant should be utilized as an amenity feature and open space for surrounding development.

Building and Site Design Characteristics

Policy AP-TTC 20

Triangle Town Center Design Guidelines

In order to create the pedestrian-oriented and transit-supportive development envisioned for the Triangle Town Center, building and site design should incorporate the policies identified in the Design Guidelines Element Table UD-1.

Policy AP-TTC 21

Triangle Town Center Mixed Use

Mixed-use areas are designated on the Triangle Town Center Plan map and development of these areas should incorporate the policies identified in the Urban Design Element I.2.2 I.2 'Design of Mixed-Use Developments'.

Policy AP-TTC 22

Triangle Town Center Neighborhood Centers

Neighborhood Centers are the central public feature in each quadrant of the Triangle Town Center and should contain green spaces, water features, civic buildings, information centers, special architectural features and public art. General locations for the Neighborhood Centers are noted on the attached map with a more specific location dependent upon the site layout.

Policy AP-TTC 23

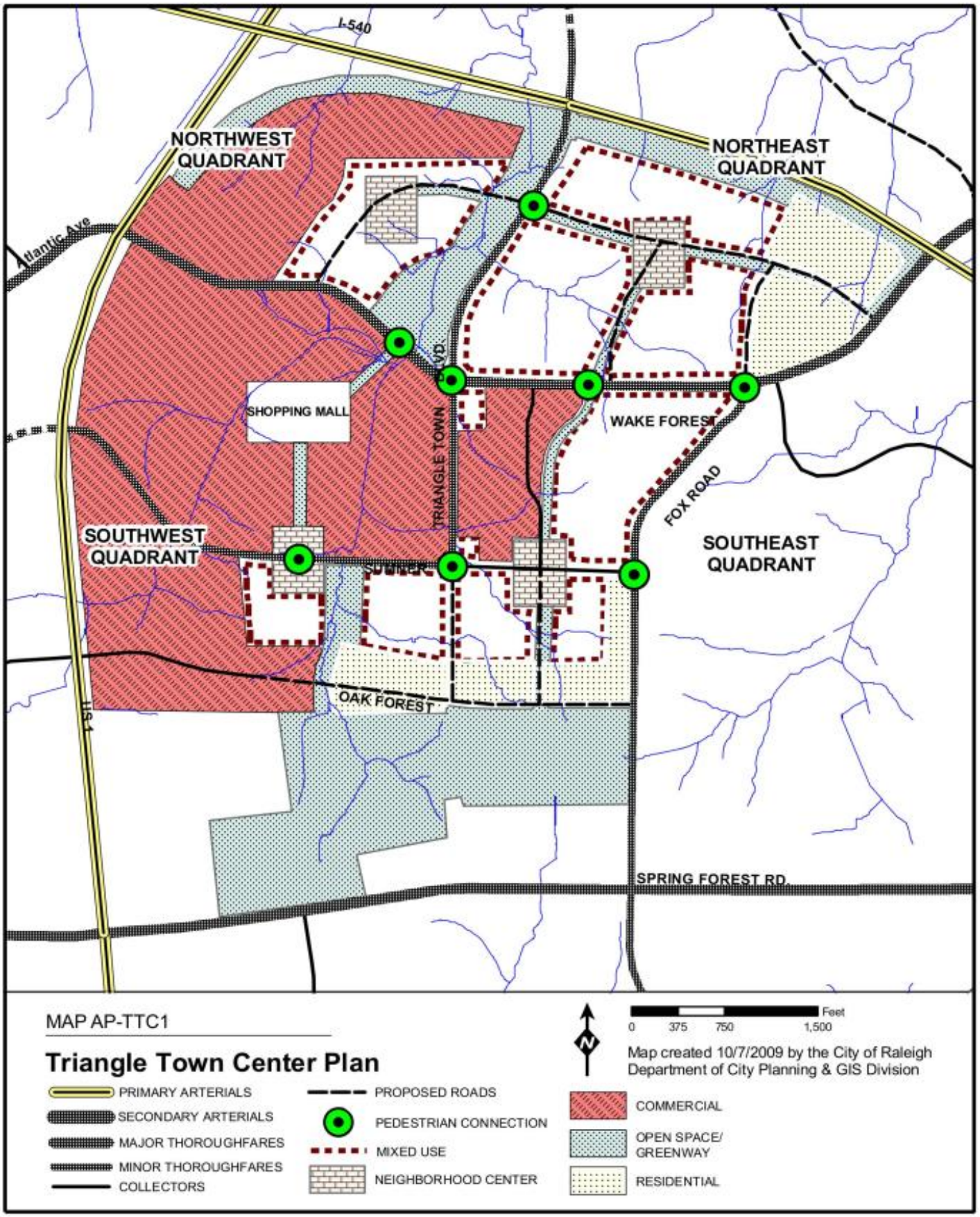
Triangle Town Center Public Spaces

Neighborhood Centers in the Triangle Town Center should include usable open spaces designed to serve as public gathering places. The design of these public spaces should be guided by the policies provided in the Urban Design Element I.2.4 I.4 'Creating Inviting Public Spaces'.

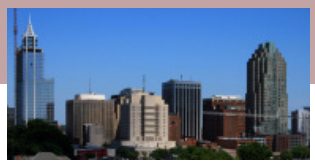
Policy AP-TTC 24

Triangle Town Center Pedestrian Safety

The streets that typically bisect Neighborhood Center squares should have special traffic calming and pedestrian-friendly characteristics. Additional guidance is provided in the Urban Design Element UD-1.7 I.6 'Pedestrian-Friendly Design'.



NOTE - See Future Land Use map for current land use designations



Area Plan 21: Wade/Oberlin

The plan area is bounded by St. Mary's Street on the east, by Clark Avenue on the south, by Chamberlain Street on the west, and by the northern property lines of parcels on the north side of Wade Avenue on the north. This plan has a horizon of up to 15 years, to about 2018. All policies in the Wade-Oberlin Plan pertaining to permitted uses, building bulk and height, and other aspects of development typically regulated by zoning are intended to be implemented through the rezoning of property. Until such time as zoning reflects the Plan policies, however, the applicable zoning standards shall continue to control these fundamental parameters determining the development potential of particular sites.

Policy AP-WO 1

Wade-Oberlin Vision

The Wade-Oberlin area should evolve into a livelier pedestrian and transit-oriented mixed-use center.

Policy AP-WO 2

Wade-Oberlin Land Use Compatibility

While intensification of uses in the Wade-Oberlin area is anticipated, such intensification should not have significant adverse impacts on surrounding low-density neighborhoods or cause significant traffic congestion.

Policy AP-WO 3

Protecting Wade-Oberlin's Neighborhood Character

The strengths of the Wade-Oberlin area (viable commercial uses in close proximity to various housing densities within a pedestrian-friendly street grid) should be enhanced by careful design of new structures and open spaces, with an emphasis on scale, pedestrian activity, and streetscapes that will harmoniously connect non-residential to residential areas.

Policy AP-WO 4

Cameron Village Shopping Center

Cameron Village Shopping Center is bounded by Clark Avenue, Oberlin Road, Smallwood Drive, and the rear property lines of shopping center property facing Woodburn Avenue. The tallest buildings should be located in the Shopping Center.

Policy AP-WO 5

Wade-Oberlin Retail

Cameron Village Shopping Center should continue as the main retail location. Retail outside of Cameron Village Shopping Center should only be located in vertically mixed-use structures that are in close proximity (preferably adjacent) to the shopping center, and should complement the pedestrian scale of the area.

Policy AP-WO 6

Wade-Oberlin Transition

Buildings at the edges of Wade-Oberlin's non-residential area should step down in development intensity to the surrounding residential area, and not be more than two or three stories in height if adjacent to single-family housing.

Policy AP-WO 7

Oberlin Road Main Street

Oberlin Road should evolve as the "main street" of the area, with improved pedestrian amenities and streetscaping.

Policy AP-WO 8

Wade-Oberlin Auto-Oriented Retail

Automobile drive-throughs, front-of-lot parking areas, and excessive number of curb cuts associated with retail uses are discouraged throughout the Wade-Oberlin plan area.

Policy AP-WO 9

Wade-Oberlin Street Continuity

The existing public street network in Wade-Oberlin should remain intact.

Policy AP-WO 10

Wade-Oberlin Traffic Calming

Traffic calming measures should be considered with any proposed redevelopment in the Wade-Oberlin study area.

Policy AP-WO 11

Oberlin Village Land Uses

The Oberlin Village neighborhood should be preserved with its current residential uses: single-family houses and apartment units.

Policy AP-WO 12

Mayview Housing Redevelopment

Mayview public housing should eventually be redeveloped into new housing (three-story maximum height) emulating the surrounding vernacular architecture with common open spaces and direct access to Jaycee Park. The conversion of these units into mixed-income residences would enhance the social fabric of the neighborhood.

Policy AP-WO 13

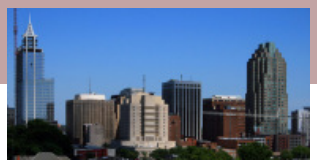
Oberlin Road Corridor

Office properties located on Oberlin Road between Clark Avenue and Everett-Smallwood may be redeveloped or converted to vertically mixed-use office, residential, and convenience/personal services retail sales in conjunction with the redevelopment of the Shopping Center. Oberlin Road north of Everett-Smallwood (except the northeast corner of Oberlin and Smallwood) should remain office and institutional, with only accessory retail as permitted in the Office and Institutional zoning district.

Policy AP-WO 14

Old Rex Hospital Site

No additional retail uses should be allowed on Wade Avenue with the exception of the North Carolina Department of Employment Security (the old Rex Hospital) on the northwest corner of Wade Avenue and St. Mary's Street, which may be redeveloped into mixed-use residential and office, with retail uses limited to Accessory Retail Sales not to exceed 5 percent of total built square footage. Building height should be limited to four stories or 50 feet and adjacent to single family residential should be limited



to a maximum of two stories or 25 feet. Building heights in excess of 25 feet should require a one foot for one foot step back. Residential densities should be limited to 30 units per acre. On-site parking should comply with the Urban Design policy Policy UD 2.6 'Parking Location and Design'.

Action AP-WO 1

Wade-Oberlin Streetscape Plan

Develop and implement a Comprehensive Streetscape Plan for Daniels Street, Oberlin Road, Smallwood Drive, Clark Street, and any other appropriate streets (per the City's determination) in the Study Area. The Streetscape Plan should encompass travel lanes, on-street parking, medians, enhanced pedestrian and bicycle access, plantings, lighting, public transit, and additional safety and calming features.

Action AP-WO 2

Daniels Street and Oberlin Road Cross-Section Standards

The following street cross-sections should be considered in the streetscape plan:

Daniels Street

Within the existing cross-section, provide one vehicular travel lane in each direction, a center median, and parallel parking on the west side. Within the existing right-of-way (ROW) provide a continuous sidewalk (5 foot minimum width) on the east side and an extension of the sidewalk on the west side between Smallwood Drive and Wade Avenue.

Oberlin Road, Between Mayview and Bedford

Within the existing cross-section, provide one vehicular travel lane and a striped bicycle lane in each direction. Within the existing ROW, provide a street tree zone on both sides of the street with trees planted at a regular interval no further than approximately 40 feet apart and new continuous sidewalks (5 foot minimum width). Align the driveway for the Wade-Oberlin (Crosland) Development access road with new roundabout at Mayview Road.

Oberlin Road, Between Bedford and Park

Within the existing cross-section, provide one vehicular travel lane and a striped bicycle lane in each direction with a center turn lane and/or a median. Provide adequate space between the bicycle lanes and curbs for parallel parking, turn lanes, or transit stops. Within the existing ROW on both sides of the street and provide for continuous sidewalks that are a minimum of ten feet in width. Provide a roundabout at the Clark-Oberlin intersection per the Hillsborough Street Reconstruction Plan.

Oberlin Road, Between Park and Groveland

Within the existing cross-section, provide one vehicular travel lane and a striped bicycle lane in each direction. Within the existing ROW, provide a street tree zone on both sides of the street with trees planted at a regular interval no further than approximately 40 feet apart and a new continuous sidewalk (5 foot minimum width).

Action AP-WO 3

Oberlin Road Historic Program

Develop a cultural/historic program to celebrate and prominently display Oberlin Road's history, especially its significance in the African-American community.

Action AP-WO 4

Wade-Oberlin Intersection Studies

Two troublesome intersections should be studied for traffic congestion mitigation. One is the confluence of Sutton, Smallwood, Bellwood and Daniels Streets, which has stop signs in close proximity to one another. The second is a localized congestion problem on Oberlin Road at the YWCA and Mayview Road.

Action AP-WO 5

Cameron Village Bus Loop

Consider provision of a bus route loop to include Cameron Village, the State Government Center regional rail stop, and sites downtown including hotels, the convention center, the BTI Center, the downtown regional rail stop at the Wye, and portions of Hillsborough Street. Another possible stop on the loop would be the NCSU regional rail station.

Action AP-WO 6

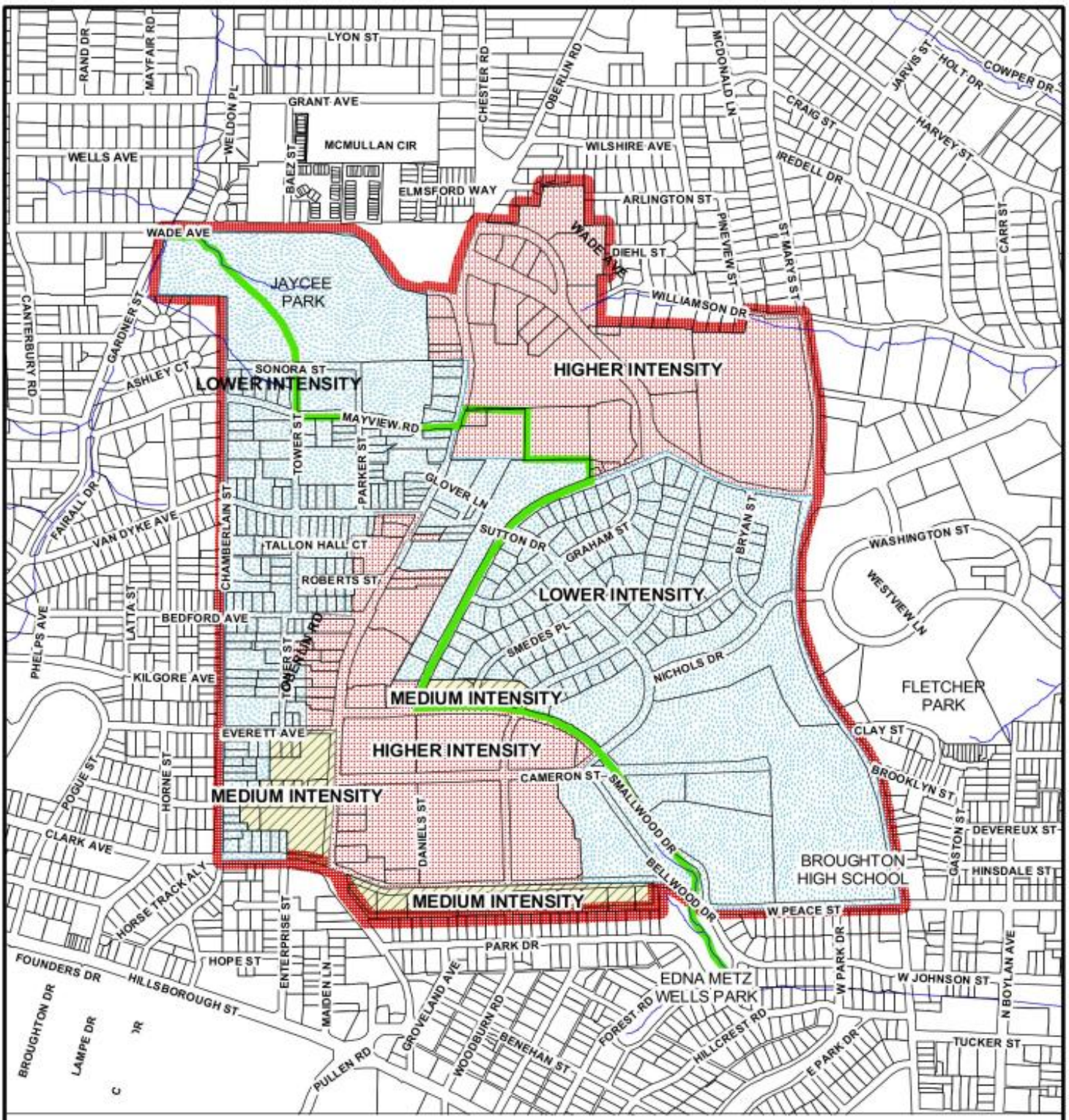
Cameron Street Improvements

The City, School Board, and property owners should work together to improve the appearance and vitality of the area along Cameron Street from its intersection with Sutton Drive eastward to Broughton High School.

Action AP-WO 7

Wade-Oberlin Urban Greenway

Development of an urban greenway that would run through the Wade-Oberlin area and connect Jaycee Park on the north to Clark Avenue on the south should be considered. This trail would connect the existing greenway trail along Gardner Street through Cameron Village to the Edna Metz Wells Park as shown on Map AP-WO-1. There is also an opportunity to connect at this point to Fred Fletcher Park. This connection may run along the rear property line of Broughton High School.



MAP AP-WO1

Wade/Oberlin Plan - Land Use Intensity

LOWER INTENSITY

MEDIUM INTENSITY

HIGHER INTENSITY

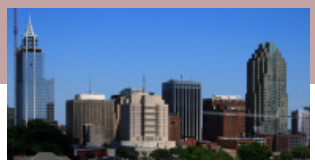
PLAN BOUNDARY

URBAN GREENWAY

N

0 350 700 1,400 Feet

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Area Plan 22: Wake Crossroads

The Plan area includes about 40 acres along Mitchell Mill Road between Forestville Road and Watkins Road. By working with commercial development interests in serving the growing residential population within the crossroads area, an opportunity is presented to coordinate future development patterns with individual property owners to address identified growth issues and to help create a neighborhood center as a focus for community activities.

A neighborhood center can be defined as a compact mix of retail, office, and residential uses within close proximity of each other providing a strong pedestrian orientation as well as the convenient vehicular access needed for commercial uses. The compact design accommodates walking and public transit by locating uses close to each other along an interconnected street system with sidewalks and on-street parking. A core area of convenience retail and local-serving office uses anchors the center. Buildings are typically located along the sidewalk with large parking areas centrally located within the interior of a block. A main street atmosphere is created by storefronts with display windows adjacent to the sidewalk with street trees, sidewalk lighting, and comfortable public spaces included to enhance the walking experience. The neighborhood center is also conveniently connected to the adjacent residential neighborhoods by traffic-calmed streets and pedestrian ways.

Policy AP-WC 1

Wake Crossroads Retail Core

The retail core area of Wake Crossroads should be on the north side of Mitchell Mill Road along the intersecting public streets shown on the plan concept map.

Policy AP-WC 2

Wake Crossroads Building Massing

Two- and three-story buildings should be located in the commercial core of Wake Crossroads to achieve a minimum 1:6 height-to-width ratio within the public space between buildings. A 1:3 height-to-width ratio should be pursued as an average to create a stronger spatial definition of the public space.

Policy AP-WC 3

Wake Crossroads Buffer Land Uses

Mixed-uses with an emphasis on office, service, and higher-density residential uses should be located outside the Wake Crossroads retail core transitioning with lower intensities to the adjacent single family neighborhoods.

Policy AP-WC 4

Wake Crossroads Streetscapes

Streetscapes in Wake Crossroads should be designed to enhance the pedestrian environment with street trees, pedestrian level lighting, wide sidewalks, and sitting areas.

Policy AP-WC 5

Wake Crossroads Pedestrian Amenities

Sidewalks should be provided on both sides of all streets within the Wake Crossroads plan area. Intersections should be designed and marked to provide safe pedestrian crossings. Mid-block crosswalks with curb bump-outs should be included where appropriate to

improve the convenience of walking and access from the off-street parking areas located within each block.

Policy AP-WC 6

Wake Crossroads Building Orientation

Buildings within the Wake Crossroads neighborhood center should be set close to the street with parking located behind or beside the building. Buildings at street intersections should be oriented to the corner with parking and service areas located away from the intersection. Buildings should be articulated so that the long side fronts the street.

Policy AP-WC 7

Wake Crossroads Drive-Through Windows

Drive-through windows are discouraged within the Wake Crossroads core commercial area. Outside of the core area, drive-through windows should be located on the side of the principal building that is not parallel to an adjacent street or pedestrian way. The principal building should include an interior customer service area in addition to the drive-through.

Policy AP-WC 8

Wake Crossroads Parking Design

Parking lots in Wake Crossroads should be located behind buildings within the interior of a block and should not occupy more than 1/3 of the frontage of the block face. Convenient pedestrian connections from the parking lots to the street front and additional building entries should be provided.

Policy AP-WC 9

Wake Crossroads Street Grid

An interconnecting grid of public streets should guide the development pattern within the Wake Crossroads neighborhood center. The core area public streets should be designed to collector street standards. The street grid should create 400-foot to 500-foot block faces with on-street parking and streetscape.

Policy AP-WC 10

Mitchell Mill Road Intersection Limits

Access to the intersections of Forestville and Watkins roads with Mitchell Mill Road should be limited to maintain the efficiency of traffic circulation.

Policy AP-WC 11

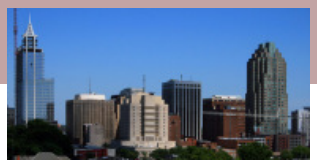
Mitchell Mill Median

A landscaped median should be provided in Mitchell Mill Road from Forestville Road east to Watkins Road. The median shall be at least 20 feet wide to accommodate a minimum width of 8 feet at intersections with left turn bays. A 110-foot right-of-way will be necessary to provide the 20 foot median.

Action AP-WC 1

Wake Crossroads Greenway

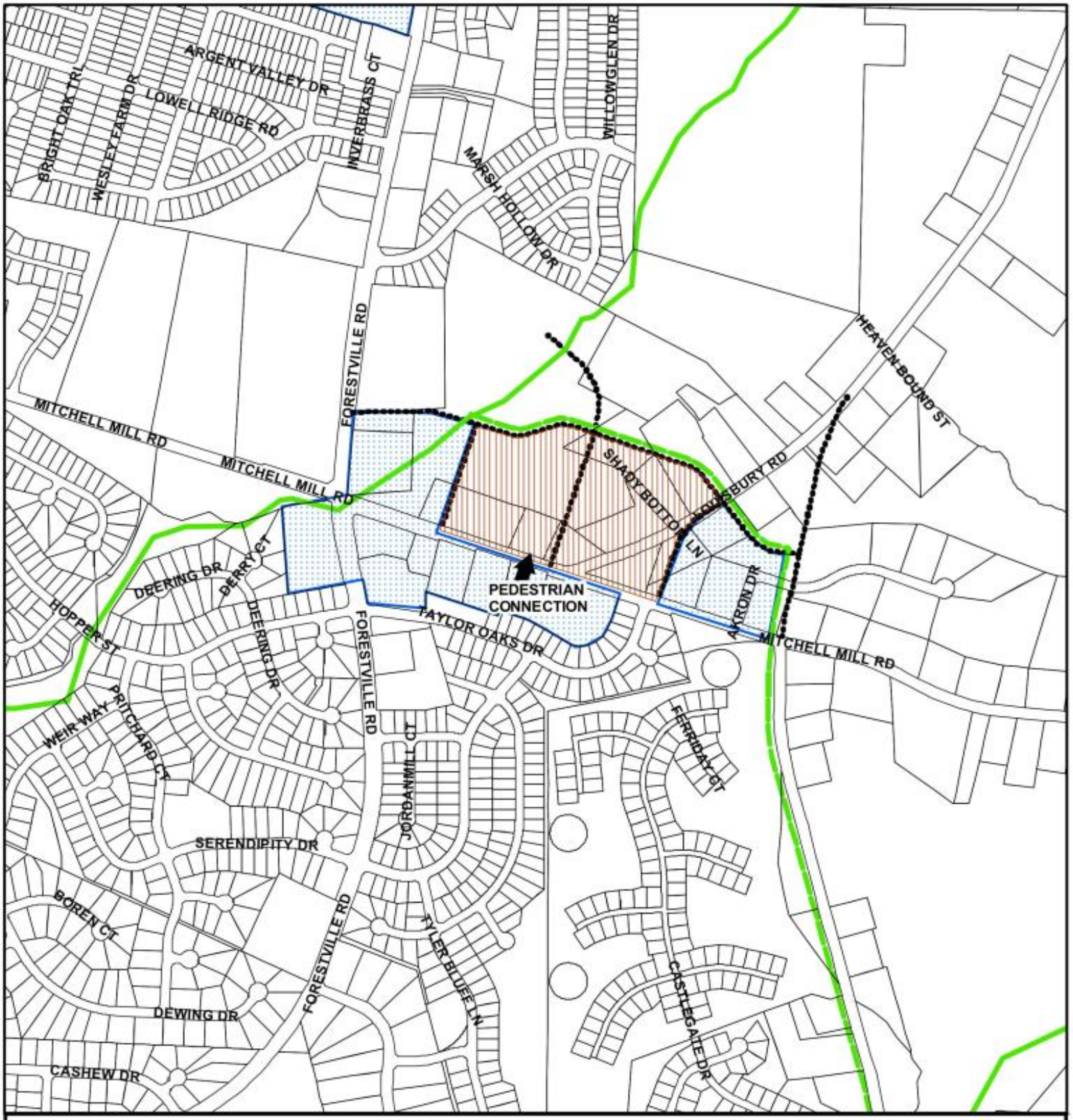
Provide a connector greenway from the Harris Creek greenway north along the western side of Watkins Road to create a greenway loop through the Neighborhood Center and back to the Neuse River.



Action AP-WC 2

Wake Crossroads Zoning

Adopt Zoning Code standards that will support the recommended Wake Crossroads neighborhood center development pattern, especially in relation to building setbacks, mix of uses, and parking requirements.



MAP AP-WC1

Wake Crossroads Plan

TRANSITION AREA

CORE AREA

PROPOSED PUBLIC STREET GRID

GREENWAY CORRIDOR CONNECTOR

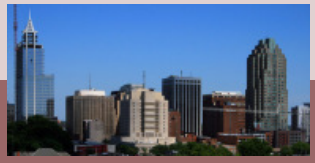
GREENWAY CORRIDOR

MIXED USE CENTER

N

0 250 500 1,000 Feet

Map created 10/7/2009 by the City of Raleigh Department of City Planning & GIS Division



Implementation

Element N: Implementation

The adoption of this Comprehensive Plan is the first step in the implementation process. It is the product of considerable effort on the part of the City of Raleigh and its City Council, Planning Commission, Department of City Planning, as well as many other municipal departments, community leaders, and concerned citizens. Continuing action to implement the Plan will be needed for it to have lasting impact. Working with a range of implementation partners, the Department of City Planning will be the lead facilitator to implement the Plan and coordinate consistency reviews among municipal departments.

This Implementation Element describes how the policies and actions in the Comprehensive Plan should be carried out. It provides recommendations for administering the planning process and enhancing linkages between the Comprehensive Plan and the Capital Improvement Program (CIP); identifies actions to be considered during the update of the City's development regulations. It recommends steps to be taken to monitor, evaluate, and update the Plan on a regular basis. In the Action Plan section and the Action Plan Matrix, each of the Plan's action items is assigned to an agency and given a timeframe and priority ranking. Ties to the Capital Improvement Program are made explicit. All of the actions listed in the Action Plan Matrix are excerpted from the elements of the Plan and the reader is advised to consult the relevant element for more information and context.

The Comprehensive Plan is used to guide private and public development. The City uses the Plan to assess the appropriateness of proposed development cases including zoning actions, and special exceptions. All the Elements of the Comprehensive Plan are used to assess development applications, including both the narrative policies and applicable maps. The Plan is also used to assess the appropriateness of public development actions, proposed CIP items, and the siting of public facilities.

N.1 Zoning Regulations and Consistency

This section provides guidance on how the zoning regulations should be amended and updated after the Comprehensive Plan is adopted. Zoning is the primary tool for implementing the Comprehensive Plan's policies, particularly the Future Land Use Map. The zoning regulations themselves need substantial revision and reorganization, ranging from new definitions to updated development and design standards, and even new zoning districts. Therefore, the City plans to undertake a major overhaul of the zoning regulations beginning in 2009.

Policy IM 1.1

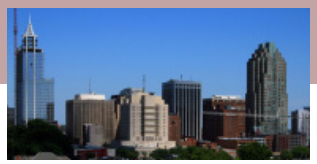
Consistency of the Comprehensive Plan and Development Code

Maintain consistency between the City's development regulations and the Comprehensive Plan, such that regulations facilitate, and do not inhibit, the implementation of Plan policies. (1, 2, 3, 4, 5, 6)

Action IM 1.1

Revision of Development Regulations

Undertake a comprehensive revision to the City's development regulations following the adoption of the Comprehensive Plan.



Action IM 1.2

Annual Review of Development Regulations

Annually review and update the City's regulations to account for any adopted Comprehensive Plan amendments, emerging issues, and market or real estate trends.

N.2 Relation to Capital Improvement Planning and Other City Plans

The City's Capital Improvement Program (CIP) is an important mechanism to implement public projects and infrastructure improvements. Public dollars will always be limited, so the City should balance its priorities with available revenues and other public funding sources. When updating its annual CIP, the City should consider the priorities that are listed within the Action Matrix.

The Comprehensive Plan is the city policy guide for issues related to the city's physical development. Raleigh's City Charter authorizes the Department of City Planning to prepare a comprehensive plan *"for the purpose of over-all planning for the city rather than disintegrated and disassociated fragments."* The City Charter also states that the comprehensive plan is intended to *"assist several operating departments of the City in formulating a public policy which will treat the problems of the municipal government as a closely knit whole."* All of the City's other plans for development, parks and open space, utilities, public services, and environmental preservation must be consistent with the Comprehensive Plan.

Policy IM 2.1

CIP Priorities

The Comprehensive Plan shall be consulted when establishing priorities within the City's Capital Improvement Program. (3)

Policy IM 2.2

Preeminence of the Comprehensive Plan

The Comprehensive Plan shall be the city's lead and overall policy guide for the growth and development of Raleigh. All other city plans related to the City's growth and development and related infrastructure plans must be revised to be in conformance with the Comprehensive Plan. (3, 4, 5)

Policy IM 2.3

Consistency of Other Plans

All City departments shall submit annually to the City Manager and Planning Director a list of plans and studies to be undertaken in the upcoming year, to determine joint planning opportunities and consistency with the Comprehensive Plan. (3, 4)

Action IM 2.1

CIP Review Criteria

Refine the criteria used for the review of capital projects to be included in the CIP.

Action IM 2.2

Revision of Other Plans

Review and update the City's plans, including Redevelopment Plans, to bring them into conformance with the policies of this adopted Comprehensive Plan.

N.3 Comprehensive Plan Updates and Amendments

This section addresses the process for monitoring, amending, and updating the Comprehensive Plan. It outlines the amendment process and recommended timeframe for amendment cycles as well as for the more extensive periodic update of the Comprehensive Plan every five years.

The City needs to be able to measure successes and challenges in the implementation of the Comprehensive Plan. The Department of City Planning should prepare an annual report to assess the progress of the City in implementing the Plan's recommendations and to set priorities for the coming year. This annual assessment should be used to guide City agency programs, capital improvement budgeting, and policy development to better achieve the goals of the Plan. It should be submitted to the City Manager, City Council, and the public. The Department of City Planning should make the progress report a highly publicized effort to demonstrate the important role the Comprehensive Plan plays in decisions that affect the City's growth and to continue the excellent public involvement process that helped develop the Comprehensive Plan.

To maintain the Plan's currency, the City should undertake a major re-evaluation and update of the Comprehensive Plan every five years. Such updates should include an update and revision of the Community Inventory report. This systematic update will allow the City to keep its data, policies, and actions relevant to changing times. However, this is not to infer that plan amendments should not take place otherwise.

The City should establish a yearly cycle for minor plan amendments to maintain its relevancy to the public and city government. The cycle should be timed to follow the annual progress assessment, so that lagging implementation items can be revisited. The yearly amendment process should provide an opportunity for individuals, groups, or city agencies to propose a minor amendment to the Comprehensive Plan to address changing social and market conditions or reflect new facility plans and work programs. Minor amendments may include changes to the text or maps of the Comprehensive Plan. Each proposed amendment will require the applicant to provide the burden of proof for the change or addition.

Policy IM 3.1

Five-Year Updates

Update the Comprehensive Plan every five years to remain current and relevant, with a particular focus on the Plan's policy actions. (3, 6)

Policy IM 3.2

Annual Amendments

Amend the Comprehensive Plan on a yearly basis so the Plan may address changes in demography, economic markets, and public priorities. (1, 3, 6)

Policy IM 3.3

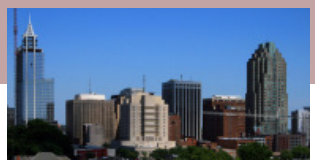
Internal Consistency

All amendments to the Comprehensive Plan shall be reviewed for consistency against adopted plan policies. Any policies, existing or proposed, found to be in conflict shall be revised or removed to achieve consistency. (3)

Policy IM 3.4

Amendment Criteria

Require the proponent of a Comprehensive Plan amendment to demonstrate its need and justification, as follows:



- Significant changes have occurred since the adoption of the Comprehensive Plan and necessitate the proposed amendment;
- Inconsistencies in land use or other plan policies exist in the adopted Comprehensive Plan that affect the City's efficient growth and development;
- The City's ability to achieve the goals of the Comprehensive Plan will be increased, or the operations of City government will be enhanced;
- The Comprehensive Plan's policies or actions inhibit the ability of the City to achieve other public policy objectives;
- Substantial improvement in the quality of life for City residents will be achieved; and
- Adoption of the proposed amendment is necessary to incorporate public policies established by the City government that are not reflected in the Comprehensive Plan. (3, 6)

Action IM 3.1

Amendment Process Protocol

Develop an annual Comprehensive Plan amendment process.

Action IM 3.2

Annual Progress Report

Prepare and publish an annual easy-to-digest report on Comprehensive Plan progress including key accomplishments, critical issues, and key implementing agencies.

Action IM 3.3

Monitoring of Existing Conditions

Develop additional data collection and analysis tools for continuous monitoring of issues such as land use and development activity, vacant land and development capacity, and changes in quality (improvement or decline) of environmental and natural resources.

Action IM 3.4

Community Inventory Updates

Update the data in the Community Inventory Report every year.

N.4 Small Area Studies

To create a more predictable planning framework for the future, Raleigh has updated its planning procedures to replace Area Plans with area-specific planning studies. These studies will be undertaken as part of the Department of City Planning's work program for defined geographic areas that require more focused study and outreach, and will produce more detailed recommendations, than can be provided by the Comprehensive Plan. The intent of such studies is to guide long-range development; stabilize and improve neighborhoods, corridors, or other defined areas to achieve citywide goals; and attain economic and community benefits. These area-specific studies will be used, where appropriate, to develop amendments to the Comprehensive Plan, the Future Land Use Map, and/or the Capital Improvement Plan. The studies may also generate strategic recommendations to be implemented outside of the Comprehensive Plan process. However, these area specific studies will not be adopted in toto as a part of the Comprehensive Plan. The following policies and actions provide guidance on how the City will allow and consider area-specific studies in the future.

Policy IM 4.1

Area Planning Studies

Prepare area-specific planning studies for parts of the City where detailed direction or standards are needed to guide land use, economic development, transportation, urban design, and other future physical planning and public investment decisions. The focus should be on areas or corridors that offer opportunities for revitalization or new residential, commercial, and mixed-use development and redevelopment, areas with challenges or characteristics requiring place-specific planning actions and public interventions, and areas designated "special study area" on the Future Land Use Map. (1, 3, 5)

Policy IM 4.2

Area Study Content and Intent

Ensure that area-specific planning studies take a form appropriate to the needs of the community and reflect citywide needs, as well as economic development policies and priorities, market conditions, implementation requirements, available staffing resources and time, and available funding. Such studies should address such topics as an existing conditions inventory, future land use recommendations, aesthetic and public space improvements, circulation improvements and transportation management, capital improvement requirements and financing strategies, the need for zoning changes or special zoning requirements, and other implementation techniques. If necessary, as a result of the findings of the area-specific plans, Comprehensive Plan amendments to the plan's text or maps should be introduced to ensure internal consistency for the areas involved. (3)

Policy IM 4.3

Existing Area Plans

As part of the update and re-examination process, remove existing, adopted Area Plans from the Comprehensive Plan as they become fully implemented, or if they are superseded by future area planning studies. (3, 6)

Action IM 4.1

Area Study Priorities

Undertake specific area studies for selected areas, starting with the areas highlighted in D.5 'Economic Development and Land Use' in Element D: 'Economic Development'.

Action IM 4.2

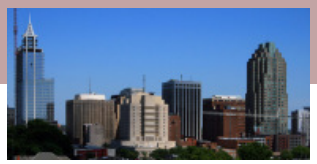
Area Studies and Comprehensive Plan Amendments

Create an annual comprehensive amendment process that incorporates area and corridor study policies and land use and zoning changes to more efficiently and systematically implement recommendations.

Action IM 4.3

Area Studies and the CIP

Consider the capital improvement recommendations from area and corridor studies during the City's annual capital improvement planning process.



N.5 Action Plan

This section of the Implementation Element includes an "Action Plan Matrix" that summarizes all actions in the Comprehensive Plan. All of the actions listed in the Matrix are excerpted from the Plan's Elements, and the reader is advised to consult the relevant chapter for more information and additional context for each action listed.

The Action Plan Matrix includes the responsible agency, the timeframe for implementation, level of priority, and whether actions will require capital funds for implementation. Relative to the timeframe designation, short-term actions should be completed within one to two years, mid-term actions should be completed within three to five years, long-term actions should be completed within five to ten years, and on-going actions should remain a constant priority of the City.

Responsibilities are assigned at the departmental level. Where multiple departments are specified, the first to be listed is the designated lead agency, with subsequently-listed departments in a supporting role. Most actions involve multiple departments, in keeping with the intent to mobilize expertise across the City's organization to ensure the best achievable outcome for all undertakings.

Action Matrix

The Action Plan Matrix is maintained as a spreadsheet document for ease of maintenance. It is incorporated into this document by reference, and can be downloaded as a PDF at the web site of the City of Raleigh Department of City Planning.

The following tables contain the key to all the terms and acronyms used in the action matrix.

Timeframe

Term	Description
Short-term	1 to 2 years
Mid-term	3 to 5 years
Long-term	6 to 10 years
On-going	No predetermined start or end time

Action Type

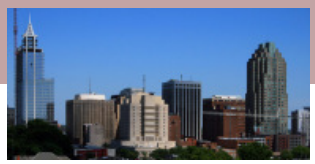
Term	Description
Development regulations	Zoning, codes, ordinance-related; site planning and development
Study/plan	Studies, plans, evaluations, research into options, inventories, demonstration projects
Coordination/outreach	Convening and coordinating; educating, promoting, marketing
Systems/support	Adjustments to or expansion of current core systems; continuing support to systems currently in place; implementation of pre-existing plans/programs; improvements to infrastructure, community facilities
Program/organization	Programmatic changes/additions; development of new tools, processes, and programs; creation of new institutions
Financial	Issues of funding and financing

Internal Agency Acronyms

Internal Agencies	Acronym
Administrative Services Department	ASD
City Attorney's Office	CAO
City Clerk's Office	CCO
City Manager's Office	CMO
City Planning, Dept. of	DCP
Community Development Department	CD
Community Services Department	CS
Emergency Communications Center	ECC
Finance, Department of	DOF
Information Technology Department	IT
Inspections Department	INSP
Parks and Recreation Department	P&R
Public Affairs Department	PA
Public Utilities Department	CORPUD
Public Works Department	PW
Raleigh Convention and Conference Center	RCCC
Raleigh Fire Department	RFD
Raleigh Police Department	RPD
Solid Waste Services Department	SWS

External Agency Acronyms

Outside Agencies	Acronym
Capital Area Transit	CAT
Capital Area Metropolitan Planning Organization	CAMPO
North Carolina Capital Planning Commission	NCCPC
North Carolina Department of Transportation	NCDOT
North Carolina State Construction Office	NCSCO
North Carolina State Property Office	NCSPO



Outside Agencies	Acronym
North Carolina State University	NCSU
Raleigh-Durham Airport Authority	RDAA
Raleigh Housing Authority	RHA
North Carolina Department of Environment and Natural Resources	NCDENR
Triangle J Council Of Governments	TJCOG
Triangle Transit Authority	TTA
Wake County Community Services	WCCS
Wake County Environmental Services	WCES
Wake County Planning Department	WCPD
Wake County Public School System	WCPSS
U.S. Army Corps of Engineers	USACOE
Other	
Private Sector (includes developers, property owners, neighborhood groups,non-profits)	PRIV

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
ELEMENTS OF THE COMPREHENSIVE PLAN						
Element A Land Use						
A.1 Future Land Uses						
Action LU 1 .1	Zoning Update	DCP, CAO	Short-term	Development regulations		N
Action LU 1 .2	Zoning Innovations	DCP, CAO	Short-term	Development regulations		N
Action LU 1 .3	Special Study Area Plans	DCP	Mid-term	Study/ plan		N
Action LU 1 .4	Future Land Use Map Maintenance and Revision	DCP, CAO	On-going	Study/ plan		N
Action LU 1 .5	Incorporate Adopted Regulations into Zoning	DCP, CAO	Short-term	Development regulations		N
Action LU 1 .6	Update Subdivision and Site Plan Regulations	DCP, CAO	Short-term	Development regulations		N
A.2 City-wide Growth						
Action LU 2.1	Future Studies in High-Density Areas	DCP	On-going	Study/ plan		N
Action LU 2.2	Zoning for Smarter Growth	DCP, CAO	Short-term	Development regulations		N
Action LU 2.3	Strengthening Site Plan Standards	DCP, CAO	Short-term	Development regulations		N
Action LU 2.4	Linking Development and Infrastructure	DCP, CAO	Short-term	Development regulations		N
Action LU 2.5	Regulatory Incentives	DCP, CAO	Short-term	Development regulations		N
Action LU 2.6	Targeting Development Incentives	DCP, CAO	Short-term	Development regulations		N
Action LU 2.7	Land Conservation Approaches	DCP, CAO	Short-term	Development regulations		N
A.3 Land Use and Transportation Coordination						
Action LU 3.1	Accommodating Mixed Uses	DCP, CAO	Short-term	Development regulations		N
Action LU 3.2	Connective Site design	DCP, CAO	Short-term	Development regulations		N
Action LU 3.3	Station Area Plans	DCP	Mid-term	Study/ plan		N
A.5 Land Use Compatibility						
Action LU 5.1	Buffering and Screening Regulations	DCP, CAO	Short-term	Development regulations		N
Action LU 5.2	Interface Area Standards	DCP	Short-term	Study/ plan		N
Action LU 5.3	Zoning Changes to Reduce Conflicts	DCP, CAO	Short-term	Development regulations		N
A.6 Mixed Use Development						

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action LU 6.1	Zoning Standards for Mixed Use	DCP, CAO	Short-term	Development regulations		N
A.7 Commerical District and Corridors						
Action LU 7.1	Zoning Changes to Reduce Land Use Conflicts in Commercial Zones	DCP, CAO	Short-term	Development regulations		N
Action LU 7.2	Height and Bulk Hierarchy	DCP, CAO	Short-term	Development regulations		N
Action LU 7.3	Promoting Commercial Reinvestment	DCP, CD	On-going	Study/ plan		N
A.8 Neighborhood Conservation and Development						
Action LU 8.1	Common Open Space	DCP, CAO	Short-term	Development regulations		N
Action LU 8.2	Open Space Networks	DCP, CAO	Short-term	Development regulations		N
Action LU 8.3	Acquisition of Vacant Lots	DCP, CAO	Short-term	Program/ organization		N
Action LU 8.4	Infill Standards	DCP, CAO	Mid-term	Development regulations		N
A.9 Research and Development/Institiutional Land Uses						
Action LU 9.1	Zoning for the Tech Sector	DCP, CAO	Short-term	Development regulations		N
Action LU 9.2	Small Area Studies in Institutional Areas	DCP	On-going	Study/ plan		N
Action LU 9.3	Institutional Overlay District	DCP, CAO	Short-term	Development regulations		N
A.10 Retail Land Uses						
Action LU 10.1	Performance Standards for Big Box Retail	DCP, CAO	Short-term	Development regulations		N
A.11 Industrial Land Uses						
Action LU 11.1	Industrial Zoning Amendments	DCP, CAO	Short-term	Development regulations		N
Action LU 11.2	Industrial Land Use Compatibility	DCP, CAO	Short-term	Development regulations		N
A.12 Large Site Development						
Action LU 12.1	PDD Revisions for Large Sites	DCP, CAO	Short-term	Development regulations		N
Action LU 12.2	Dix Property Acquisition	CMO	Mid-term	Systems/ support		Y
Action LU 12.3	Dix Property Plan	DCP, P&R, PW	Mid-term	Study/ plan		N
Element B Transportation						
B.1 Land Use and Transportation Coordination						
Action T 1.1	Corridor Preservation	PW, DCP	Mid-term	Program/ organization		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action T 1.2	Transportation Impact analysis	PW, DCP, CAO	Short-term	Development regulations		N
Action T 1.3	Context Sensitive Solutions	PW	Mid-term	Program/ organization		N
B.2 Roadway System and Transportation Demand Management						
Action T 2.1	Transportation Demand Management	PW	Mid-term	Study/ plan		N
Action T 2.2	Access Management Plan	PW	Mid-term	Study/ plan		N
Action T 2.3	Right of Way Reservation	PW, DCP	Mid-term	Study/ plan		N
Action T 2.4	Limited Access Lane Management	PW	Short-term	Coordination/ outreach		N
Action T 2.5	Intermodal Facility Prioritization	PW	On-going	Coordination/ outreach		N
Action T 2.6	Reducing Single Occupant Driving	PW, DCP	Short-term	Program/ organization		N
Action T 2.7	Special Transportation Studies	PW, DCP	Short-term	Study/ plan		N
Action T 2.8	Transportation Funding Strategy	PW	On-going	Financial		Y
Action T 2.9	Connectivity Index	DCP, CAO, PW	Mid-term	Development Regulations		N
B.3 Complete Streets: Hierarchy and Design						
Action T 3.1	Designation of Complete Streets	DCP, PW	Short-term	Program/ organization		N
Action T 3.2	Redefining Road Classification	PW	On-going	Program/ organization		N
Action T 3.3	Street, Sidewalk and Driveway Access Handbook	DCP, PW	Short-term	Development Regulations		N
Action T 3.4	Transportation Data Collection	PW	Mid-term	Study/ plan		N
Action T 3.5	Operationalizing Complete Streets	PW	Mid-term	Program/ organization		N
B.4 Public Transportation						
Action T 4.1	Multi-Modal Transportation Center	DCP, PW	Mid-term	Systems/ support		Y
Action T 4.2	Transit Stop Evaluations	PW	On-going	Study/ plan		N
Action T 4.3	Intercity Fixed Route Transit	DCP, PW	Mid-term	Study/ plan		N
Action T 4.4	Streetcars	PW	Long-term	Study/ plan		N
Action T 4.5	Transit Infrastructure	PW	Mid-term	Study/ plan		N
Action T 4.6	Park and Ride lots	TT, PW	Short-term	Systems/ support		Y
Action T 4.7	Shared Parking and Transit	TT, PW	Short-term	Study/ plan		N
Action T 4.8	Secondary Transit Hubs	PW	Short-term	Systems/ support		Y
Action T 4.9	Commitment to Regional Rail	TT, PW	Mid-term	Coordination/ outreach		N
Action T 4.10	Local Financing for Transit	DCP, DOF, ASD, CMO	Mid-term	Program/ organization		Y

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action T 4.11	Bench and Shelter Standards	PW	Mid-term	Systems/ support		N
Action T 4.12	Bench and Shelter Siting	PW	Mid-term	Coordination/ outreach		N
Action T 4.13	Transit Stop Design	PW	Short-term	Program/ organization		N
B.5 Pedestrian and Bicycle Circulation						
Action T 5.1	Sidewalk Inventory	PW	Mid-term	Study/ plan		N
Action T 5.2	Updating Sidewalk Standards	DCP, CAO, PW	Short-term	Development Regulations		N
Action T 5.3	Sidewalk Requirements	DCP, CAO, PW	Short-term	Development regulations		N
Action T 5.4	Sidewalk Funding	PW	Short-term	Program/ organization		Y
Action T 5.5	Trail and Path Width	P&R	On-going	Systems/ support		Y
Action T 5.6	Bicycle Plan Implementation	PW	On-going	Systems/ support		N
Action T 5.7	Bicycle and Pedestrian Coordinator	CMO, PW	Short-term	Financial		Y
Action T 5.8	Pedestrian and Bicycle Facilities in Development Regulations	DCP, CAO, PW	Short-term	Development Regulations		N
Action T 5.9	Personal Motorized Modes	PW, P&R	Long-term	Study/ plan		N
Action T 5.10	Pedestrian Crossing Standards	DCP, CAO, PW	Short-term	Development Regulations		N
Action T 5.11	Crosswalk Safety	PW	Long-term	Systems/ support		Y
Action T 5.12	Pedestrian Signals	PW	On-going	Systems/ support		Y
Action T 5.13	Pedestrian Plan	PW	Short-term	Study/ plan		N
Action T 5.14	Railroad Greenway Trails	P&R, DCP	Mid-term	Systems/ support		Y
B.6 Parking Management						
Action T 6.1	Large Surface Lots	DCP, CAO	Short-term	Development Regulations		N
Action T 6.2	Shopping Center Park and Ride	DCP, CAO, PW	Short-term	Development Regulations		N
Action T 6.3	Parking Study Implementation	DCP, CAO	Short-term	Development Regulations		N
Action T 6.4	Criteria for Changing On-Street Parking Regulations	PW	Mid-term	Program/ organization		N
Action T 6.5	Parking Lot Landscaping	DCP, CAO	Short-term	Development Regulations		N
B.7 Transportation Safety Improvements						
Action T 7.1	Street Lighting	PW	On-going	Systems/ support		N
Action T 7.2	Crash Analysis	PW	Mid-term	Systems/ support		N
B.8 Commercial Truck and Rail Freight						
Action T 8.1	Railroad Crossing Safety	PW	On-going	Systems/ support		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action T 8.2	Improving Freight Movement	PW	Long-term	Systems/ support		N
Element C Environmental Protection						
C.1 Energy Security and Climate Change Prepardness						
Action EP 1.1	Green Purchasing	DOF, ASD, CMO	Short-term	Outreach		N
Action EP 1.2	Public Facility Energy Audit	P&R	Short-term	Study/ plan		N
Action EP 1.3	Energy Retrofits	P&R, PW	Long-term	Program/ organization		Y
Action EP 1.4	LEED-EB	P&R	Long-term	Program/ organization		Y
Action EP 1.5	LEED-ND	DCP, CAO	Mid-term	Study/ plan		N
Action EP 1.6	LEED Incentives	DCP, CAO	Mid-term	Study/ plan		N
Action EP 1.7	Green Training	WCES	Short-term	Coordination/ outreach		N
Action EP 1.8	Solar and Co-generation Incentives					
Action EP 1.9	Energy Efficient Construction					
Action EP 1.10	Community Supported Energy	CORPUD	Long-term	Study/ plan		N
Action EP 1.11	Rooftop Energy	PW, P&R	Long-term	Study/ plan		N
Action EP 1.12	Charging Stations	PW	On-going	Systems/ support		Y
C.2 Design with Nature						
Action EP 2.1	Green Infrastructure Plan	P&R, DCP	Mid-term	Study/ plan		N
Action EP 2.2	Park Acquisition	P&R	Mid-term	Program/ organization		Y
Action EP 2.3	Green Infrastructure Team	Various	Mid-term	Coordination/ outreach		N
Action EP 2.4	Environmentally Sensitive Development Controls	DCP, CAO	Short-term	Development Regulations		N
Action EP 2.5	Environmental Feature Protection	DCP, CAO	Short-term	Development Regulations		N
C.3 Water Quality and Conservation						
Action EP 3.1	Demonstration Projects	CORPUD, PW	Mid-term	Coordination/ outreach		N
Action EP 3.2	Low Impact Development Ordinance	DCP, CAO	Short-term	Development Regulations		N
Action EP 3.3	Permanent Conservation Measures	DCP, CAO	Short-term	Development Regulations		N
Action EP 3.4	Water Quality Management Projects	PW	Mid-term	Systems/ support		N
Action EP 3.5	Illegal Discharges	PW, CORPUD	On-going	Systems/ support		N
Action EP 3.6	Land Acquisition for Stormwater Control	PW, CORPUD	Mid-term	Program/ organization		N
Action EP 3.7	Stormwater Plan Review	PW	On-going	Systems/ support		N
Action EP 3.8	Erosion Control Inspections	PW, INSP	Mid-term	Systems/ support		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action EP 3.9	Upper Neuse Initiative	CORPUD, P&R	On-going	Systems/ support		Y
Action EP 3.10	Wastewater Treatment Demonstration Project	CORPUD	Long-term	Coordination/ outreach		N
Action EP 3.11	Zoning Amendment for Steep Slopes	DCP, CAO	Short-term	Development Regulations		N
Action EP 3.12	Watercourse Restoration	PW, DCP	Mid-term	Program/ organization		N
C.4 Flood Reduction and Preparedness						
Action EP 4.1	Flood Mitigation Funding	PW	Long-term	Financial		Y
Action EP 4.2	Flood Preparedness	PW	Mid-term	Program/ organization		N
Action EP 4.3	Floodplain Management Best Practices	PW	Mid-term	Program/ organization		N
Action EP 4.4	Floodplain Regulations	DCP, CAO	Short-term	Development Regulations		N
Action EP 4.5	Watershed Studies	PW	Long-term	Study/ plan		N
C.5 Tree Canopy Conservation and Growth						
Action EP 5.1	Tree and Landscape Ordinance Amendments	DCP, CAO, P&R	Short-term	Development Regulations		N
Action EP 5.2	Urban Forestry Plan	P&R	Mid-term	Study/ plan		N
Action EP 5.3	Planning Incentives and Standards	DCP, CAO	Short-term	Development Regulations		N
Action EP 5.4	Utility Coordination	P&R, PW	On-going	Systems/ support		N
Action EP 5.5	Tree Planting Guidelines	P&R, PW	Mid-term	Program/ organization		N
Action EP 5.6	NeighborWoods	P&R	Long-term	Program/ organization		N
C.6 Wildlife and Habitat Protection and Preservation						
Action EP 6.1	Habitat Plan	P&R	Short-term	Study/ plan		N
Action EP 6.2	Habitat Protection Regulations	P&R	Mid-term	Study/ plan		N
Action EP 6.3	Invasive Species Control	P&R	Mid-term	Coordination/ outreach		N
C.7 Material Resource Management						
Action EP 7.1	Pay-As-You-Throw	SWS	Mid-term	Coordination/ outreach		N
Action EP 7.2	Composting	SWS	On-going	Coordination/ outreach		N
Action EP 7.3	Waste-to-Energy Demonstration	SWS, PRIV	Mid-term	Study/ plan		Y
Action EP 7.4	Environmentally-Friendly Product Use	SWS	Short-term	Study/ plan		N
Action EP 7.5	Recycled Material Purchasing	DOF, ASD, CMO	Short-term	Systems/ support		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action EP 7.6	Demolition Debris	DCP, CAO, INSP	Short-term	Development regulations		N
Action EP 7.7	Environmentally Preferable Purchasing	DOF, ASD, CMO	Mid-term	Program/ organization		N
C.8 Light and Noise Pollution Controls						
Action EP 8.1	Lighting Regulation	PW, CAO, INSP	Mid-term	Study/ plan		N
Action EP 8.2	Dark Sky Incentives	DCP, CMO	Mid-term	Study/ plan		N
C.9 Environmental Education, Awareness and Coordination						
Action EP 9.1	Environmental Education Programs	P&R	Mid-term	Coordination/ outreach		N
Action EP 9.2	Public School Environmental Component	P&R, WCPSS	Short-term	Coordination/ outreach		N
Action EP 9.3	Renewable Energy Education	CMO	Short-term	Coordination/ outreach		N
Action EP 9.4	Community Gardening	P&R, DCP, CS	Long-term	Study/ plan		N
Element D Economic Development						
D.1 Commercial Corridor Reinvestment						
Action ED 1.1	Strategic Revitalization Plans	DCP	Mid-term	Study/ plan		N
Action ED 1.2	Mixed-Use Zoning Incentives	DCP, CAO	Short-term	Development regulations		N
Action ED 1.3	Shopping Center Revitalization Incentives	DCP, CMO, CD	On-going	Financial		N
Action ED 1.4	Retail Property Code Enforcement	DCP, CAO, INSP	Short-term	Development regulations		N
D.2 Neighborhood Reinvestment						
Action ED 2.1	Selecting Revitalization Focus Areas	DCP, CD	Short-term	Program/ organization		N
Action ED 2.2	Neighborhood Quality Teams	CMO, CS, CD, INSP	On-going	Systems/ support		N
Action ED 2.3	Developing Funding Resources	CMO, CD, DCP	Mid-term	Financial		N
Action ED 2.4	Site Acquisition	CMO	On-going	Systems/ support		N
Action ED 2.5	Neighborhood Grants for Community Benefits	CS, DCP	Mid-term	Study/ plan		Y
Action ED 2.6	Neighborhood Commercial Regulations	DCP, CAO	Short-term	Development regulations		N
D.3 Entrepreneurs and Business Development						
Action ED 3.1	Business Assistance Program	ASD	On-going	Systems/ support		N
Action ED 3.2	Entrepreneurial Education	DCP, CMO	On-going	Coordination/ outreach		N
Action ED 3.3	Wake Tech Green Collar Program	DCP, CMO	Long-term	Coordination/ outreach		N
Action ED 3.4	Home Based and Cottage Industry Regulation	DCP, CAO	Short-term	Development Regulations		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
D.4 Workforce Training and Access to Employment						
Action ED 4.1	Education and Emerging Sectors	DCP, CMO	On-going	Coordination/ outreach		N
Action ED 4.2	Summer Job Programs	CS	On-going	Coordination/ outreach		N
Action ED 4.3	Wake County Retraining Coordination	CS	On-going	Coordination/ outreach		N
D.5 Economic Development and Land Use						
Action ED 5.1	Certification of Industrial Sites	DCP	On-going	Coordination/ outreach		N
Action ED 5.2	Target Economic Development Plans	DCP, CD	On-going	Coordination/ outreach		N
Action ED 5.3	Infrastructure Investments in Underperforming Areas	DCP, PW	Mid-term	Study/ plan		N
Action ED 5.4	Capital Improvement Funding	DOF, ASD, DCP	On-going	Systems/ support		N
Action ED 5.5	Mixed-Use Zoning Incentives	DCP, CAO	Short-term	Development regulations		N
Action ED 5.6	Disposal of City-Owned Land	DCP, CAO, ASD	Mid-term	Program/ organization		N
D.6 Hospitality and Tourism						
Action ED 6.1	Downtown Cultural Investments	CMO, RCCC	On-going	Systems/ support		N
Action ED 6.2	Downtown Tourism Itineraries	DCP, RCCC, PA	Long-term	Coordination/ outreach		N
Action ED 6.3	Cultural Resource Preservation	DCP, CMO	Short-term	Development regulations		N
D.7 Creative Industries						
Action ED 7.1	Adaptive Reuse for the Arts	DCP	Short-term	Study/ plan		N
Action ED 7.2	Downtown Arts Development	CMO, DCP	Short-term	Program/ organization		N
D.8 Organization Structure and Functions						
Action ED 29	Economic Development Vision and Strategic Plan	DCP, CMO, CD	Mid-term	Study/ plan		N
Action ED 30	Economic Development Annual Report	DCP	Long-term	Program/ organization		N
Action ED 31	Economic Development Administration	DCP, CMO	Mid-term	Program/ organization		N
Action ED 32	Economic Development Communication	DCP, CMO	Short-term	Coordination/ outreach		N
Action ED 33	Reinvestment Partnerships	DCP, CMO	On-going	Coordination/ outreach		N
Action ED 34	Economic Development Website	DCP	Short-term	Program/ organization		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action ED 35	Prioritization Methodology	DCP, CD	Short-term	Program/ organization		N
Element E Housing						
H.1 Quality and Diversity of Housing						
Action H 1.1	Affordable Rental Program Expansion	CD	On-going	Systems/ support		N
Action H 1.2	Zoning for Mixed Income	DCP, CAO	Short-term	Development regulations		N
Action H 1.3	Zoning for Housing Diversity	DCP, CAO	Short-term	Development regulations		N
Action H 1.4	Consistency Between Plans	DCP, CD, RHA	On-going	Coordination/ outreach		N
Action H 1.5	City and RHA Meetings	DCP, CD, RHA	On-going	Coordination/ outreach		N
H.2 Affordable and Workforce Housing						
Action H 2.1	Housing Trust Fund	CD	Mid-term	Financial		N
Action H 2.2	Community Land Trust	CD	Mid-term	Program/ organization		N
Action H 2.3	Inclusionary Housing Ordinance	CD, DCP	Mid-term	Program/ organization		N
Action H 2.4	Bundling Public Sites	CD, DCP, CAO	Mid-term	Systems/ support		N
Action H 2.5	Scattered Site Policy Change	CD, DCP	Short-term	Systems/ support		N
Action H 2.6	Review of Housing Loan Policies	CD	Mid-term	Study/ plan		N
Action H 2.7	Fast-Tracking Affordable Units	DCP, CAO	Short-term	Development regulations		N
Action H 2.8	Review of Potential Barriers	DCP, CAO	Short-term	Development regulations		N
Action H 2.9	Accessory Unit Standards	DCP, CAO	Short-term	Development regulations		N
Action H 2.10	Education Material for Removing Barriers					
Action H 2.11	Parking Reductions	DCP, CAO	Short-term	Development regulations		N
Action H 2.12	Monitoring of Expiring Subsidies	CD	On-going	Systems/ support		N
Action H 2.13	Foreclosure Acquisition	CD	Mid-term	Study/ plan		Y
Action H 2.14	Impact Fee Waivers	DOF, DCP	Mid-term	Financial		N
Action H 2.15	Affordable Property Assessments	DOF	Short-term	Study/ plan		N
Action H 2.16	Housing Program Capacity	CD, PERS	On-going	Systems/ support		N
Action H 2.17	Land for Affordable Housing	CD, CMO		Program/ organization		
Action H 2.18	Sustainability Incentives	DCP, CMO, CD	Mid-term	Program/ organization		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action H 2.19	Create Partnership Program	CD	Mid-term	Program/ organization		N
Action H 2.20	Projects Involving City Owned Land	CMO, DCP	Short-term	Program/ organization		N
Action H 2.21	Affordable Housing Production Goal	CD, DCP	Short-term	Study/ plan		N
Action H 2.22	Non-Profit Support	CMO, CD	Mid-term	Financial		Y
H.3 Supportive and Special Needs Housing						
Action H 3.1	Ending Homelessness Action Plan					
Action H 3.2	Very Low Income Rentals	CD	On-going	Systems/ support		N
Action H 3.3	Transitional and Emergency Housing	CD, CMO	On-going	Financial		N
Action H 3.4	Eliminating Barriers to Supportive Housing	DCP, CAO	Short-term	Development regulations		N
Action H 3.5	Rooming House and Transitional Housing	DCP, CAO	Short-term	Development regulations		N
H.4 Fair Housing, Universal Access and Aging in Place						
Action H 4.1	Tax Relief for Seniors	DOF, CD	Mid-term	Study/ plan		N
Action H 4.2	Fair Housing Ordinance Review	CD, CAO	Short-term	Development regulations		N
Action H 4.3	Aging in Place	DCP, CAO	Short-term	Development regulations		N
Action H 4.4	City Sponsored Residential Construction and Rehabilitation	CD	On-going	Program/ organization		N
Action H 4.5	Focus on the Housing Needs of the Physically Challenged	DCP, CAO	Short-term	Development regulations		N
Element F Parks, Recreation and Open Space						
F.1 Planning for Parks						
Action PR 1.1	Parks Plan Update	P&R	On-going	Study/ plan		N
Action PR 1.2	Greenway Plan Update	P&R	Short-term	Study/ plan		N
F.2 Park System and land Acquisition						
Action PR 2.1	Innovative Strategies for Acquisition	P&R	Short-term	Study/ plan		N
Action PR 2.2	Grant Requests and Partnerships	P&R	On-going	Systems/ support		N
Action PR 2.3	Parkland Search Methodologies	P&R	On-going	Systems/ support		N
Action PR 2.4	Facility Fee for Acquiring and Developing New Parks	P&R	On-going	Systems/ support		N
Action PR 2.5	Zoning Incentives for Recreation	DCP, P&R	Short-term	Development regulations		N
F.3 Greenway System Land and Trails						
Action PR 3.1	Capital Area Greenway	P&R	Long-term	Systems/ support		Y
Action PR 3.2	Neuse River Land Acquisition	P&R	On-going	Systems/ support		Y
Action PR 3.3	Neuse River Trail	P&R	Mid-term	Systems/ support		Y
Action PR 3.4	Stream Buffer Acquisition	P&R	On-going	Systems/ support		Y
F.4 Recreational Facilities and Programs						

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action PR 4.1	ADA Accessibility Plan	P&R	Short-term	Study/ plan		Y
Action PR 4.2	Sustainable Practice Development	P&R	Short-term	Program/ organization		N
Action PR 4.3	Open Space in New Development	DCP, CAO, P&R	Short-term	Development regulations		N
Action PR 4.4	Creating Opportunities for Active Living Choices	P&R	On-going	Systems/ support		Y
Action PR 4.5	Performance Standards for Recreation Facilities	DCP, CAO, P&R	Short-term	Development regulations		N
Action PR 4.6	Comprehensive Aquatics Plan	P&R	Short-term	Systems/ support		Y
Action PR 4.7	Senior Center Feasibility Study	P&R	Mid-term	Systems/ support		Y
F.5 Open Space and Special Landscapes						
Action PR 5.1	Mandatory Greenway Dedication	P&R	On-going	Systems/ support		N
Action PR 5.2	Code Requirements for Accessible Open Space	DCP, CAO, P&R	Short-term	Development regulations		N
Action PR 5.3	Streetscape, Gateway and Public Space Improvements	P&R, CMO	On-going	Systems/ support		N
Action PR 5.4	Identifying Conservation Lands	P&R	Short-term	Study/ plan		N
F.6 Management and Stewardship						
Action PR 6.1	Innovative Maintenance Strategies	P&R	Long-term	Program/ organization		N
Action PR 6.2	Adopt-A-Park/ Adopt-A-Trail	P&R	Mid-term	Systems/ support		Y
Action PR 6.3	System Integration Plan Implementation	P&R	On-going	Systems/ support		N
Action PR 6.4	Historic Cemeteries	P&R	Mid-term	Systems/ support		Y
Action PR 6.5	Awareness of Natural Resource Areas	P&R	On-going	Coordination/ outreach		N
Action PR 6.6	Stewardship Capacity	P&R, CMO	Mid-term	Systems/ support		N
Element G Public Utilities						
G.1 Sytems and Adequacy						
Action PU 1.1	Infrastructure Plans and Future Land Use Map	CORPUD	Short-term	Study/ plan		N
Action PU 1.2	Enterprise Resource Planning and Utility Rates	CORPUD, IT, DOF	Mid-term	Program/ organization		N
G.2 Utility Extensions						
Action PU 2.1	Update of Municipal Code	DCP, CAO, CORPUD	Short-term	Development regulations		N
Action PU 2.2	Utility Plan Updates	CORPUD	On-going	Study/ plan		N
Action PU 2.3	Reuse Pipe Ordinance	DCP, CAO, CORPUD	Short-term	Development regulations		N
Action PU 2.4	Dual Plumbing Incentives	CORPUD	Mid-term	Study/ plan		N
Action PU 2.5	Merger Town Development Policies Regarding Utilities	DCP, CORPUD	On-going	Coordination/ outreach		N
G.3 Drinking Water						
Action PU 3.1	Falls Lake Water Supply Study	CORPUD	Short-term	Study/ plan		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action PU 3.2	Water Saving Devices	DCP, CAO, CORPUD	Short-term	Development regulations		N
Action PU 3.3	Slow the Flow	CORPUD, PA	On-going	Systems/ support		N
Action PU 3.4	Drought Tolerant Landscaping	DCP, CAO, P&R	Short-term	Development regulations		N
Action PU 3.5	Water Saving Incentives	CORPUD	Mid-term	Study/ plan		N
G.4 Wastewater Collection and Dispersal						
Action PU 4.1	Residential FOG Collection and Reuse Program	CORPUD, SWS	Mid-term	Program/ organization		N
Action PU 4.2	Pigeon House Branch Demonstration Project	CORPUD	Mid-term	Study/ plan		Y
Action PU 4.3	Biosolids Target	CORPUD	Long-term	Program/ organization		N
Action PU 4.4	Methane Capture at Neuse River Plant	CORPUD	Mid-term	Program/ organization		N
Action PU 4.5	Solar Arrays at Neuse River Plant	CORPUD	Long-term	Study/ plan		Y
G.5 Stormwater						
Action PU 5.1	System Inventory and Illicit Discharge Protocol	PW	Mid-term	Program/ organization		N
Action PU 5.2	Stormwater Fee Review	PW	On-going	Systems/ support		N
Action PU 5.3	Drainage Basin Studies	PW	Long-term	Study/ plan		N
Action PU 5.4	Green Infrastructure Study	PW, P&R	Mid-term	Study/ plan		N
Action PU 5.5	Stormwater Basin Solids Removal	PS	Long-term	Coordination/ outreach		N
G.6 Energy and Telecommunications						
Action PU 6.1	Distributed Generation Pilot Project	PS	Long-term	Program/ organization		N
Action PU 6.2	Cogeneration Pilot Project	PS	Mid-term	Study/ plan		N
Action PU 6.3	Coordination with Utility	DCP, CORPUD, PW	On-going	Coordination/ outreach		N
Element H Community Facilities and Services						
H.1 Community Facilities and Services						
Action CS 1.1	Land Demand Projections	DCP, various	On-going	Study/ plan		N
Action CS 1.2	Sustainable Development Plans	ASD, various	Mid-term	Study/ plan		N
Action CS 1.3	Land Acquisition	ASD, P&R, RFD, CORPUD	On-going	Systems/ support		Y
Action CS 1.4	Development Plans Review Group	CMO	Short-term	Program/ organization		N
Action CS 1.5	Building Design Team	CMO, P&R	Short-term	Program/ organization		N
Action CS 1.6	Retrofitting of Municipal Buildings	P&R	Long-term	Systems/ support		Y

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action CS 1.7	Shared Space	CMO	Mid-term	Coordination/ outreach		N
H.2 Solid Waste						
Action CS 2.1	Enterprise Resource Planning and Solid Waste	SWS, IT, DOF	Mid-term	Program/ organization		N
Action CS 2.2	Full-Cost Accounting for Waste Management	SWS	Mid-term	Systems/ support		N
Action CS 2.3	Mandatory Recycling	SWS	Mid-term	Study/ plan		N
Action CS 2.4	Solid Waste Monitoring	SWS	Short-term	Program/ organization		N
Action CS 2.5	Alternative Waste Disposal Techniques	SWS	Mid-term	Study/ plan		N
Action CS 2.6	Solid Waste Services and Site Plan Review	SWS, CMO	Short-term	Coordination/ outreach		N
Action CS 2.7	Regulations for Recyclables Storage	DCP, CAO	Short-term	Development regulations		N
Action CS 2.8	Retrofits to Facilitate Recycling	SWS, DCP	Mid-term	Study/ plan		N
H.3 Public Safety						
Action CS 3.1	CPTED Development Plan Review	RPD, DS	Short-term	Systems/ support		N
Action CS 3.2	CPTED Partnerships	RPD, DCP	Mid-term	Study/ plan		N
Action CS 3.3	Police Facility Plan	RPD	Mid-term	Study/ plan		N
Action CS 3.4	NE/NW Raleigh Field Offices	RPD	Mid-term	Study/ plan		N
Action CS 3.5	Training Facility Economics	RPD	Short-term	Study/ plan		N
Action CS 3.6	Police Training Center	RPD, PW	Short-term	Systems/ support		N
Action CS 3.7	Field Operation Units	RFD	On-going	Study/ plan		N
H.4 Fire and Emergency						
Action CS 4.1	Measuring Level of Service	DCP, RFD, RPD	Short-term	Program/ organization		N
H.5 Health and Human Services						
Action CS 5.1	Zoning for Health and Human Services	DCP	Short-term	Development regulations		N
Element I Urban Design						
I.1 Raleigh's Identity						
Action UD 1.1	Downtown Wayfinding Improvements	PW, DCP	Mid-term	Systems/ support		Y
Action UD 1.2	Falls of Neuse Corridor	DCP, PW	On-going	Systems/ support		N
Action UD 1.3	US-401 Corridor	DCP	On-going	Systems/ support		N
Action UD 1.4	Gateway Design in Focus Areas	DCP, PW, P&R	Mid-term	Program/ organization		Y
Action UD 1.5	New Bern Planting Guidelines	PW, P&R	On-going	Systems/ support		N
Action UD 1.6	Using Zoning to Achieve Design Goals	DCP, CAO	Short-term	Development regulations		N
I.2 Design of Mixed-Use Developments						

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action UD 2.1	Regulatory Barriers to Mixed Use	DCP, CAO	Short-term	Development regulations		N
Action UD 2.2	Setbacks for Taller Buildings	DCP, CAO	Short-term	Development regulations		N
I.3 Appearance and Function of Raleigh's Corridors						
Action UD 3.1	Corridor Overlay Districts	DCP, CAO	Short-term	Development regulations		N
Action UD 3.2	Undergrounding Utilities	PW	Long-term	Systems/ support		Y
Action UD 3.3	Parking Lot Design Standards	DCP, CAO	Short-term	Development regulations		N
Action UD 3.4	Interstate Signage	PW	Long-term	Coordination/ outreach		N
I.4 Creating Inviting Public Spaces						
Action UD 4.1	Open Space Standards	DCP, CAO	Short-term	Development regulations		N
I.5 Designing Successful Neighborhoods						
Action UD 5.1	LEED-ND Program	DCP, ASD	Long-term	Systems/ support		N
Action UD 5.2	Retaining Landscaping	DCP, CAO	On-going	Development regulations		N
I.6 Pedestrian-Friendly Design						
Action UD 6.1	New Planting Techniques	DCP, P&R	Mid-term	Study/ plan		N
Action UD 6.2	Street Tree Provisions	DCP, P&R, CAO	Short-term	Development regulations		N
I.7 Design Guidelines						
Action UD 7.1	Lighting Standards	DCP, CAO	Short-term	Development regulations		N
Action UD 7.2	Zoning Code Review	DCP, CAO	Short-term	Development regulations		N
Action UD 7.3	Street, Sidewalk, and Driveway Handbook Revision	DCP, PW	Short-term	Development regulations		N
Action UD 7.4	Transit Supportive Design Guidelines	DCP, CAO	Short-term	Development regulations		N
Action UD 7.5	Siting of Service Equipment	DCP, CAO	Short-term	Development regulations		N
Action UD 7.6	Sign Ordinance Revisions	DCP, CAO	Short-term	Development regulations		N
Action UD 7.7	PBOD and PD-CU Overlay Revisions	DCP, CAO	Short-term	Development regulations		N
Action UD 7.8	Unity of Development	DCP, CAO	Short-term	Development regulations		N
Element J Historic Preservation						

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
J.1 Raleigh's Historic Identity						
Action HP 1.1	Historic View Corridors	DCP	Mid-term	Study/ plan		N
Action HP 1.2	Evaluation of Archaeological Significance	DCP	Short-term	Study/ plan		N
Action HP 1.3	Cultural Tourism Marketing	DCP, RCCC	On-going	Coordination/ outreach		N
Action HP 1.4	Wayfinding Signage	DCP, PW	Long-term	Systems/ support		N
Action HP 1.5	Special Street Signs	DCP, PW	Mid-term	Study/ plan		N
J.2 Planning, Zoning and Neighborhood Conservation						
Action HP 2.1	Existing Survey and Designation Reports	DCP	Mid-term	Study/ plan		N
Action HP 2.2	Periodic Updates of Survey	DCP	On-going	Study/ plan		N
Action HP 2.3	Historic Resource GIS Data	DCP, IT	On-going	Systems/ support		N
Action HP 2.4	Historic Landscape Surveys	DCP	Mid-term	Study/ plan		N
Action HP 2.5	Local Landmark Designation	DCP	Mid-term	Program/ organization		N
Action HP 2.6	Downtown Historic Overlays	DCP, CAO	Short-term	Development regulations		N
Action HP 2.7	Applying Zoning Regulations and Planning Tools	DCP, CAO	On-going	Development regulations		N
Action HP 2.8	Transfer of Development Rights	DCP	Mid-term	Study/ plan		N
Action HP 2.9	Limited Historic Overlay District	DCP	Short-term	Study/ plan		N
Action HP 2.10	Preservation Criteria for Capital Projects	DCP	Mid-term	Program/ organization		N
Action HP 2.11	Assessing Impacts to Historic Resources	DCP, CAO, INSP	Short-term	Development regulations		N
Action HP 2.12	Economic Hardship Provisions	DCP	Mid-term	Program/ organization		N
J.3 Housing and Building Codes, Rehabilitation, and Adaptive Reuse						
Action HP 3.1	Parking Reduction for Adaptive Use	DCP	On-going	Systems/ support		N
Action HP 3.2	Historic Resources and Affordable Housing	DCP	Mid-term	Study/ plan		N
Action HP 3.3	Housing Code and Preservation Coordination	DCP, INSP	On-going	Coordination/ outreach		N
Action HP 3.4	City Repair and/or Acquisition	DCP, INSP	Mid-term	Program/ organization		N
Action HP 3.5	Unsafe Building Code and Preservation	DCP, INSP	Mid-term	Study/ plan		N
Action HP 3.6	Demolition Permit Conditions	DCP, CAO, INSP	Short-term	Development regulations		N
Action HP 3.7	Demolition Denial Criteria	DCP, INSP	Short-term	Study/ plan		N
J.4 Coordination and Outreach						
Action HP 4.1	Public Outreach	DCP	On-going	Coordination/ outreach		N
Action HP 4.2	Preservation Advocacy Group	DCP	Long-term	Program/ organization		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action HP 4.3	Rehabilitation Development Corporation	DCP, CD	Long-term	Program/ organization		N
Action HP 4.4	*In The Districts* Newsletter	DCP	Short-term	Systems/ support		N
Action HP 4.5	Certified Local Government	DCP	On-going	Systems/ support		N
Action HP 4.6	Preserve America Designation	DCP	Mid-term	Coordination/ outreach		N
J.5 Funding and Incentives						
Action HP 5.1	Historic Overlay District Tax Deferral	DCP	Mid-term	Coordination/ outreach		N
Action HP 5.2	Historic Preservation Loan Fund	DCP	Mid-term	Study/ plan		N
Action HP 5.3	Preservation Easements and Acquisition	DCP	On-going	Coordination/ outreach		N
Action HP 5.4	Preserve America Grants	DCP	On-going	Financial		N
Action HP 5.5	Property Tax Freeze for Certified Rehab	DCP	Mid-term	Coordination/ outreach		N
Element K Arts and Culture						
K.1 Public Art						
Action AC 1.1	Comprehensive Art Program	CMO	Short-term	Coordination/ outreach		N
Action AC 1.2	Public Art Master Plan	CMO, DCP, P&R	Mid-term	Study/ plan		N
Action AC 1.3	Public Art Approval Process	CMO	Short-term	Program/ organization		N
Action AC 1.4	Public Art Funding	CMO	Mid-term	Study/ plan		N
Action AC 1.5	Density Bonuses for Art	DCP, CAO	Long-term	Study/ plan		N
Action AC 1.6	Downtown Art Installations	CMO	Mid-term	Systems/ support		Y
K.2 Art and Entertainment Districts						
Action AC 2.1	Arts Overlay Zones	DCP, CAO	Short-term	Development regulations		N
Action AC 2.2	Cultural Enterprise Zones	DCP, CAO	Short-term	Development regulations		N
Action AC 2.3	Arts in RFPs	DCP, CMO	Short-term	Development regulations		N
Action AC 2.4	Moore Square, Glenwood and Warehouse Arts Districts	DCP, CAO	Short-term	Development regulations		N
K.3 Arts and Cultural Venues						
Action AC 3.1	Underwriting Arts Costs	P&R, CMO	Short-term	Program/ organization		N
Action AC 3.2	Venue Inventory	CMO, P&R	On-going	Systems/ support		N
Action AC 3.3	Live/Work Regulations	DCP, CAO	Short-term	Development regulations		N
K.4 Economic Development Through the Arts						

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action AC 4.1	Attracting Artists	CMO	On-going	Program/ organization		N
Action AC 4.2	Arts and Music Partnership	CMO	Mid-term	Program/ organization		N
Action AC 4.3	Cultural Directory	CMO	Short-term	Coordination/ outreach		N
Action AC 4.4	Cultural Tours	CMO	On-going	Coordination/ outreach		N
Action AC 4.5	Action Blueprint for Raleigh Arts	CMO	On-going	Systems/ support		N
K.5 Artistic and Cultural Identity						
Action AC 5.1	South Park and Olde East Cultural District	DCP, CD	Short-term	Systems/ support		N
Action AC 5.2	Cultural Heritage Office	DCP, CMO, RCCC	Long-term	Program/ organization		N
Element L Regional and Inter-Jurisdictional Coordination						
L.1 Transportation Investments						
Action RC 1.1	Transit Agency Coordination Plan	PW	Mid-term	Study/ plan		N
Action RC 1.2	Regional Transit Vision	PW	Mid-term	Financial		Y
Action RC 1.3	Sales Tax Feasibility Study	DCP, PW	Short-term	Coordination/ outreach		N
L.2 Land Use and Growth Management						
Action RC 2.1	Regional Growth Management Agreement	DCP, CMO	Mid-term	Coordination/ outreach		N
Action RC 2.2	Regional Growth Management Initiatives	DCP, PW	On-going	Coordination/ outreach		N
Action RC 2.3	State and County Role in Park Acquisition	P&R, CMO	Long-term	Coordination/ outreach		N
Action RC 2.4	Rural Development Guidelines	DCP, CAO	Short-term	Development regulations		N
Action RC 2.5	Developments of Regional Impact	PW, DCP	On-going	Coordination/ outreach		N
Action RC 2.6	Regional Land Use Maps	DCP	Mid-term	Program/ organization		N
Action RC 2.7	Inter-local Agreement on Affordable Housing	CMO	Mid-term	Coordination/ outreach		N
L3. Economic Develompent Initiatives						
Action RC 3.1	Job Retraining Programs	DCP, CMO	On-going	Coordination/ outreach		N
Action RC 3.2	Research Triangle Regional Partnership	DCP, CMO	On-going	Coordination/ outreach		N
Action RC 3.3	Green Technology Strategy	DCP, CMO	Mid-term	Study/ plan		N
L.4 Education Investments						

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action RC 4.1	School Enrollment Projections	DC	On-going	Systems/ support		N
Action RC 4.2	Financing of School Construction	DCP, DOG	Short-term	Study/ plan		N
Action RC 4.3	Partnerships with Design and Construction Staff					
Action RC 4.4	Rezoning Impacts on Schools	DCP	Short-term	Systems/ support		N
Action RC 4.5	Distance Learning	IT, HR	Long-term	Coordination/ outreach		N
Action RC 4.6	Pedestrian Access to Schools	DCP	On-going	Coordination/ outreach		N
Action RC 4.7	School Site Location Working Group	DCP	Short-term	Coordination/ outreach		N
L.5 Public Libraries						
Action RC 5.1	Downtown and North Hills Branch Libraries	CMO	Short-term	Coordination/ outreach		Y
Action RC 5.2	Wake County Coordination on Library Siting	DCP	On-going	Systems/ support		N
L.6 Environmental Sustainability and Natural Resources						
Action RC 6.1	Neuse River Corridor Extension	P&R	Long-term	Study/ plan		Y
Action RC 6.2	Participation in UNRBA Initiatives	PW, CORPUD	On-going	Coordination/ outreach		N
Action RC 6.3	Stormwater Discharge Alternatives					
Action RC 6.4	Air Pollution Mitigation Projects	PW	Mid-term	Study/ plan		N
Action RC 6.5	Regional Open Space Plan	DCP, P&R	Mid-term	Study/ plan		N
Action RC 6.6	Regional Climate Action Planning	DCP	Long-term	Study/ plan		N
Action RC 6.7	Wildlife Habitats	DCP, P&R	On-going	Coordination/ outreach		N
L.7 Public Facilities and Infrastructure						
Action RC 7.1	Solid Waste Plan Implementation	SWS	On-going	Systems/ support		N
Action RC 7.2	Emergency Water Transmission	CORPUD	On-going	Coordination/ outreach		N
Action RC 7.3	Landfill Capacity Monitoring	SWS	On-going	Systems/ support		N
Action RC 7.4	Regional Stormwater Management Plan	PW	On-going	Systems/ support		N
Element M Downtown Raleigh						
M.1 Future Land Uses						
Action DT 1.1	Downtown Zoning District	DCP, CAO	Short-term	Development regulations		N
Action DT 1.2	Form-Based Zoning in Downtown	DCP	Short-term	Study/ plan		N
Action DT 1.3	Downtown Plan	DCP	Short-term	Study/ plan		N
Action DT 1.4	Downtown Infrastructure	PW, CORPUD	Short-term	Study/ plan		N
Action DT 1.5	Downtown Strategic Plan Update	DCP, PW	Mid-term	Study/ plan		N
Action DT 1.6	Development Site Database	DCP	Mid-term	Study/ plan		N
Action DT 1.7	Disposal of City-Owned Land	DCP, CMO, ASD	Mid-term	Study/ plan		N
Action DT 1.8	Identifying Transition Areas	DCP	Short-term	Study/ plan		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action DT 1.9	Density Bonuses for Public Benefits	DCP, CAO	Short-term	Development regulations		N
Action DT 1.10	Zoning and High Density Development	DCP, CAO	Short-term	Development regulations		N
Action DT 1.11	Regulation of Drive-Through Uses	DCP, CAO	Short-term	Development regulations		N
M.2 Transportation						
Action DT 2.1	Expand the Downtown Grid	DCP, PW	Long-term	Study/ plan		Y
Action DT 2.2	Lane Striping Study	PW	Mid-term	Study/ plan		N
Action DT 2.3	Downtown Public Realm Study	DCP, PW, P&R	Mid-term	Systems/ support		Y
Action DT 2.4	No Right on Red	DPW, PW	Short-term	Study/ plan		N
Action DT 2.5	Downtown Street Design Standards	DCP, CAO, PW	Short-term	Development regulations		N
Action DT 2.6	Priority Pedestrian Street Improvements	DCP, PW, ASD	Mid-term	Systems/ support		Y
Action DT 2.7	Pedestrian Counts	PW, DCP	On-going	Study/ plan		N
Action DT 2.8	Green Street Design Standards	PW, DCP, P&R	Long-term	Study/ plan		N
Action DT 2.9	Incorporate Greenways in the Pedestrian Network	PW, P&R, DCP	Mid-term	Systems/ support		N
Action DT 2.10	Alleyway Study	PW, DCP	Mid-term	Study/ plan		N
Action DT 2.11	Downtown Circulators	PW	Mid-term	Systems/ support		Y
Action DT 2.12	Downtown Fixed Rail Transit Study	DCP, PW	Short-term	Study/ plan		N
Action DT 2.13	Car Sharing and City Vehicles	PW	Short-term	Program/ organization		N
Action DT 2.14	Moore Square Station Redesign	PW, DCP	Mid-term	Systems/ support		Y
Action DT 2.15	Downtown Parking Master Plan	PW, DCP	Short-term	Systems/ support		N
Action DT 2.16	Downtown Parking Model					
Action DT 2.17	Curb Parking Inventory	PW	Mid-term	Study/ plan		N
Action DT 2.18	Parking In-Lieu Fee	DCP, CAO, PW	Mid-term	Development regulations		N
Action DT 2.19	Downtown Loading and Service Regulations	DCP, CAO, PW	Short-term	Development regulations		N
M.3 Economic Development						
Action DT 3.1	Financial Assistance for New Retailers	DCP, CMO	Long-term	Study/ plan		N
Action DT 3.2	Façade Improvement Incentives	DCP	Short-term	Development regulations		N
Action DT 3.3	Retail Study Implementation	DCP	Mid-term	Coordination/ outreach		N
Action DT 3.4	Downtown Retail Space Inventory	DCP	On-going	Coordination/ outreach		N
Action DT 3.5	Downtown Economic Development Study	DCP	Mid-term	Study/ plan		N
Action DT 3.6	Promotion of Downtown Assistance Programs	DCP, CMO	Mid-term	Coordination/ outreach		N

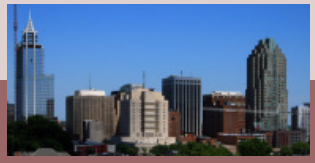
Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action DT 3.7	Coordinating Downtown Business Programs	DCP, CMO	Long-term	Coordination/ outreach		N
Action DT 3.8	Heritage Tourism in Downtown	DCP, PA	Mid-term	Coordination/ outreach		N
Action DT 3.9	Concessions in Downtown Squares	DCP, P&R, CMO, CAO	Long-term	Coordination/ outreach		N
Action DT 3.10	Coordinating Heritage Tourism Organizations	RCCC	On-going	Coordination/ outreach		N
Action DT 3.11	Support for Creative Talent	CMO	Long-term	Program/ organization		N
Action DT 3.12	Recruiting Hospitality Uses	CMO, DCP	On-going	Coordination/ outreach		N
M.4 Housing						
Action DT 4.1	Zoning for Downtown Housing	DCP, CAO	Short-term	Development regulations		N
Action DT 4.2	Promoting Downtown as a Neighborhood	DCP	Short-term	Coordination/ outreach		N
Action DT 4.3	Tools and Regulations for Affordable Housing	DCP, CAO, CD	Short-term	Development regulations		N
M.5 Parks, Recreation and Open Space						
Action DT 5.1	Fees for Open Space	DCP, DOG, P&R	Long-term	Program/ organization		N
Action DT 5.2	Downtown Parks Plan	P&R, DCP	Short-term	Study/ plan		Y
Action DT 5.3	Development Regulations for Open Space	DCP, CAO	Short-term	Development regulations		N
Action DT 5.4	BID Open Space Improvements	CMO	Mid-term	Systems/ support		N
Action DT 5.5	Halifax Mall	DCP, P&R	Short-term	Study/ plan		N
Action DT 5.6	Chavis Park	P&R	Mid-term	Study/ plan		Y
Action DT 5.7	Downtown College Open Space	P&R	On-going	Coordination/ outreach		Y
M.6 Community Facilities and Services						
Action DT 6.1	Downtown Library	DCP, WCCS	Mid-term	Coordination/ outreach		N
M.7 Urban Design						
Action DT 7.1	Managing High-Rise Impacts	DCP, CAO	Short-term	Development regulations		N
Action DT 7.2	Downtown Planting Standards	DCP, P&R	Short-term	Development regulations		N
Action DT 7.3	Nash and Moore Square Improvements	DCP, P&R	Long-term	Study/ plan		Y
Action DT 7.4	Caswell Square	DCP, P&R, ASD	Long-term	Coordination/ outreach		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action DT 7.5	Moore and Nash Square Ownership	CMO, P&R	Long-term	Program/ organization		N
Action DT 7.6	Regulations for Building Crowns	DCP, CAO	Short-term	Development regulations		N
Action DT 7.7	Reopening New Bern	PW	Long-term	Study/ plan		N
Action DT 7.8	Wayfinding System Development	DCP, PW	Short-term	Study/ plan		Y
AREA PLANS						
AP-1. Arena Small Area Plan (adopted 7/17/01)						
Action AP-A-1	Hillsborough Street Streetscape Improvements	DCP, PW	Long-term	Program/ organization		Y
Action AP-A-2	Trinity Road Streetscape Plan	DCP	Mid-term	Study/ plan		N
Action AP-A-3	Arena Area Bus Line	PW	Mid-term	Systems/ support		Y
AP-2. Avent West Neighborhood Plan (adopted 3/15/05)						
Action AP-AW-1	Traffic Calming on Beltline Accessways	PW	Mid-term	Study/ plan		N
Action AP-AW-2	Kent Road Parking	PW	Short-term	Study/ plan		N
Action AP-AW-3	Avent West Stop Signs	PW	Short-term	Study/ plan		N
Action AP-AW-4	Avent Ferry Crosswalk	PW	Short-term	Systems/ support		Y
Action AP-AW-5	Avent West Greenway Links	P&R, PW	Long-term	Systems/ support		Y
Action AP-AW-6	Athens Drive School Crossing	PW	Mid-term	Study/ plan		N
Action AP-AW-7	Athens West Sidewalks	PW, P&R	Mid-term	Study/ plan		N
Action AP-AW-8	Lake Dam Road Crosswalk	PW	Short-term	Systems/ support		Y
Action AP-AW-9	Western Boulevard Median Replacement	PW	Mid-term	Systems/ support		N
AP-3. Brier Creek Village Center Plan (adopted 4/6/04)						
Action AP-BC-1	Brier Creek Parkway Transit Easement	DCP	Short-term	Systems/ support		N
Action AP-BC-2	CORE Transit Loop Coordination	DCP, PW	On-going	Coordination/ outreach		N
Action AP-BC-3	Brier Creek Village Center Traffic Planning Coordination	PW, DCP	On-going	Study/ plan		N
AP-4. Cameron Park Neighborhood Plan (adopted 7/20/04)						
Action AP-AP-1	Hillsborough Streetscape Improvements	PW, DCP	Mid-term	Systems/ support		Y
Action AP-AP-2	Cameron Park Neighborhood Conservation Overlay District	DCP, CAO	Short-term	Development regulations		N
Action AP-AP-3	Cameron Park Mixed Use Zoning	DCP, CAO	Short-term	Development regulations		N
Action AP-AP-4	West Park Drive Curb	PW	Mid-term	Systems/ support		Y
Action AP-AP-5	College Place Parking Study	PW	Short-term	Study/ plan		N
Action AP-AP-6	Oberlin Road Lane Study	PW	Mid-term	Study/ plan		N
AP-5. Crabtree Small Area Plan (adopted 6/4/02)						
Action AP-C-1	Glenwood Avenue Pedestrian Bridge	PW, PRIV	Short-term	Systems/ support		Y
AP-6. Downtown West Gateway						
Action AP-DWG-1	Downtown Overlay District	DCP, CAO	Short-term	Development regulations		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action AP-DWG-2	Industrial-2 Rezoning	DCP, CAO	Short-term	Development regulations		N
Action AP-DWG-3	South Saunders Rezoning	DCP, CAO	Short-term	Development regulations		N
Action AP-DWG-4	Two-Way Traffic Conversions	PW, DCP	Short-term	Development regulations		Y
Action AP-DWG-5	Streetscape Improvements	DCP, PW	Mid-term	Systems/ support		Y
Action AP-DWG-6	Air Rights	DCP	Mid-term	Study/ plan		N
Action AP-DWG-7	Railroad Wye Rail Yard	DCP, PW	Short-term	Study/ plan		N
Action AP-DWG-8	S. West Street Extension	PW, DCP	Short-term	Study/ plan		N
Action AP-DWG-9	Street and Pedestrian Connections	PW, DCP	Short-term	Study/ plan		N
Action AP-DWG-10	Boylan Avenue Pedestrian Connection	PW, DCP	Short-term	Study/ plan		N
Action AP-DWG-11	Rosengarten Greenway	P&R, DCP	Mid-term	Systems/ support		Y
Action AP-DWG-12	Rosengarten Street Extension	PW, DCP	Mid-term	Systems/ support		N
Action AP-DWG-13	Saunders North Redevelopment Plan Funding	CD, DCP	Short-term	Financial		Y
AP-7. Falls of Neuse Corridor Plan (adopted 11/21/06)						
Action AP-FON-1	Falls of Neuse Multi-Purpose Path	PW	Short-term	Systems/ support		Y
Action AP-FON -2	Durant/Shadowlawn Drive Connections	PW, PRIV	Long-term	Systems/ support		N
Action AP-FON -3	Dehijuston/Raven Ridge Road Connection	PW, PRIV	Long-term	Systems/ support		N
Action AP-FON -4	Dunn/Falls of Neuse Access	PW, PRIV	Long-term	Study/ plan		N
Action AP-FON -5	Falls of Neuse/Wide River Drive Connection	PW, PRIV	Long-term	Systems/ support		Y
AP-12. King Charles Neighborhood Plan (adopted 9/21/04)						
Action AP-KC-1	King Charles Rezoning	DCP, CAO	Short-term	Development regulations		N
Action AP-KC-2	Longview Gardens Preservation	DCP	Mid-term	Study/ plan		N
Action AP-KC-3	King Charles Park Revitalization	P&R	Mid-term	Program/ organization		Y
Action AP-KC-4	Raleigh Blvd/New Bern Streetscape Improvements	DCP, PW	Long-term	Program/ organization		Y
Action AP-KC-5	New Bern Corridor Plan	DCP, PW	Short-term	Study/ plan		N
Action AP-KC-6	King Charles Traffic Circle	P&R	Mid-term	Systems/ support		Y
Action AP-KC-7	New Bern Bus Stop Improvements	PW	Mid-term	Systems/ support		Y
AP-13. Mission Valley Small Area Plan (adopted 4/17/07)						
Action AP-MV-1	Centennial to North Campus Connectivity	P&R, NCSU, PW	Mid-term	Systems/ support		Y
AP-14. Olde East Raleigh Small Area Plan (adopted 9/18/07)						
Action AP-OER-1	Olde East Raleigh NCOD	DCP, CAO	Short-term	Development regulations		N
Action AP-OER-2	Olde East Raleigh Capital Improvements	DCP, PW	On-going	Coordination/ outreach		Y
Action AP-OER-3	Olde East Raleigh Redevelopment Plan Amendments	CD, DCP	Mid-term	Study/ plan		N

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action AP-OER-4	Olde East Raleigh Rezoning	DCP, CAO	Short-term	Development regulations		N
AP-16. South Park Neighborhood Plan (adopted 5/15/07)						
Action AP-SC-1	South Park Pedestrian Improvements	PW	Mid-term	Systems/ support		Y
Action AP-SC-2	Garner Road Pedestrian Improvements	PW	Mid-term	Systems/ support		Y
Action AP-SC-3	South Park Redevelopment Plan Amendment	CD, DCP	Mid-term	Study/ plan		N
Action AP-SC-4	South Park Zoning Amendment	DCP, CAO	Short-term	Development regulations		N
AP-20. Wade-Oberlin Small Area Plan (adopted 11/5/03)						
Action AP-WO-1	Wade-Oberlin Streetscape Plan	DCP, PW	Mid-term	Study/ plan		Y
Action AP-WO-2	Daniels Street and Oberlin Road Cross-Section Standards	DCP, PW	Mid-term	Study/ plan		N
Action AP-WO-3	Oberlin Road Historic Program	DCP, CD		Coordination/ outreach		N
Action AP-WO-4	Wade-Oberlin Intersection Studies	PW	Short-term	Study/ plan		N
Action AP-WO-5	Cameron Village Bus Loop	PW	Long-term	Systems/ support		Y
Action AP-WO-6	Cameron Street Improvements	PW	Long-term	Coordination/ outreach		N
Action AP-WO-7	Wade-Oberlin Urban Greenway	P&R	Long-term	Study/ plan		Y
AP-21. Wake Crossroads Small Area Plan (adopted 2/15/05)						
Action AP-WC-1	Wake Crossroads Greenway	P&R	Long-term	Systems/ support		Y
Action AP-WC-2	Wake Crossroads Zoning	DCP, CAO	Short-term	Development regulations		N
Implementing the Plan						
Element N: Implementation						
N.1 Zoning Regulations and Consistency						
Action IM 1	Revision of Development Regulations	DCP, CAO	Short-term	Development regulations		N
Action IM 2	Annual Review of Development Regulations	DCP, CAO	Short-term	Development regulations		N
N.2 Relation to Capital Improvement Planning and Other City Plans						
Action IM 3	CIP Review Criteria	ASD, DCP, CMO	Short-term	Systems/ support		N
Action IM 4	Revision of Other Plans	DCP, various	Mid-term	Study/ plan		N
N.3 Comprehensive Plan Updates and Amendments						
Action IM 5	Amendment Process Protocol	DCP	Short-term	Program/ organization		N
Action IM 6	Annual Progress Report	DCP	Short-term	Program/ organization		N
Action IM 7	Monitoring of Existing Conditions	DCP, IT	Long-term	Program/ organization		N
Action IM 8	Community Inventory Updates	DCP	On-going	Systems/ support		N
N.4 Small Area Studies						

Number	Action	Responsible Agency	Time Frame	Action Type	Priority Level	Capital Funds Needed (Y/N)
Action IM 9	Area Study Priorities	DCP	Long-term	Study/ plan		N
Action IM 10	Area Studies and Comprehensive Plan Amendments	DCP	Short-term	Program/ organization		N
Action IM 11	Area Studies and the CIP	ASD	On-going	Program/ organization		N



Glossary

Glossary

The following Glossary of terms is provided as an aid in understanding and interpreting the Comprehensive Plan by defining terms that may not be familiar to all readers, or by clarifying their usage in the Plan. The glossary is not intended to be an instrument of policy.

Definitions found in this glossary were adapted from several sources, including A Planners Dictionary (Michael Davidson and Fay Dolnick, editors; American Planning Association, 2004); the websites for the Federal Highway Administration, the Environmental Protection Agency, and the International Association of Landscape Ecology; and Wikipedia.

The hyperlinks below provide an aid to navigation for the on-line and PDF versions of the Plan.

'A – D' | 'E – H' | 'I – L' | 'M – P' | 'Q – T' | 'U – Z'

A – D

Access management: Regulatory control of access to streets, roads, and highways from public roads and private driveways. Controls may include restrictions on the placement of interchanges, restrictions on the type, number, and location of access to roadways, and use of physical controls such as signals, channelization, and medians.

Accessory dwelling unit: A separate, complete dwelling unit with its own entrance, kitchen, sleeping area, and full bathroom facilities, which is an attached or detached extension to an existing single-family structure.

Adaptive use: The conversion of obsolete or historic buildings from their original or most recent use to a new use, for example, the conversion of former hospital or school buildings to residential use, or the conversion of an historic single-family home to office use.

Administrative approval: An official and binding decision delegated to government staff by elected or appointed public officials.

Air rights: The ownership or control of the volume of three-dimensional air space above a piece of land or existing building.

Alternative energy sources: Energy derived from sources that do not unsustainably deplete natural resources or harm the environment, such as wind and solar generated energy.

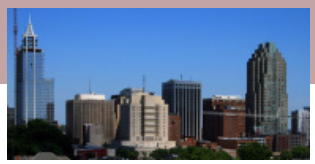
Americans with Disabilities Act (ADA): A federal law intended to provide disabled people with equitable living and working conditions. It prohibits employers from discriminating against qualified job applicants and workers who are or who become disabled and also sets requirements for handicapped accessibility.

Ancillary retail: The retail sales of various products in a store or similar facility that is located within and is secondary to a health care facility, hotel, residential development and/or office or industrial complex for the purpose of serving residents, employees, patrons, and visitors. These uses can include pharmacies, gift shops, and food service establishments.

Annexation: The incorporation of a land area into a municipal corporation with a resulting change in the corporate limits of that municipality. This is the process by which cities extend their municipal services, regulations, voting privileges, and taxing authority into new territory. Annexation can be voluntary (petitioned) or involuntary (city-initiated).

Area median family income (AMI): A commonly used measure of regional income in which the income of a family is defined as the combined pre-tax incomes of all residents over the age of 18 during a single-year period. The median is the number separating the higher half of all family incomes from the lower half.

Assisted housing: Government provision of housing for senior and disabled citizens, low-cost housing in multi-unit complexes that are available to low-income families, or rental vouchers that allow very low-income families to choose where they want to live.



Automobile dependency: A result of transportation and land use patterns that do not provide meaningful alternatives to private vehicular travel, such as convenient and efficient provisions for transit, pedestrian, or bicycle travel.

Auto-oriented businesses: Businesses that offer services for automobiles, such gas stations, auto repair, auto servicing, and auto sales. Also, business that are dependent on easy automobile access for success, like drive-through fast food restaurants.

Beltline: The Interstate Highway loop around Raleigh, composed of I-40 and I-440.

Best management practices (BMP): Methods, measures, practices, and maintenance procedures intended to prevent or reduce water pollution.

Big box: A large single-tenant, warehouse-like retail building, typically with large parking lot, such as membership buying clubs and home improvement stores. When grouped together, they form a *power center*.

Biodiversity: The variety of life and its activities that includes living things and the communities and ecosystems in which they occur, including genetic diversity within species, species diversity within a community, and diversity in a full range of biological communities.

Bio-solids: By-products of wastewater treatment that have been treated and stabilized to the extent that it is possible to beneficially re-use them, also known as sewage sludge.

Blight: Community deterioration that is characterized by obsolete, dilapidated, and/or abandoned buildings, unsanitary or unsafe conditions, and trash accumulation. The statutory definition of a "blighted area" can be found in the Urban Redevelopment Law, N.C.G.S. 160A-503.

Brownfield: Abandoned, idled, or under-used industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination. They can be in urban, suburban, or rural areas.

Buffer: An area of land, which may include landscaping, tree stands, berms, walls, fences, and building setbacks, that is located between land uses of different character or intensity, and is intended to mitigate potential negative impacts of the proximity and adjacency of such different uses.

Building lot coverage (BLC): The ratio of the ground floor or footprint area of a building to the total lot area.

Building orientation: The placement of a building within its surrounding context. If a building faces a street, it is said that the building orientation is toward the street. Building orientation sometimes refers to a building's placement in respect to north, south, east, and west.

Bus rapid transit: A variety of transportation systems that, through improvements to infrastructure, vehicles, and scheduling, uses buses to provide a service that is of a greater speed, frequency, and/or dependability than an ordinary bus line.

Business Improvement District: A special tax assessment district in which property owners agree to have additional charges placed on their tax bills in order to fund services beyond those provided by the local government. These services can include extra maintenance, improved street lighting, beautification, promotional activities, and heightened security.

By-right (also "as-by right" or "as-to-right"): A standing legal right, particularly to use property within the limits of the regulations governing the use of such property, without having to justify or gain permission for such use.

Capital Area Greenway: The greenway system for the City of Raleigh. The greenway system is a network of public open spaces providing for riparian buffers, floodplain protection, and wildlife habitat, as well as recreational trails that provide for outdoor activity such as walking, jogging, hiking, bicycling, and nature study.

Capital Area Metropolitan Planning Organization (CAMPO): The joint quasi-governmental unit that coordinates regional transportation planning for all of Wake County, and for portions of Granville, Franklin, Johnston, and Harnett Counties.

Capital Area Transit (CAT): The City of Raleigh's fixed-route bus and *demand-responsive* transit system.

Capital Improvement Program (CIP): A short-range, five-year budget used to fund capital projects and equipment purchases. The CIP provides a planning schedule and identifies options for financing costs. CIP programs involve such one-time expenses as facility construction, as opposed to the operating budget that funds routine and recurring expenses.

Car sharing: A model of car rental in which people pay a membership fee for the ability to rent cars for short periods of time, often by the hour. Car sharing is helpful to those who only occasionally require use of a vehicle or who need access to a vehicle of a different type than they use on a day-to-day basis.

Center of Region Enterprise (CORE): A multi-jurisdictional planning initiative for the land area between the Raleigh-Durham International Airport and the Research Triangle Park. Six local governments exercise land use control and plan for infrastructure in this area, including Cary, Durham (city), Durham County, Morrisville, Raleigh, and Wake County. In order to create a balanced, sustainable pattern of development in this area, these local governments, regional organizations, and private sector leaders have developed a comprehensive plan for the CORE area.

Certified Local Government: A federally-based preservation partnership among federal, state, and local governments focused on promoting historic preservation. The program is jointly administered by the National Park Service (NPS) and the State Historic Preservation Offices (SHPOs) in each state, with each local community working through a certification process to become recognized as a Certified Local Government. Among other things, the certification makes federal historic preservation grants available to local governments.

City of Raleigh Arts Commission (CORAC): The official advisory body and advocate for the arts to the Raleigh City Council, which appoints its members.

Cluster development: A development technique that concentrates buildings on a portion of a site, allowing the remaining land to be used for recreation, open space, or preservation of natural features.

Co-generation: A power plant that generates both electricity and useful heat for uses such as space and water heating. Because heat is a by-product that is typically wasted, co-generation is more thermodynamically efficient.

Co-location: The placement of multiple (sometimes related) entities within a single location. In an organization, it refers to placing related roles or groups in a single room, building, or campus. In business, it refers to the practice of locating multiple related businesses in the same location.

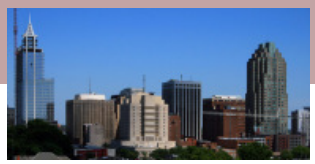
Commercial: A land use, building, or other activity involving the sale of goods or services.

Community Inventory Report: An extensive review and analysis of conditions and trends in Raleigh, prepared to serve as the factual and analytical foundation for the 2030 Raleigh Comprehensive Plan.

Community rating system (CRS): A program for recognizing and encouraging community floodplain management activities that exceed the minimum National Flood Insurance Program standards.

Conditional use zoning: The attachment of special conditions to a rezoning. Conditions can include restrictions of use, size, design, and development timing as a means to mitigate potential adverse impacts that could be expected to occur without imposing such conditions. The conditions are over and above the restrictions otherwise made on the land through the general zoning category.

Congestion mitigation and air quality program (CMAQ): Coordinated growth management techniques, including traffic level of service requirements, standards for public transit, trip



reduction programs, and capital improvement programming for the purpose of reducing the cumulative regional traffic impacts of development.

Conservation subdivision: Subdivisions featuring shared open space and clustered compact lots. The purpose of a conservation subdivision is to protect farmland and/or natural resources while allowing for the maximum number of residences under the zoning and subdivision regulations.

Context Sensitive Solutions (CSS): A transportation facility design approach that considers the total context within which a transportation improvement project will exist. It is an interdisciplinary collaboration to develop a facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility.

Corridor: A strip of land forming a passageway between two otherwise separate places, often referring to transportation rights-of-way, but also including riparian corridors (watercourses).

Cottage industry: A small business, located in a neighborhood, that functions without altering the residential character of the neighborhood.

Cul-de-sac: A local street having one end open to vehicular traffic and the other end permanently closed at a vehicular turnaround.

Cultural tourism: Tourism oriented to an area's unique cultural attributes, including its arts. Cultural tourism can center on urban historic and cultural facilities such as museums and theatres.

Daylighting (streams): The reconstruction of a previously-piped stream into an exposed channel. Typically the goal is to restore a stream of water to a more natural state.

Demand-responsive transit: A user-oriented form of public transport characterized by flexible routing and scheduling of small vehicles. The vehicles operate in shared-ride mode between pick-up and drop-off locations according to passenger needs.

Demographics: Population characteristics commonly including race, age, income, disabilities, mobility (in terms of travel time to work or number of vehicles available), educational attainment, home ownership, and employment status.

Density: The number of dwelling units per a unit of land area, usually expressed as the ratio of residential units per acre.

Density bonus: In a development, those additional residential units (exceeding the otherwise allowed residential density) that are granted as a result of the provision of a community amenity, affordable housing, or some other realization of community goals.

Distributed generation: The creation of electricity from many small energy sources rather than a few more centralized electric plants.

Downtown Raleigh Alliance (DRA): A consortium of downtown Raleigh businesses and property owners, funded through a special property tax levy, that promotes downtown through marketing and advocacy and also provides services such as sidewalk cleaning, security, and visitor services.

Drainage basin: The area that contributes storm water to a drainage system or water body.

Dual plumbing system: A system that utilizes separate and independent piping systems for reclaimed/re-use water and potable water.

Duplex: A structure on a single lot containing two dwelling units, each separated from the other by walls and having its own direct outside access.

E – H

Ecosystem: A characteristic assembly of plant and animal life within a specific physical environment and all the interactions among species and between species and their environment.

Effluent: Something that flows out, particularly the outflow or discharge of wastewater.

Emergency housing: Temporary housing for low-income families, for a one day to four month period, who are homeless or at risk of homelessness that provides a transition into other housing options. The term is also used to refer to temporary housing for people made homeless by disasters.

Enterprise resource planning (ERP): A computer system used to manage and coordinate all the resources, information, and functions of an organization.

E-waste (Electronic waste): Computers, entertainment electronics, mobile phones, and other such items passed on by their original owners, including used electronics destined for re-use, re-sale, salvage, recycling, or disposal.

Extra-territorial jurisdiction (ETJ): Authority granted to municipalities to exercise zoning and subdivision powers outside but adjacent to their city limits. It is intended to protect land on the edge of communities from being encroached on by incompatible activities and to provide an orderly extension of services, including utilities and roads.

Façade: The face of a building, especially the principal face, including the entire building wall, windows, doors, canopies, and visible roof structures.

Fair housing: The outlawing of discrimination in the rental or purchase of homes and other housing-related transactions, such as advertising, mortgage lending, and homeowner's insurance. The goal is a housing market in which a person's background, as opposed to financial resources, does not restrict access.

Fast-tracking: To speed up the processing, production, or construction of a project.

Fats, oils, and grease (FOG): Usually by-products of food preparation, especially regarding their introduction into a wastewater system. Sanitary sewer systems are not designed or equipped to handle the FOG that can accumulate on the interior of the sewer pipes, causing blockages and overflows.

Fee-in-lieu: Cash payments that may be required of an owner or developer as a substitute for dedication of land or physical improvements, usually calculated in dollars per lot, square foot of land, or building area, or in dollars per linear foot of street frontage.

Fenestration: Window and door openings in a building wall, one of the important elements of the exterior appearance of a building.

First priority areas: As applied to the City of Raleigh's scattered site policy, areas that are continuing to experience growth in population and housing units, have proximity to retail and office development, and have relatively low percentages of minority populations and low-income residents.

Fixed guideway: Any transit service that uses exclusive or controlled rights-of-way or rails. The term includes heavy rail, commuter rail, light rail, and bus service operating in exclusive or controlled rights-of-way.

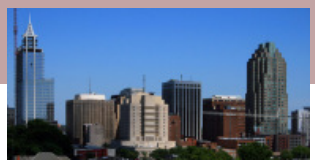
Flag lot: A parcel of land that is accessible only by a long narrow strip of land leading from the main road.

Flex space: A building providing flexibility among office and other uses such as manufacturing, laboratory, warehouse, etc.

Floodplain: The land area susceptible to inundation by water as a result of flood. Typically a floodplain is geographically defined by the likelihood of a flood of a certain severity. A 100-year floodplain would be inundated by a flood whose severity could be expected on average once every 100 years; likewise a 500-year floodplain would be defined by floodwaters whose severity could be expected on average once every 500 years.

Floodway: That portion of a waterway channel that is, during flooding, extremely hazardous due to the velocity of storm waters, erosion potential, and water-borne debris.

Floor area ratio: The total floor area of a building or buildings (including all floors in a multi-story building) on a lot, divided by the lot area.



Force main: Pipelines that move wastewater under pressure, usually uphill. Pumps or compressors located in a lift station, rather than gravity, provide the energy for wastewater conveyance in force mains.

Form-based zoning: A zoning type that allows flexibility in determining land uses within the constraints of a set building type. The look, scale, and layout of an area are controlled but building owners and occupants are allowed within certain parameters to determine how the buildings will be used.

Fossil fuel: Combustible fuels formed from the decomposition and transformation of organic matter over a geologic time scale. Examples are natural gas, oil, and coal.

Geographic information system (GIS): A method of storing geographic information digitally on computers.

Grade-separation: The vertical separation of one horizontal stream of movement from another, such as motor vehicles, pedestrians, and bicyclists from trains, or motor vehicles from pedestrians and bicycles. An overpass is an example of a grade separation.

Gravity system: Conventional wastewater collection systems that convey untreated wastewater through pipelines to a treatment facility or lift station by gravity, not pumping. The pipes are installed with slopes sufficient to propel the wastewater to its destination without being pumped.

Greater Raleigh Convention and Visitors Bureau: A not-for-profit marketing organization that promotes tourism and provides resources for convention planners for the Raleigh area.

Green collar job/green industry: Jobs associated with sustainability initiatives such as solar power generation.

Green infrastructure: An interconnected green space network that is planned and managed for its natural resource values and for the associated benefits it confers to human populations [Benedict, Mark and Edward McMahon (2006) "Green Infrastructure," Island Press].

Greenfield: Farmland and open areas where there has been no prior industrial or commercial activity and therefore where the threat of contamination is much lower than in urbanized areas.

Greenhouse gases: Gases that absorb and emit heat within the atmosphere. Common greenhouse gases are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Greenprint: One of the six themes of the Raleigh 2030 Comprehensive Plan. The Greenprint theme promotes Raleigh as a model green city and a leader in environmental sustainability and stewardship.

Heritage business: Businesses that capitalize on local history and culture.

Highway corridor: A geographical band that lies on both side of and includes a highway.

Historic Overlay District (HOD): A zoning district that provides protection through design review for buildings and places that are of importance because of their significance in history and/or their unique architectural style.

Hospitality sector: Businesses that provide food, beverages, or accommodation services, including restaurants, bars, hotels, and contract catering, especially for visitors.

Household: Any number of related people and/or a maximum of four unrelated people living together in a single dwelling unit.

Housing First: An approach to ending homelessness that centers on providing homeless people with housing quickly without pre-conditions and then offers needed services.

Housing tax credit: A reduction of taxes for buying a house, often for lower-income and first-time homebuyers.

Housing trust fund: A program with dedicated sources of funding not subject to an annual appropriations process. The purposes of such a fund

are usually to assure an adequate supply of rental housing and increase homeownership for extremely low, very low income and otherwise homeless households.

Human capital: The stock and accumulation of skills and knowledge gained by workers through education and experience.

I – L

Illicit discharge: The clandestine introduction of inappropriate substances into the environment. Such a discharge might be of poisonous materials into a watercourse or of solid trash into a wastewater line.

Impervious surface coverage: The percentage of the area of a lot that is covered by solid or dense surface through which rain or irrigation water cannot penetrate.

Inclusionary housing: A development containing low- and moderate-income dwelling units. Certain governments may adopt regulations that provide incentives for or require a minimum percentage of housing for low- and moderate-income households in new housing developments and in conversions of apartments to condominiums.

Infrastructure: Facilities and services needed to sustain development, land use, and human health and activity. Specific components of infrastructure may be site-based, such as fire stations, parks, schools, and other public facilities; or linear in nature, such as streets; water, sewer, and utility lines; and greenways, which are a unique linear element of urban infrastructure.

Infill: Development or redevelopment of land that has been bypassed, remained vacant, or is underused but is in close proximity to areas that are substantially developed. The term is also used to describe construction of new houses on residential lots where the former house has been demolished (see also *Teardown* in 'Q – T').

Intensity, land use: The degree to which land is used referring to the levels of concentration or activity in uses ranging from uses of low intensity (agricultural and residential) to uses of highest intensity (heavy industry). There is no single measure of the intensity of land use. Rather, a land use is relatively more or less intense than another use. Generally, a particular use may be more intense due to one or more characteristics, such as traffic generated, amount of impervious surface, bulk of the structures, number of employees, density, or nuisance such as pollution, noise, light, etc.

Intermittent stream: A stream that only flows for part of the year, typically mapped as a dashed blue line.

International Council for Local Environmental Initiatives (ICLEI): An international association of local, regional, and national governments that have made a commitment to sustainable development.

Invasive species: Non-native plants or animals that economically, environmentally, and/or ecologically adversely affect the habitats they invade.

Jobs-housing balance: The ratio of the number of jobs in an area to the number of employed residents. A ratio of 1.0 indicates a balance. A ratio greater than 1.0 indicates a net in-commute of workers; less than 1.0 indicates a net out-commute.

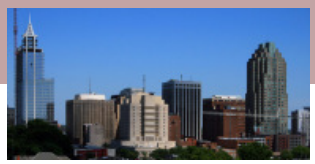
Joint venture units: Coordinated public-private sector effort to provide affordable housing.

Knowledge-based industries: Those industries that are relatively intensive in their need of technology and human capital.

Land clearing and inert debris (LCID): The removal of vegetation from a site except when land is cleared and cultivated for agricultural uses. Mowing, trimming, pruning, or removal of vegetation to maintain it in a healthy condition is not considered clearing.

Land trust: A private, non-profit conservation organization formed to protect natural resources, such as productive farm and forest land, natural areas, historic structures, and recreational areas.

Land use: A description of how land is occupied or utilized, usually according to standard categories such as residential, office and industrial.



Landscape ecology: The study of spatial variation in landscapes at a variety of scales. It includes the biophysical and societal causes and consequences of landscape heterogeneity. Above all, it is broadly interdisciplinary.

Leadership in Energy and Environmental Design (LEED): A building rating system that provides standards for environmentally sustainable construction.

Level of service (LOS): Standards used to measure the quality or effectiveness of a service such as police, fire, or library, or the performance of a facility, such as a street or highway.

Lifestyle center: Upscale retail areas typically located near affluent neighborhoods. Lifestyle centers tend to be smaller than suburban malls, are often open air, and are devoid of anchor stores.

Long range transportation plan (LRTP): A strategy developed to guide the public investment in multi-modal transportation facilities for 25 to 30 years into the future. The plan may be amended as a result of changes in projected federal, state, and local funding, major improvement studies, interchange justification studies, and environmental impact studies. The plan provides the context for a region's Transportation Improvement Program (TIP), the short range capital improvement program.

Low impact development (LID): A comprehensive land planning and engineering design approach with a goal of maintaining and enhancing the pre-development water characteristics and drainage of urban and developing watersheds.

Low-income housing tax credit: A tax incentive for the use of private money in the development of affordable housing for low-income households. The tax credits are more attractive than tax deductions as they provide a dollar-for-dollar reduction in a taxpayer's federal income tax, whereas a tax deduction only provides a reduction in taxable income.

Low-moderate income: Between 50 and 80 percent of *Area Median Income* (AMI) (see 'A – D').

M – P

Metropolitan Planning Organization (MPO): A regional government unit that provides service planning, particularly planning for the transportation system.

Micro-power: Very small power-generating installations, such as rooftop windmills (see also *Distributed Generation* in 'A – D').

Minimum housing code: A local government ordinance that sets minimum standards of safety and sanitation for dwellings. Minimum size, electrical safety, and availability of plumbing, heat, and ventilation are usually regulated by such ordinances, among other concerns.

Mixed-income neighborhoods: Neighborhoods with housing options for people of a variety of incomes rather than homogeneous income-segregated neighborhoods.

Multi-modal transportation: The use of more than one type of transportation, particularly the use of modes like bicycles and buses in addition to or other than the single-occupant automobile.

Multi-use fields: Outdoor recreational space that can be used for more than one specific sport or for informal recreation.

Multi-use path: A path that can be utilized by more than one type of user, possibly including pedestrians, bicyclists, horseback riders, skaters, and golf carts.

Municipal solid waste (MSW): Trash and garbage that is collected by a municipality.

Natural areas: Land and water that have substantially retained their natural character, or although altered in character, are important habitats for plant and animal life.

Neighborhood park: A park with a neighborhood-sized service area, as opposed to community parks, which have larger service areas and may contain amenities such as swimming pools.

Neighborhood Quality Team: A group of City staff, representing various disciplines and departments, that works in a coordinated manner to improve social, economic, and physical conditions in a particular neighborhood.

NeighborWoods: A national program with local affiliates that works to restore and maintain the tree cover in a community.

Net metering: An electricity policy for consumers who own (usually small) renewable energy generators, such as for wind or solar power. Under net metering, owners receive credit for at least a portion of the electricity they generate. See also *Micro-power* and *Distributed Generation* (see 'A – D').

No adverse impact (NAI): A type of drainage basin management in which the actions of one property owner are not allowed to adversely affect the rights of other property owners. The adverse effects or impacts can be measured in terms of increased flood peaks, increased flood stages, higher flood velocities, increased erosion, and sedimentation.

Node: An identifiable grouping of land uses concentrated in an area, usually of higher intensity than their surroundings. Under the 2030 Comprehensive Plan, nodes are encouraged to be *walkable* (see 'U – Z').

North Carolina Housing Finance Agency: A state-chartered agency that works to create affordable housing for those whose needs are not met by the general housing market.

North Carolina Mountains to Sea Trail: A trail consisting of footpaths, roads, and state bicycle routes. When complete it will stretch about 950 miles east-west across the state.

North Carolina Wildlife Resources Commission: The NCWRC regulates hunting and fishing in North Carolina, registers boats, and offers various wildlife programs.

One stop shop: A location where various needs can be met in one place. In the context of permitting, a single location for obtaining information, forms, and staff assistance for obtaining a variety of permits.

Operating budget: A type of budget containing a detailed projection of all estimated income and expenses based on forecasted revenue during a given period. The budget allocates money for salaries, utilities, rents, maintenance, and other operating expenses.

Package Treatment Plant: A relatively small wastewater treatment plant that serves an area otherwise not served by municipal wastewater treatment facilities.

Park and ride lot: A facility designed for parking automobiles, the occupants of which transfer to public transit to continue their trips.

Pedestrian-friendly: The design of a development plan or area in a manner that encourages walkability. Relevant design elements include density, site layout, building orientation, infrastructure, lighting, and security (see also *Walkable* in 'U – Z').

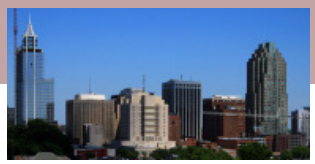
Pedestrian street: A street lined with buildings and storefronts that is closed to most automobile traffic. Emergency vehicles have access at all times, and delivery vehicles are restricted to limited delivery hours.

Performance-based zoning: Zoning regulations that permit uses based on a particular set of standards rather than on particular type of use. It is a flexible zoning technique designed to evaluate development on a project-by-project basis. The process involves preparing a detailed analysis of existing conditions in the area and estimates the impacts of development on community facilities, the environment, local economic conditions, and on subsequent standards established by the community.

Performance standards: Verifiable, measurable levels of service in terms of quantity, quality, and timeliness.

Potable water: Water that is clean enough for drinking and cooking.

Power center: A retail area dominated by several large anchors, particularly discount department stores, off-price stores, and warehouse clubs. The center typically has few if any small tenants.



Preserve: An area in which beneficial land uses in their present condition are protected, such as a nature preserve or an agricultural preserve.

Preserve America designation: A federal program that encourages and supports community efforts to preserve and appreciate local cultural identity through heritage tourism initiatives.

Pressure collection system: A wastewater collection system that relies on pumping rather than gravity to move wastewater for treatment.

Priority Wildlife: Wildlife species found by the North Carolina Wildlife Resources Commission to be of greatest conservation concern and/or need, and so listed in the North Carolina Wildlife Action Plan.

Primary watershed protection area: The area immediately adjacent to a water supply reservoir, with more stringent regulations than the outer-lying secondary watershed. The extents of such protection areas are defined by the North Carolina Department of Environment and Natural Resources (see also *Secondary watershed protection area* in 'Q – T').

Public art: A fountain, sculpture, painting, mural, or similar object that is sited as a focal point and is intended for the enjoyment of the general public. The term usually applies to art that is located outdoors on government property.

Public housing: Rental housing for eligible low-income families, the elderly, and persons with disabilities.

Public realm: The common areas between private property and buildings, including all public spaces, streets, alleys, sidewalks, parks, plazas, and open space.

Purple pipe: Pipes containing reclaimed non-drinkable re-use water that is used for irrigation. The water has been treated to make it safe for returning to the environment but not so clean as to be drinkable.

Q – T

Rainwater harvesting: The accumulation and storage of rainwater. Traditionally rainwater harvesting has provided water for household use, livestock, and irrigation.

Raleigh Historic Landmark: A building, structure, site, area, or object designated by Raleigh City Council as being of special significance in terms of historical, prehistorical, architectural, archaeological, and/or cultural importance, and possessing integrity of design, setting, workmanship, materials, feeling, and/or association.

Raleigh Housing Authority: A local government agency chartered by the State of North Carolina that owns and manages approximately 2,000 public housing units and administers more than 3,500 rent vouchers.

Redevelopment: The process of replacing or upgrading existing development.

Redevelopment areas: Areas in which jurisdictions can use eminent domain to acquire properties for the purpose of improving blighted conditions. The State of North Carolina sets the criteria for identifying these areas and how the properties are subsequently handled by jurisdictions.

Regional rail: A form of rail transit intended to serve multi-jurisdictional regions. It is similar to commuter rail in coverage, but designed to provide a greater span and frequency of service outside of commuting hours.

Renewable energy: Energy generated from natural resources such as sunlight, wind, and geothermal heat that are naturally replenished.

Research Triangle Region Partnership (RTRP): A public-private partnership that works to keep the 13-county Research Triangle region economically competitive through business, government, and educational collaboration.

Re-use water: Waste water that has been treated and made available for purposes such as irrigation and car washes.

Revolving Historic Preservation Loan Fund: A fund with capital designated for the preservation of historically and architecturally significant properties threatened by demolition or neglect. The fund acquires a property and sells it to a party committed to rehabilitate the historic structure, or provides loans for the same purpose. Proceeds from the sale or loan repayment are returned to the revolving fund in order to assist other endangered historic properties for the same purpose.

Rezoning: An amendment to the official zoning map that changes the land use zone classification of an area.

Rip-rap: Large rocks or concrete chunks applied to the shoreline of a water body to prevent erosion.

Right-of-way: A strip of land granted for a rail line, highway, or other transportation facility.

Riparian: A habitat that is strongly influenced by the presence of water and that occurs adjacent to streams, shorelines, and wetlands and differs in density, diversity, and productivity of plant and animal species relative to nearby uplands.

Safe yield: A water resources engineering term used to identify the calculated maximum available water supply withdrawal rate capacity in million gallons per day (MGD) of a surface water reservoir during a specified period of time, based on historical tributary streamflow and weather information. Safe yields generally use a 20-year or 50-year time period for these calculations.

Scattered site policy: Council-adopted guidance for the distribution and location of assisted rental housing in the City of Raleigh. This policy promotes greater rental housing choice and opportunities for low-income households and avoids undue concentrations of assisted rental housing in minority and low-income neighborhoods.

Secondary watershed protection area: The outer-lying part of the watershed of a drinking water reservoir. The development regulations pertaining to these areas are less stringent than those for the primary watershed protection area (see also *Primary watershed protection area* in 'M – P').

Segregated land uses: The separation rather than mixing of different types of land uses. Land areas with relatively homogenous land uses result, such as shopping centers, which contain almost exclusively retail uses.

Sense of place: The characteristics of a location that make it readily recognizable as unique and different from its surroundings and that provide a feeling of belonging to or being identified with that particular place.

Sensitive road design: See *Context sensitive solutions* in 'A – D'.

Single-family attached housing: Housing in which the dwelling units share vertical party walls, but the structure and land are owned fee-simple. Townhouses and row houses are examples.

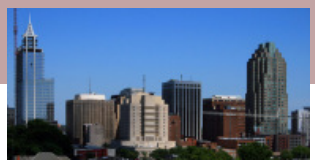
Single-family detached housing: Housing in which each building contains just one dwelling, exclusive of sheds and detached garages.

Site plan: A map or graphic depicting the development of a tract of land, including the location and relationship of structures, streets, driveways, recreation areas, parking areas, utilities, landscaping, grading, walkways, and other site development information.

Smart growth: A perspective, method, and goal for managing the growth of a community. It focuses on the long-term implications of growth and how they may affect the community, instead of viewing growth as an end in itself.

Southeast Raleigh Assembly (SERA): A Raleigh City Council-appointed group that promotes a broad range of economic and social support for Southeast Raleigh.

Special Transit Advisory Commission (STAC): A regional task force charged to make recommendations regarding long-rang transit planning for the Triangle region. The Commission completed its work in May 2008 and has provided its recommendations to the Triangle Region's MPOs, including recommendations for bus service, circulator service, and rail transit.



Sprawl: A development pattern characterized by large expanses of predominantly low-intensity, *automobile-dependent* development found in outlying suburban and exurban areas (see 'A – D').

Step backs: The reduction of a building's volume and profile proportional to the building's height. A pyramidal building consequently has notable step backs whereas a cubic building has no step backs.

Stormwater: The flow of water that results from precipitation and that occurs immediately following rainfall or a snowmelt.

Street connectivity: The extent to which street systems provide multiple routes and connections serving the same origins and destinations, allowing the dispersion of traffic through several routes, and redundancy in the case of congestion or blockage.

Street stub: A street having only one outlet for vehicular traffic and that is intended to be extended to serve development on adjacent land.

Street tree: A tree that is currently located or proposed for planting along a street or highway. Such tree can be located on private property or on public land.

Streetcar: An electric rail-borne vehicle, of lighter weight and construction than a train, designed for the transport of passengers on tracks running primarily on streets.

Streets, Sidewalks, and Driveways Access Handbook (SSDAH): A publication of the City of Raleigh Public Works Department containing regulations and standards for adequate and coordinated construction of transportation facilities.

Streetscape: The visual and experiential character of the linear space defined by the buildings adjacent to a street. The elements of a streetscape include building façades, landscaping, sidewalks, paving, street furniture (benches, kiosks, trash receptacles, fountains, etc.), signs, awnings, and street lighting.

Street wall: The group of building faces that define the edges of a roadway corridor.

Strip development: Commercial, retail, or industrial development, usually one lot deep, that fronts on a major street. It includes individual buildings on their own lots and small linear (strip) shopping centers with on-site parking in front of the stores.

Structured parking: A covered, usually multi-story structure that provides parking areas for motor vehicles, also known as a parking deck.

Student-oriented housing: Structures intended to house students, particularly college students. Included are dormitories, sorority and fraternity houses, but also multi-bedroom, rent-by-the bedroom apartment units that are marketed to students.

Subdivision: The division of land into two or more lots. Also a development consisting of subdivided lots.

Supportive housing: A combination of housing and services intended to help people live more stable, productive lives. Supportive housing targets the homeless and those who also have very low incomes or serious, persistent issues such as substance abuse, mental or physical illness, or who are dually diagnosed.

Surface parking: Vehicular parking located in one level on the ground, most commonly seen as parking lots.

System integration plan: A park plan developed prior to the initiation of a Master Plan, containing a set of guidelines for the interim management of parkland, documenting existing site conditions and constraints, establishing the park's classification consistent with the Comprehensive Plan, and if applicable proposing any special intent for the park.

Teardown: The demolition of an existing house in order to provide a building site for the immediate construction of a new house.

Text amendments: Changes to the City Code of Ordinances.

Tiered water rates: Different water rates applied to different types of water users, usually lower rates for households and higher rates for industrial and commercial users, such as car washes and bottling plants.

Topography: The configuration of the earth's surface including the relative relief, elevations, and positions of land features.

Track-out camps: Special-subject training camps held outside of formal education for children who are enrolled in schools following the year-round educational calendar.

Traditional neighborhood development (TND) A development pattern that mimics pre-1950's development and exhibits several of these characteristics: alleys, grid-based street layout, buildings oriented to the street, front porches on houses, pedestrian orientation, mixed land uses, and public squares.

Traffic calming: The use of physical measures, such as speed humps, traffic circles, narrow lane widths, or similar devices, intended to discourage speeding and improve the usability of a street for bicycles and pedestrians.

Transfer of development rights: The moving of the right to develop or build from one land parcel to another, or from a portion of a lot to another part of the same lot.

Transit corridor: A relatively narrow strip of land through which transit service runs. This may be a rail corridor or a regular street with bus service.

Transit oriented development (TOD): A development of high density mixed land uses that have a transit facility as a focal point. TODs mix residential, retail, office, and public uses in a walkable environment, making it convenient for residents and employees to travel by transit, bicycle, foot, or car.

Transit-first features: Physical or technological adjustments that allow transit vehicles greater efficiency, such as traffic signal preferences and reserved travel lanes for buses, and give transit vehicles advantages in the general traffic stream.

Transitional housing: Shelter provided to the homeless or those exiting emergency housing for a period of four to twenty-four months, combined with other social services and counseling programs to assist in the transition to self-sufficiency through the acquisition of a stable income and permanent affordable housing.

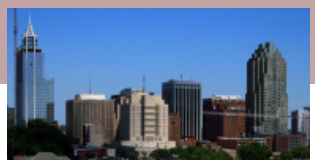
Transitional protective yard: A physical buffer required by the zoning code that separates and provides a transition between potentially incompatible land uses, particularly between more and less intensive uses.

Transportation Demand Management (TDM): Programs, plans, or policies designed to encourage changes in individual travel behavior. TDM can emphasize alternatives to the single-occupant vehicle such as carpools, vanpools, and transit; other techniques include reduction or elimination of the number of vehicle trips, telecommuting, alternative work weeks, and flex time.

Transportation impact analysis (TIA): A study of the effects of a proposed development on the transportation system and that system's ability to respond to the increase in demand created by the development.

Transportation improvement program (TIP): A prioritized multi-year program for the implementation of transportation improvement projects by NCDOT. It is a management tool to ensure the most effective use of funding for transportation improvements. The TIP is a federal requirement of the transportation planning process. A transportation improvement is not eligible for federal funding unless it is listed in the TIP.

Triangle J Council of Governments (TJCOG): A voluntary organization of municipal and county governments in North Carolina's Region J (Chatham, Durham, Johnston, Lee, Moore, Orange and Wake Counties). It is one of 17 regional councils established in 1972 by the state to aid, assist, and improve the capabilities of local governments in administration, planning, fiscal management, and development.



Triangle Region: A region in central North Carolina, anchored by the cities of Raleigh, Durham, and Chapel Hill, commonly called "the Triangle." The eight-county region is officially named by the U.S. Census Bureau as the Raleigh-Durham-Cary Combined Statistical Area.

Triangle Transit: An authority that provides regional bus service and promotes other transportation demand management techniques in the Triangle area. Triangle Transit is also charged with implementing a regional rail transit system.

Typology: The classification of physical characteristics commonly found in buildings and urban places, according to their association with different categories, such as intensity of development. The following is an example of a set of characteristics with typological associations: single-family residences set well back from a street on large lots and surrounded by mowed lawns with naturalistic ornamental plantings of trees and shrubs are associated typologically with suburban places.

U – Z

Universal design: Buildings, products, and environments that are usable and effective for everyone, regardless of physical abilities or disabilities.

Unprogrammed open space: Open space, particularly in parks, that is not set aside for any particular sport or recreational activity. The space is therefore available for spontaneous use by the public.

Unsafe building code: Regulations that describe the circumstances in which a building is considered structurally dangerous to the general public and unfit for human access or habitation.

Upper Neuse Clean Water Initiative (UNCWI): An initiative of the Triangle Land Conservancy that promotes multi-county cooperation to protect the water quality of the Triangle region's part of the Neuse River basin.

Upper Neuse River Basin Association (UNRBA): A group of representatives of eight municipalities and six counties whose goal is water quality protection and water resource planning and management within the 770 square mile watershed that drains into Falls Lake.

Urban Services Area (USA): An area in which a nearby jurisdiction will eventually supply urban services (such as water, wastewater, fire, and police protection) and outside of which such services will not be extended by that jurisdiction.

Vehicle miles traveled (VMT): A unit to measure vehicle travel made by a private vehicle, such as an automobile, van, pickup truck, or motorcycle. Each mile traveled is counted as one vehicle mile regardless of the number of persons in the vehicle.

Vehicle trips per day (VPD): The number of vehicle trips generated by a particular location within one day.

Very low income: Very low income is defined as below 50 percent of the area median income (AMI)

Viewshed: The area within view from a defined observation point.

Wake County Growth Issues Task Force: A citizen group created by the Wake County Board of Commissioners to examine growth management strategies and help Wake County balance growth and quality of life issues.

Walkable: Characteristic of how easy, pleasant, and practical an area is for walking. Walkable areas include origins and destinations located within walking distance of one another, and linked by a *pedestrian-friendly* network and development pattern (see 'M – P').

Wastewater: Water carrying waste from domestic, commercial, or industrial facilities, otherwise known as sewage.

Water conservation: The prudent and efficient use of water, recognizing that water supplies are limited and that the treatment of water, both for drinking and wastewater returned to the environment, is expensive and energy intensive.

Water resources: All sources of water for human use, including rain, ground water, water in reservoirs, and water courses.

Water supply watershed: The drainage basin for a reservoir that provides drinking water.

Water treatment plant (WTP): The facility within the water supply system that can clean water to make it drinkable.

Watershed: A land area that collects precipitation and contributes runoff to a receiving body of water or point along a watercourse, also known as a drainage basin.

Western Wake Partnership: The four local governments that cooperate for regional wastewater management in western Wake County. The partners are the towns of Apex, Cary, Holly Springs, and Morrisville.

Wetland: Areas that are inundated and saturated by water at a frequency and duration sufficient to support vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

William Christmas Plan: The original plat laying out the streets and lots of the plan for the City of Raleigh was developed at the direction of the State Legislature by William Christmas in April 1792 for the purpose of establishing a new capital city. Union (now Capitol) Square was reserved for the statehouse in the center, with four principal streets radiating axially from each face of the square. The axial streets were named for the four judicial districts toward which they ran (each identified by the name of its principal city). The other 17 streets were named for the remaining judicial districts, for the points of the compass, for the site-selection commissioners, and for other prominent citizens. The plan included four parks named for the first three Governors (Nash, Caswell, and Burke) and for Attorney General Alfred Moore, of which Nash and Moore squares still remain as open space.

Workforce housing: Housing affordable to working low- and moderate-income persons, often applied to housing for workers who supply essential services such as police and teachers.

Zoning: Local laws used by jurisdictions to regulate the uses of land, buildings, and structures within designated areas.