

MORRISVILLE LAND USE PLAN

2009 - 2035





Town of Morrisville, North Carolina
Land Use Plan
2009 - 2035

Adopted March 24, 2009



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This report was prepared by The Louis Berger Group, Inc. and Renaissance Planning Group, Inc. for the Town of Morrisville, with the assistance of the Plan Advisory Committee and Town staff. Additional copies are available through the Town of Morrisville Planning Department. Special thanks to Town staff, Louis Berger Group staff and Suvas Shah for photos.

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EXECUTIVE SUMMARY

In 2007, the Town of Morrisville had tripled in population since its existing Land Use Plan was prepared and was rapidly growing toward its full build-out potential. About a quarter of the area inside the Town's planning jurisdiction remained undeveloped, and there was no opportunity for outward expansion due to the shared boundaries with the Town of Cary and other jurisdictions (Research Triangle Park, Raleigh-Durham International Airport, and Umstead State Park). In response to this challenge, from 2007 through 2009, the Town of Morrisville completed major updates of both the existing Land Use Plan (1999) and Transportation Plan (2002) for the Town.

The two Plans were developed simultaneously because current land use, and anticipated future land use, are inextricably tied to how the transportation system connects the land and people of Morrisville together. Similarly, the way in which the transportation system develops significantly influences land development practices, property values, and how convenient it is to travel from one place to another using different modes of travel (car, bus, rail, walking, or bicycling). This Executive Summary describes how the Plans were developed, the key recommendations, and where in the document to access additional information. Section Two (Background), Section Four (Policy Direction) and Section Seven (Action Items) are identical in both plans.



A participant presents her small group's ideas at the first public workshop, on October 29, 2007.

Developing the Plans

Extensive communication with the general public was a focal point throughout the planning process, both to provide basic inputs into the content and recommendations of the Plans, but also to provide opportunities for people to comprehend the meaning of the Plans and provide feedback on the recommendations. An extensive plans update website, three public workshops, seven Plan Advisory Committee (PAC) meetings, three focus group meetings, a paper and internet survey, and a phone hotline were important parts of the planning process. Every single comment submitted could not be included in the final Plans, but many of the common themes of the comments and how they were addressed by the Plans are included in Appendix C.

Town staff worked with a team of consultants, who were charged with the difficult task of balancing various interests and comments by the public and PAC members, then translating that information into a specific set of action items to effect change (Section Seven). The action items were developed in order to implement the vision, goals and policies of the Plans, which were derived from the Town Council, public comments, Plan Advisory Committee, and the 1999 Land Use Plan (Section Four).

The Land Use Plan

The 2009 Land Use Plan seeks to capitalize on the opportunities in Morrisville (strong population growth and interest in residential development, an advantageous location in the heart of the Triangle) while maintaining the Town's historic roots and "small town feel." Morrisville has experienced rapid development recently, with most major tracts of land available for residential development having been built for subdivisions (Section Three). A key to the Plan is the balance of the desire for low density residential development (single family detached houses) with the need for overall economic growth as well as nearby shopping and work opportunities for the Town's residents. This balance is addressed in the Plan by recommending activity centers with a mix of commercial, office and (in some cases) higher density residential uses where there is greater access to transportation infrastructure (such as major intersections), and allowing much of the remainder of the Town to be developed for low density residential uses or master-planned to take advantage of large undeveloped areas and the Town Center (Section Five). Designating land uses in Morrisville is complicated by the RDU Airport Noise Overlay District, which covers 22% of the town's planning jurisdiction including about 40% of the developable area, and restricts residential and other noise-sensitive uses.



Members of the Plan Advisory Committee discuss what they like and would like to change about Morrisville at the October 16, 2007 meeting.

The Plan integrates transportation by linking land uses with appropriate transportation facilities that offer opportunities for walking, biking or driving. The Plan also seeks to provide an opportunity for new lifestyle and development options by establishing a Transit Oriented Development floating district, which can be applied voluntarily by a property owner to take advantage of planned bus and rail routes through Morrisville. Section Six examines in more detail different Community Areas of Morrisville and illustrates some of the land use and transportation recommendations.

To complement the recommended future land uses, examples of good design are provided for each land use type. Specific action items include the development of various ordinances to strengthen the environmental and quality of life elements of the Town, such as reducing stormwater runoff, encouraging higher-quality, sit-down style restaurants, and continue and expand upon past efforts to preserve the historic character of important places like the Shiloh Community.

The Transportation Plan

Morrisville's geographic position in the Triangle Region – surrounded by people who would like to get from their homes to major attractions like the employment centers of Research Triangle Park, Raleigh-Durham

International Airport, and the cities of Durham and Raleigh – create a situation in Morrisville that demands consideration of high volumes of "through" traffic that seldom stops in Morrisville. This kind of traffic presents interesting technical issues for providing adequate vehicle capacity while maintaining the aforementioned small-town atmosphere. Simply widening roadways with no end in sight could temporarily alleviate traffic congestion, but

EXECUTIVE SUMMARY, CONT'D

might ruin local quality of life and community cohesion in the process. This Plan prioritizes connectivity (providing multiple, redundant routes between origins and destinations), and the provision of alternative modes (bus, bike, walk and rail) to decrease dependence on car trips. Together these strategies hope to address the traffic congestion on and poor level of service provided by Morrisville's current roadways (Section Three).

A key recommendation is that the backbone of the transportation system, NC 54, should be widened to accommodate high traffic volumes, while including facilities for bicyclists and pedestrians and respecting existing development in the Town Center. Many of Morrisville's future roadways will be four lanes, with a landscaped median, 8-foot multi-use paths (wide sidewalks) along both sides and 4-foot bicycle lanes (Section Five). Providing direct connections to complementary land uses, like homes, shopping, and places of work or education, is a critical factor in determining how well traffic is distributed and the level of opportunity that will exist for people to use other modes of transportation besides a car for some of their trips.

Design standards for roadways, transit, bicycle and pedestrian facilities and intersections are included in Section Six in order to provide guidance in implementing the multi-modal recommendations to most effectively fit within the context of the town. Recommendations include developing a transit system in concert with the Town of Cary and Triangle Transit, existing operators with a proven record of success that already have services in the area. The Town should continue to collaborate on developing automated transit and regional transit services in conjunction with its nearby partners and regional organizations. Pursuing Transit Oriented Development as a future development option is a key component of both the Transportation and Land Use Plans because it integrates the development of land uses that are complementary to bus and rail services. Action items in the plan include not only fully implementing the detailed recommendations, but also a set of standards and policies that will support and enhance the recommended improvements, such as a policy for sidewalk connections between residential and commercial areas, a policy to require adequate and safe bicycle parking, a policy for access management (reducing driveways on a road to reduce accidents, among other benefits), and a policy to provide for bicycle and pedestrian accommodations during construction.

Summary: The Future of Morrisville

So what is the future of Morrisville, according to these Plans? Tree-lined streets used for driving, walking, and cycling; meaningful public transport that carries people safely and conveniently to major destinations in Town and nearby; a more collaborative atmosphere to work with neighboring entities to create opportunities that Morrisville would not be able to create or create as well on its own; a low-density lifestyle interspersed with areas that provide neighborhood- or town-scale shopping, and employment opportunities that work together with the transportation alternatives. The plans can be best summarized by how they answer two critical questions:

How do the Plans respond to the challenge of building and maintaining a community in a growing region?

- By balancing uses to meet the needs of different groups and locating land uses where they make sense. For example, placing major nonresidential uses at major intersections with greater transportation access and using the remaining undeveloped land not covered by the noise overlay for residential use.
- By prioritizing connectivity rather than simply widening roadways.
- By prioritizing the integration of non-auto modes of transportation through the option for Transit Oriented Development and the incorporation of bicycle and pedestrian facilities on every major and minor roadway.
- By enhancing Morrisville's sense of community and community identity through the provision of amenities such as parks, protected environmental resources, gateway features, a vibrant Town Center and a protected Shiloh historic area.

How do the Plans support the development of Morrisville as an "innovative crossroads"?

- By striving to be a premier example of collaboration between jurisdictions and regional partner organizations. The development of the Plans themselves incorporated these qualities by involving representatives of these groups as active participants in the planning process (see Appendix C), and the Plans call for a continuation of this kind of cooperation to implement many of the recommendations.
- By thinking in terms of the big picture and considering how land use and transportation interact and fit together to create an efficient, highly-functional community.
- By focusing on tangible results through the incorporation of concrete, timeline-driven action items to implement the vision, goals and policies of the Plans.



The first public workshop was attended by over 80 people on October 29, 2007.

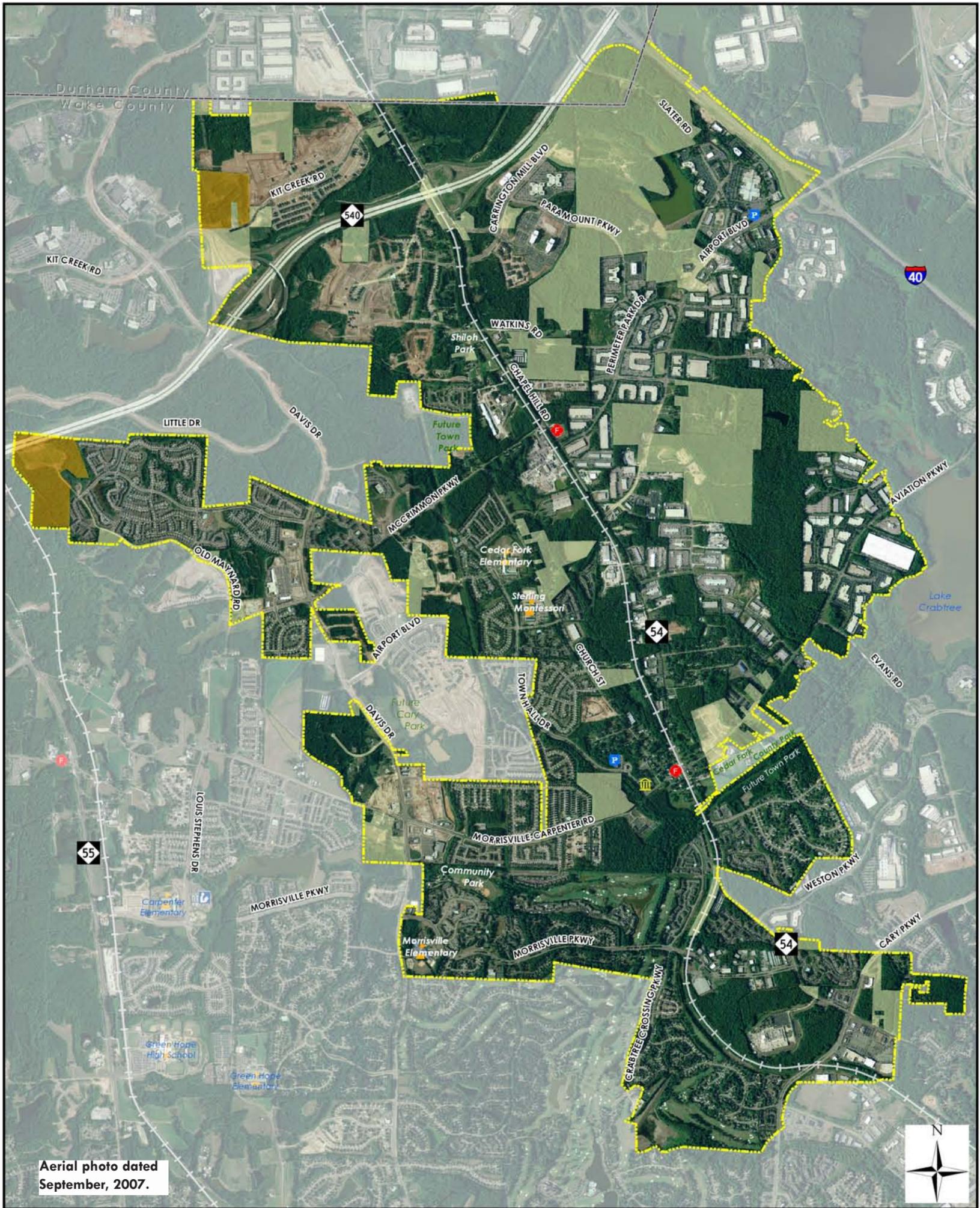


Figure 1.1 Town of Morrisville

- Town Hall
- Library
- Police Station
- Fire Station
- Schools
- County Boundary
- Morrisville Planning Jurisdiction
- Morrisville Extra Territorial Jurisdiction (ETJ)
- Morrisville Short-Range Urban Services Area
- Railroad

Morrisville Land Use Plan
2009

0 0.125 0.25 0.5 0.75 1 Miles

Updated March 24, 2009

1.0 INTRODUCTION

1.1 Purpose

The 2009 Land Use Plan for the Town of Morrisville is the foundation of the Town's land use and development policies and an official public document adopted by the Town Council. The authority to adopt a Land Use Plan is specifically enabled under the North Carolina General Statutes. The purpose of the Land Use Plan is to guide the coordinated and harmonious development of the Town that takes into account the present and future needs and resources to promote the health, safety, prosperity, and general welfare of the Town and its citizens.

The Land Use Plan provides the basis for evaluating land-development proposals. The Plan is the foundation for amendments to the Town's development ordinances ensuring that the overall land use goals of the Town are implemented through the regulatory process. Following the adoption of the 2009 Land Use Plan, these ordinances will be updated so they are consistent with the revised Plan policies.

The policies in this document provide guidance for development decisions covering the period 2009 - 2035. The Land Use Plan is not intended to be a static document. The policies of the Land Use Plan should be amended in the future without straying from the basic goals of the plan, as new information becomes available or to address further changes in circumstances.

1.2 Land Use Plan Format

The 2009 Land Use Plan is organized into several sections. The first section sets forth the purpose, background and format of the overall Land Use Plan. Section Two introduces background materials, such as surrounding jurisdictions, demographics, environmental and other development considerations, and a brief history of the Town of Morrisville. Section Three depicts the existing land use and recent development in the Town of Morrisville, providing context for the future land use recommendations. Section Four sets forth the basic policy direction of the Land Use Plan, including the Vision, Goals and Policies that will guide the Plan as a whole. Section Five describes the recommended future land uses for the town, including the Future Land Use Map and all of the Future Land Use Categories, including design guidelines for land uses. Section Six describes in greater detail the various community areas of Morrisville and offers illustrations of some of the proposed changes in this plan. Finally, Section Seven establishes Action Items to implement the Plan.

1.3 Relationship to Other Town Planning Documents

The Town's Land Use Plan updates and supersedes the 1999 Land Use Plan, which was adopted on November 9, 1999. It incorporates the basic policies and vision of the 2003 North Morrisville-Shiloh Small Area Plan. It also recognizes the 2007 Town Center Plan, leaving that area to be addressed by that document and its ongoing implementation process.

The 2009 Transportation Plan is being adopted concurrently with the Land Use Plan. The two documents were developed using the same methodology and public involvement process, and share three identical sections (Section Two: Background; Section Four: Policy Direction; Section Seven: Action Items). The Town created the plans concurrently in recognition of the interconnected nature of transportation and land use. By planning them jointly, the Town may more effectively guide its future.

1.4 Land Use Plan Review and Update Process

The 2009 Land Use Plan process was conducted from 2007 through 2009, and is the product of work by citizens, the Plan Advisory Committee, the Planning and Zoning Board, the Town Council, Town staff and consultants. The Land Use and Transportation Plans are reviewed by both the Planning and Zoning Board and Town Council.

The 2009 Land Use Plan was prepared with extensive citizen involvement. Considerable effort was made to ensure that people interested in participating in the plan review and update process had the opportunity to do so. The public process involved at least 180 individuals with a broad geographic representation from different areas within the Town. The Plan review process was accompanied by an ambitious community-involvement strategy that provided ready access both to new information and to the process.

The process included three public workshops, conducted in October 2007, January 2008, and March 2008, that were attended by more than 80 attendees each. The public workshops emphasized both information dissemination from staff and consultants as well as the active participation of citizens. Each workshop featured a group exercise that allowed participants to share their views of the future Morrisville in a structured, engaged manner. The workshops were heavily advertised via flyers, newsletter notices and the citizen email listserv. The latter two workshops were also advertised by postcards sent to all of Morrisville's 6,700 households and businesses (see example at right).

In addition, a series of seven Plan Advisory Committee (PAC) meetings were conducted to solicit in-depth input from committee members, who represented a broad spectrum of the community leaders and stakeholders. Three focus group meetings were held to target key groups that might not attend the larger meetings, including youth, residents of the North Morrisville-Shiloh area, and transit users. A public survey was conducted from January through March 2008, garnering 180 responses. A project website available throughout the planning process offered a way to find any meeting materials, the current schedule of meetings and events, and a way to provide input via an online discussion board. A project hotline was also available for citizens to leave comments or questions for project staff.

The recommendations of the townspeople and stakeholders were incorporated into the overall policies of the Future Land Use Plan through this extensive public input process. A more detailed description of public engagement in the planning process appears in Appendix C.

Figure 1.1 on the opposite page offers an overview of the Town of Morrisville, showing color aerial photographs from September 2007 and the planning jurisdiction as a yellow dashed line. The planning jurisdiction includes the town limits as well as the town's Extra Territorial Jurisdiction (ETJ) (yellow shading) and Short-Range Urban Services Area (SRUSA) (orange shading) and comprises the area subject to the policies included in this plan document. Although most of Morrisville's planning jurisdiction falls in Wake County, several parcels in Durham County have been annexed into the town.



Citizens get involved in land use planning at the second public workshop, held on January 31, 2008.



Postcard sent to Morrisville households advertising the March 27, 2008 public workshop.

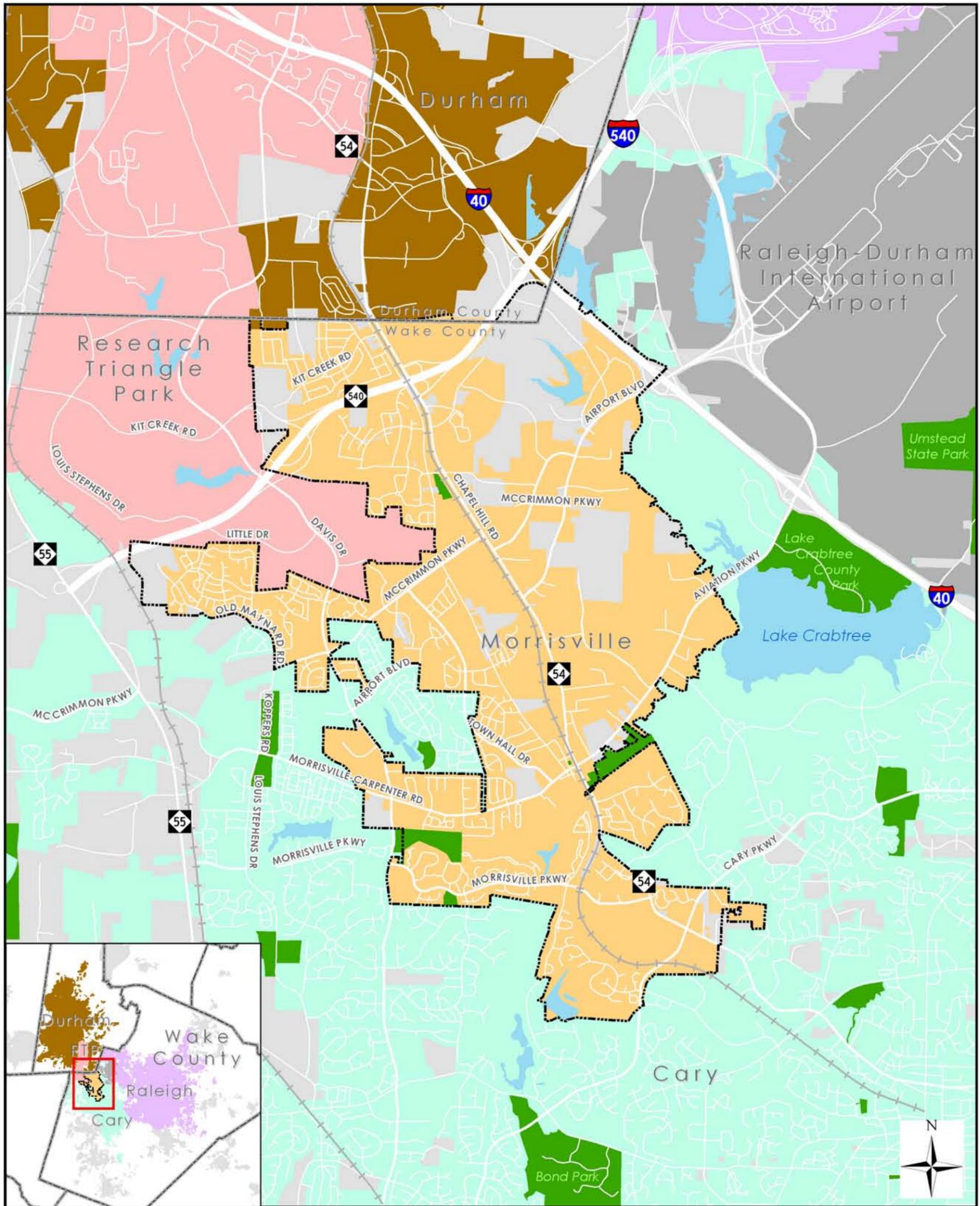


Figure 2.1 Regional Context

County Boundary	Corporate Limits
Morrisville Planning Jurisdiction	Town of Morrisville
Railroad	Town of Cary
Roads	City of Raleigh
Lakes	City of Durham
Parks	Research Triangle Park
	Raleigh-Durham International Airport
	Unincorporated Areas

Morrisville Land Use Plan
2009

0 0.15 0.3 0.6 0.9 1.2 Miles

Updated March 24, 2009

2.0 BACKGROUND

2.1 Regional Context

The Town of Morrisville is located in northwest Wake County, just south of the boundary with Durham County (see Figure 2.1 on opposite page). Morrisville is truly the “heart” of the Triangle Region, which is composed of Raleigh to the east, Durham to the north and Chapel Hill to the northwest. Research Triangle Park (RTP), home to research, technology and biotechnology corporate campuses since 1959, is located adjacent to Morrisville’s western boundary. RTP covers 7,000 acres (see map to the right) and currently employs more than 39,000 people in 160 companies. Another regional employment and transportation hub is the Raleigh-Durham International Airport, located adjacent to Morrisville to the northeast. The Town of Cary, which surrounds Morrisville’s southern half, has enjoyed tremendous growth in recent years as it serves as home to many worldwide company headquarters.

Interstate 40, adjacent to Morrisville, serves as the major east-west corridor for the state of North Carolina, and the newly constructed NC 540 is in the process of improving traffic circulation around the City of Raleigh. The proposed Triangle Parkway will potentially further link Morrisville with employment centers in Research Triangle Park. NC 54, which runs north-south through the center of Morrisville, was the main link between Raleigh and points west until I-40 was built in the 1980s, and still carries heavy commuter traffic to RTP.

Among the benefits of Morrisville’s location within the region is the fact that Morrisville residents have easy access to all the best of the Triangle’s amenities. These include Lake Crabtree and Lake Crabtree County Park, Umstead State Park and the American Tobacco Trail. An opportunity exists to link the trails at Lake Crabtree with the American Tobacco Trail, through Morrisville Town Center, helping to create a truly regional off-road trail system. Morrisville residents are also located close to major employers in Research Triangle Park, the City of Durham and the City of Raleigh. Indeed, the success of Morrisville’s business community has been in part due to the overall economic success of the region and RTP.

Along with the benefits come challenges, one of which is the town’s location adjacent to Raleigh-Durham International Airport. Noise from the airport restricts land use in the town, limiting residences, schools and other sensitive uses to the western half of the town. As a result, Morrisville has experienced a geographic separation between residential and non-residential uses, which has implications for quality of life (e.g., not being able to walk to work) and traffic congestion.

An additional planning challenge is the boundary of Morrisville itself. Figure 2.1 shows the planning jurisdiction boundary of Morrisville as a dotted black line. The planning jurisdiction includes the town limits as well as the town’s Extra Territorial Jurisdiction (ETJ) and Short-Range Urban Services Area (SRUSA), and comprises the area subject to the policies included in this plan document. The planning jurisdiction also includes several parcels annexed by agreement with Durham County. The town limits of Morrisville omit several areas within the planning jurisdiction, shown as light gray unincorporated areas in the figure. Since Morrisville is surrounded by adjacent entities, its planning jurisdiction is essentially fixed at the current ten square miles, with no opportunities for future annexation.

The planning jurisdiction boundary of Morrisville is irregular, essentially surrounding portions of Cary and RTP on the town’s western side. Some roads meander, crossing into and out of jurisdictions in their path, such as Davis Drive. This situation is complicated by the overall growth in the region, which means that communities have become effectively contiguous in some places with little indication to a casual observer that they have passed from one jurisdiction to another.

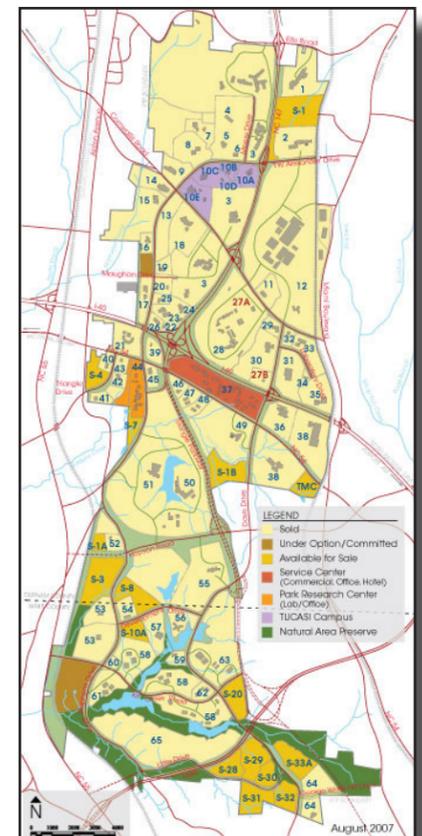
Planning for Morrisville is challenging because each jurisdiction’s planning and development actions impact the adjacent municipalities. This plan therefore calls for increased communication, and joint planning where appropriate, with neighboring jurisdictions. Through the process of creating this plan, staff and consultants received input from representatives of all of the surrounding jurisdictions, plus the North Carolina Department of Transportation, North Carolina Turnpike Authority, RDU Airport Authority, Triangle Transit, Capital Area Metropolitan Planning Organization (CAMPO), North Carolina Railroad Company, and others (see a detailed list and descriptions in Appendix C). By working within the regional context, while taking action to preserve Morrisville’s history and enhance its sense of community, Morrisville can more effectively plan for the future.

2.2 Brief History of Land Use and Transportation in Morrisville

The history of a community’s growth and development over time quite often parallels the historical development of modes of transportation. As society and technology evolved from a “horse and buggy” age to a railroad age, and then to the automobile and air travel eras, they have left imprints on cities, towns and villages that reflect these same eras.

The Town of Morrisville is no exception, and the evolution of the community form of Morrisville is closely interwoven with the evolution of transportation technology and its impact on the settlement patterns of the Town. From its beginnings as a rural crossroads community, to its days as a railroad stop, to its current expansion reflecting from the twin impacts of automobile and air travel, the Town’s character and form are intricately linked to the main eras of transportation change.

During the mid 1700s, early settlers came to Central North Carolina in search of abundant farmland and to escape the control of England. Once settled, they found themselves amongst corrupt officials preventing them from obtaining the rich farmland they came in search of. Violence erupted between the early settlers, known as “Regulators” and the governing officials around the area of Alamance County. In 1771, Governor Tryon and his Army set out to the



This map of Research Triangle Park shows the locations of its 160 companies.

Extra Territorial Jurisdiction (ETJ): An ETJ is the area adjacent to and outside the town limits in which the municipality has authority to exercise planning, zoning, building and subdivision regulation.

Short-Range Urban Services Area (SRUSA): Land that (a) is projected and intended to be urbanized and served by municipal services in the next 10 years; and (b) is not located within a water supply watershed, as designated by the State. Although the SRUSA is currently under Wake County (rather than Town) jurisdiction, the parcels would be annexed to the town limits or ETJ prior to development requiring extension of public utilities.



This 1790s Wake County map shows “Col. Jones” living in the area that would become Morrisville.
Source: Ernest Dollar

2.2 Brief History of Land Use and Transportation in Morrisville, cont'd

Much of this history of Morrisville draws on the work of Ernest Dollar, *Images of America: Morrisville*, Arcadia Publishing, 2008.



Billy Hartness in front of his former home, the historic Pugh house built in 1870, being moved to a new location. Needed road improvements threatened the structure, so Town staff worked with Mr. Hartness to find another location.

area to calm the revolt. Along the way he stopped and set up camp at what is thought to be the earliest residence in Morrisville, the home of Colonel Tignal Jones along Crabtree Creek. Gov. Tryon continued to lead his Army to the revolt and nine days later, on May 16, 1771, the Battle of Alamance occurred, one of many events that contributed to the American Revolutionary War. Wake County was formed as a result of the fighting and an early Morrisville resident, Col. Jones became one of the earliest leaders for the County.

In the nineteenth century many settlers recognized that the Town known as Morrisville today was located in a promising area. It was nestled in between the two larger communities of Raleigh and Durham. Major roads began to develop connecting the two hubs and many settled into the Morrisville area for its convenient location. The future Chapel Hill Road (NC 54) followed a ridgeline between two watersheds, while the future Morrisville-Carpenter Road, on the other hand, skirted the higher ground at the edge of the Crabtree Creek floodplain and crossed Chapel Hill Road at a point where the Town Center is now located. Until I-40 was built in the 1980s, NC 54 was the main link between the State's university in Chapel Hill and the State capital in Raleigh, a key factor in the development of Morrisville as a center of activity in the region.

Large farms were settled in the Morrisville area, with names like Morris, Allen, Scott, and Barbee. In the late 1820s, the Shiloh community north of Morrisville was settled by freeborn African Americans and freed former slaves. The defining moment for the Town of Morrisville was the construction of the rail line and depot that eventually connected the coastal areas to Wake County in the mid 1850s. The railroad was part of a grand civic project to connect Charlotte and Goldsboro through the Piedmont and spur economic development in the state. The rail line naturally followed the high ground for ease of construction and closely paralleled Chapel Hill Road. A local resident and Morrisville's namesake, Jeremiah Morris, donated several acres to the rail company for the construction of a rail yard and depot. The rail stop in Morrisville allowed the community to trade crops with areas outside Morrisville as well as to obtain goods and materials to rebuild the community. The skirmish at Morrisville, which occurred near the end of the Civil War in 1865, caused significant physical damage in the area. The railroad tracks served as a unifying or centralizing influence on the growth of the rural settlement. By the 1870s Morrisville became a popular stop along the rail line due to the growing number of businesses in the area and its location at the crossroads. The Town of Morrisville incorporated in 1875 with a population of 165 residents.

The rail line continued to be a necessity for the flourishing of Morrisville, but the residents and businesses also relied on automobile travel through the town. In 1924, the first road in town, Highway 10, was paved and many businesses grew along the road for the convenience of travelers. The economy had begun to flourish for the town, but the depression of the 1930's brought on hardships. The Town's charter was repealed in 1933 and wasn't restored until 1947. For nearly forty years, the Town did not see much change until the creation of the Research Triangle Park (RTP), an area developed just northwest of Morrisville in 1959. RTP sought to attract high-tech research and development companies such as IBM and GlaxoSmithKline. Morrisville's economy improved as businesses supporting RTP companies and the shipping activity through Raleigh-Durham International Airport located in the town. Major residential development came later, as employees of the research companies moving into RTP made Morrisville their home due to its convenient location. By 2000, the population of Morrisville had grown to 5,208 and in 2006 the population had more than doubled to 13,501.

As Morrisville's commercial and residential neighborhoods filled in over recent years, there developed a distinct network of local roads tied into the primary roadways. A characteristic of the local road network is that it is generally composed of short, unconnected segments – essentially many dead end roads connecting to the major arterials. The railroad tracks continue to form a barrier to east-west circulation in town and the Crabtree Creek floodplain forms a north-south barrier. One of the consequences of this pattern has been to put more traffic pressure on the arterial and collector roadways, with gradually increasing congestion on some segments and intersections – especially when combined with the great increase in through traffic from Cary and surrounding areas.



The railroad through Morrisville today.

This trend has also given Morrisville its own distinct urban form in the past decade or two. Its form is generally one of multiple, broad 'main streets' (such as NC 54, Aviation Parkway, Davis Drive, etc.) interspersed with self-contained residential or commercial subdivisions that relate to one another only through the main roadways. The rail line continues to carry rail cars daily through the town. AMTRAK operates two passenger lines, the Carolinian and the Piedmont, through Morrisville that carry more than 330,000 passengers annually, but there are no stops in town (Durham and Cary are the closest stations). Though the tracks currently serve primarily as a freight corridor separating the Town into two halves, there is a future potential for them to once again exert a centralizing influence on Morrisville's urban form.

Looking at Morrisville's history in the big picture, there have been three phases: Office and light industrial growth spurred by RTP, RDU Airport, and Interstate 40; residential development for RTP workers and those who want to be in the center of the region; and retail development to serve the growing residential population. Morrisville is just beginning to see major redevelopment as vacant land dwindles. The form of the Town has primarily evolved as a response to the dominant transportation technologies of the time. As Morrisville plans for its future land use and transportation patterns, it will be important to both look at – and look beyond – the current transportation and built infrastructure in order to establish a vision for the future form and character of the Town.

2.3 Demographics

Population

Morrisville faces challenges for the future as it tries to maintain quality of life and community integrity in the face of rapid growth. Understanding the growth and demographic trends of the Town will offer an understanding of where the area is going in the future and offer assistance in planning for infrastructure for current and future citizens of Morrisville.

Morrisville has experienced accelerated growth since 1990 as residential neighborhoods have developed (Figure 2.2). Between 1990 and 2000, the population grew from 1,489 to 5,208, an increase of 13.3% a year. By 2007, the population had risen to 14,308, an average growth rate of 15.5% per year. This is significantly greater than the 4.1% annual growth rate for Wake County and statewide annual growth rate of 1.7% for 2000 to 2007. The North Carolina State Demographer lists Morrisville as the seventh fastest growing municipality in the state for the period 2000 to 2007. The recent growth is visible in the town. Major housing subdivisions developed over the last several years include Breckenridge, Providence Place and Kitts Creek. In 1990, there were 778 housing units compared with 3,210 units in 2000 and 6,274 in 2004.

Although the population has increased over the last 19 years, the relative proportion of the age of residents has remained about the same. Children under the age of 18 represented about 22% of Morrisville's population in 2004. Adults 65 and over represented just 4% of the population, versus 7% for Wake County and 12% nationwide. These statistics indicate that Morrisville's population is relatively young, with many young families, which will be useful information for identifying amenities to the area such as schools, parks, senior centers and other facilities that Morrisville residents need.

The Town is predominantly identified as white, with about 66% of the population in 2004. More than 18% of the population in the Town was identified as Asian, and 11% identified as African-American. About 5% of Morrisville residents identified themselves as Hispanic or Latino. Morrisville's median household income in 2000 was \$56,548, which is slightly higher than Wake County's \$54,988 median income and the national average of \$41,994. In addition, 56% of Morrisville residents 25 years and older had a bachelor's degree or higher in 2000, versus 44% in Wake County and 24% nationwide.

Projecting the future population of Morrisville, as with any community, is a difficult task due to the number of unknown factors that can affect population growth. One way of thinking about it is to consider the land available for residential development in Morrisville. By adding the current population, the estimated population from housing units already approved for development but not yet built, and applying recommended densities to the few remaining undeveloped residential parcels, we can calculate a general estimate of the "build-out" population for Morrisville. This calculation comes to about 24,500 people and could increase if the Town Council approves additional residential development within Regional Activity Centers or the Southern Activity Center. It is important to remember that this figure includes population in the entire planning jurisdiction, rather than simply the town limits as the census figures do. When Morrisville will reach the "build-out" population is uncertain and depends on many different factors, including regional and local economic development, the housing market, and local policies that may encourage or discourage development.

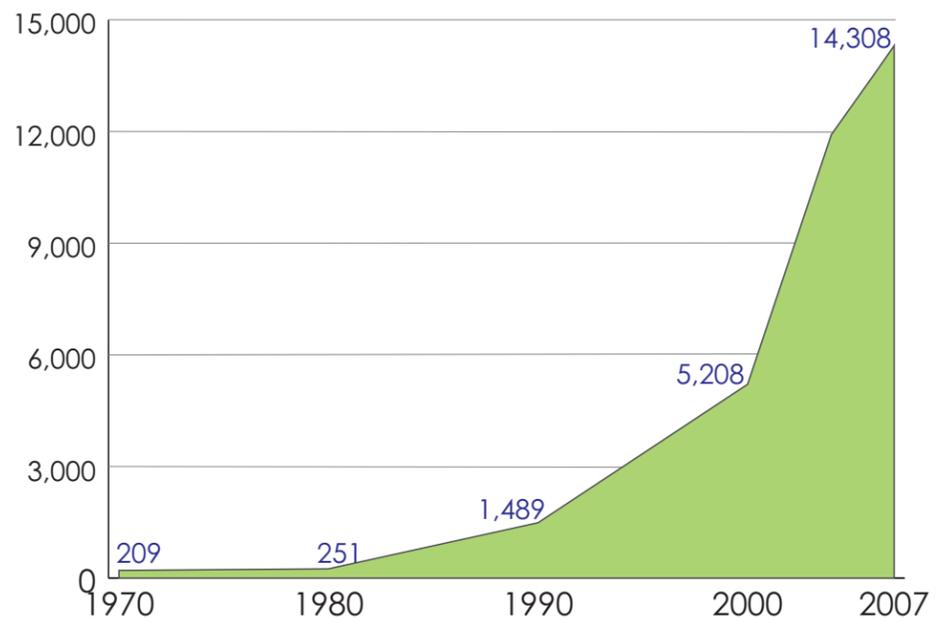
Employment and Commuting Patterns

The precise "daytime population," or number of people employed by Morrisville businesses, is difficult to determine. Several different sources provide employment data, but based on different methods of calculation and different geographies (e.g., some use town limits, others use zip codes containing Morrisville). Estimates range from 435 to 611 businesses in the Town, employing between 8,800 and 12,500 people. The various sources agree that the largest sector of employment in Morrisville is professional, scientific and technical services, with transportation and warehousing; administration and support; retail trade; and manufacturing as other important sectors.

In 2004, an employment survey by the U.S. Census Bureau indicated that only 7% of employed Morrisville residents worked in Morrisville; 22% commuted to Raleigh, 13% to Cary, 10% to other locations in Wake County, 21% to Durham County (which includes RTP), 4% to Orange County, and the remainder to other locations. These data highlight that Morrisville residents work throughout the region, not just in RTP. The U.S. Census Bureau reported that in 2000, 85% of vehicle owners in Morrisville drive to work alone, 9% used a carpool or vanpool system, and less than 2% of the working population walked or cycled to work.

Figure 2.3 shows the average commute for residents of Morrisville, compared to residents of Wake County as a whole for 1990 and 2000. The average travel time for Morrisville residents is lower than for Wake County residents, and Morrisville residents did not experience as much of an increase in travel time between 1990 and 2000. More Morrisville residents than Wake County residents have a very short commute to work, and fewer have a very long commute. Although the number of vehicles per household declined slightly from 1.9 in 1990 to 1.6 in 2000, the overall increase in population during that time period resulted in a total vehicle increase of 300% in Morrisville.

Figure 2.2 Population Growth in Morrisville 1970 - 2007



Sources: US Census Bureau, North Carolina State Demographer



Traffic backs up on Morrisville-Carpenter Road heading east to I-40.

Figure 2.3 Commute Time for Morrisville Residents 1990 - 2000

	Morrisville 1990	Morrisville 2000	Wake County 1990	Wake County 2000
Less than 10 minutes	9%	11%	13%	10%
11- 34 minutes	82%	77%	75%	67%
35 minutes or more	7%	10%	10%	18%
Average travel time to work (minutes)	19.3	21.1	20	24.7

Source: US Census Bureau

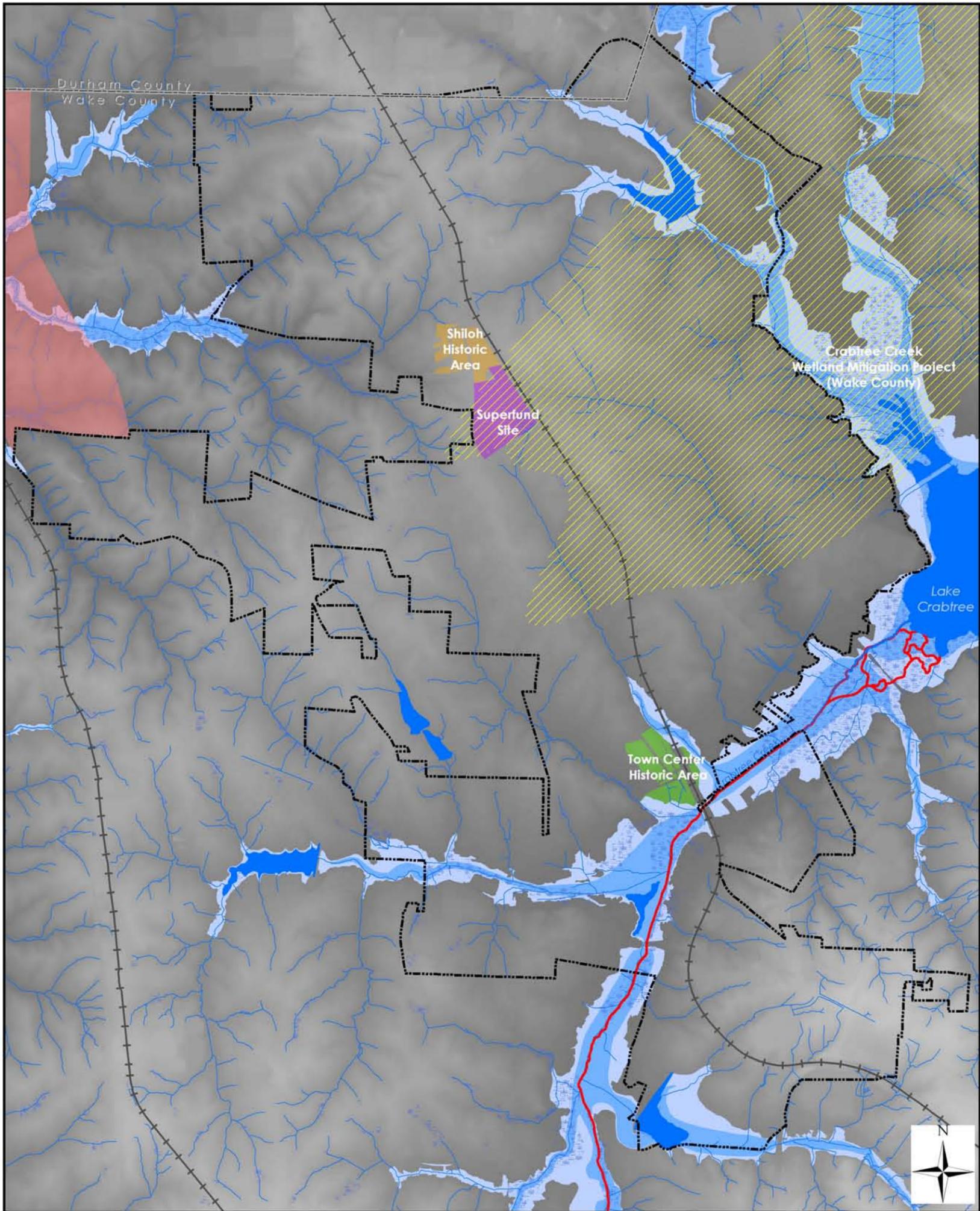
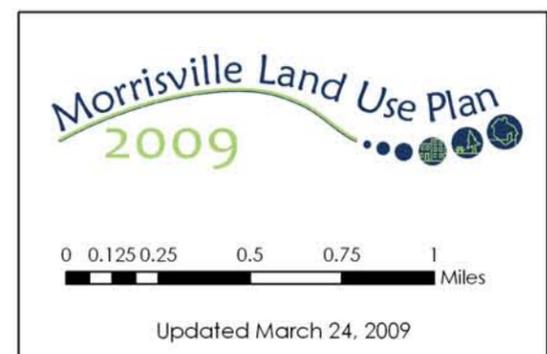


Figure 2.4 Development Constraints



2.4 Development Constraints

Understanding Morrisville's development constraints prior to beginning the planning process can avoid unnecessary negative impacts on the environment and capitalize on the assets of the community.

Water Features

Lake Crabtree, a major man-made lake, is located just east of Morrisville (Figure 2.4). A County Park on the north side of the lake provides boating and recreation access (see photo at right). Crabtree Creek flows east into Lake Crabtree, crossing through the southern portion of Morrisville. Topography in Morrisville gently slopes down to Crabtree Creek, with few steep slopes. The tributary streams of Indian Creek and Sawmill Creek feed Crabtree from the north, forming broad floodplains and wetlands along the eastern and southern portions of the Town. Wake County has preserved much of the wetland and floodplain land northwest and southwest of Lake Crabtree as part of a wetland mitigation project, restricting it from any future development. Two smaller lakes, one near the Airport Boulevard interchange at I-40 and one adjacent to the Preston Golf Course, are also owned by Wake County.

Crabtree Creek has been identified by the North Carolina Department of Natural Resources (NCDENR) as a 303(d) impaired stream, which means that the water quality does not meet Environmental Protection Agency (EPA) water quality standards. As a result, NCDENR has created a specific management plan for this stream in order to improve the water quality. This management plan may affect how much and where development can occur near Crabtree Creek.

Airport Noise Overlay

Raleigh-Durham International Airport (RDU) is located adjacent to Morrisville's eastern boundary, on the opposite side of Interstate 40. Several of the airport's flight patterns cross over Morrisville, creating substantial noise. To avoid negative impacts, RDU has been working with neighboring jurisdictions for years to restrict sensitive land uses in noise impacted areas. These restrictions are in acknowledgement of the fact that excessive noise has been shown to cause hearing and other physical problems over a long period of exposure. In addition to protecting its citizens, Morrisville's implementation of the Airport Noise Overlay District protects it from legal liability for allowing substantial negative impacts to occur. Generally speaking, residences, schools and other sensitive uses like daycares, should not be located in areas with greater than 65 decibels of airport noise (shown by yellow diagonal lines in Figure 2.4). For Morrisville, this area covers approximately 26% of the town, much of which remains undeveloped. Nonresidential uses, such as offices, retail and industrial facilities are allowed in these areas. Hotels are permitted if soundproofing is installed. The Town Council has recently changed the Town's ordinance to permit residential uses within the 65 decibel areas west of NC 54 if soundproofing is installed and the right to overflight is granted.

Railroad Corridor

The railroad through the center of Morrisville, as described earlier, has been an integral part of the town's history and success. The tracks currently separate the town into two halves, with limited crossings restricting automobile, pedestrian and bicycle traffic. The North Carolina Railroad Company owns the rail corridor and has taken the position that there can be no expansion of auto traffic crossing the railroad at-grade (without an overpass), and that no sidewalks or greenways may cross at-grade. Thus, east-west connectivity is limited in the town until funds can be secured to build additional overpasses.

Areas of Historical Significance

Morrisville has two areas of historical significance, neither of which has yet been given a formal designation, such as inclusion on the National Register of Historic Places. The Shiloh area near the north end of town is a historically black community dating from the 1820s, with a church and other historical buildings. The Shiloh Heritage Preservation Area was established by the town through the adoption of the North Morrisville-Shiloh Small Area Plan on January 6, 2003.

In addition, there are numerous historic buildings in the Town Center area, the preservation of which have been addressed in more detail in the Town Center Plan, adopted in 2007.

Superfund Site

Just south of the Shiloh area, on the northwest corner of McCrimmon Parkway and NC 54 is the former Koppers Co., Inc. plant. The plant, which dates to 1896, processed and treated wood products, releasing contaminants into the soil, groundwater and surface water. Contamination at the site was discovered by the EPA in 1980, and cleanup was performed from 1990 to 1997. Cleanup involved removal of contaminated soil; bioremediation, carbon adsorption and filtration to treat water onsite; and revegetation. The property is being actively monitored by EPA before it can be formally removed from the Superfund list, but there is currently no environmental hazard at the site. The site is currently owned by two companies, with part of the site actively operating as a wood laminating facility, while the other is vacant. Now that the site has been cleaned up, it represents an opportunity to find a more appropriate community-oriented use.



Lake Crabtree, from Lake Crabtree County Park.

Development Restrictions

Floodway: Undevelopable

100-year Floodplain: 1% chance of flooding in any given year. Development is acceptable if building is located at least 2 feet above base flood elevation (FEMA elevation certificate is required).

National Wetlands Inventory: Require permits from state agencies for any major development, such as subdivisions or commercial development. May require developers to mitigate wetland losses.



Crabtree Creek, just east of the crossing with NC 54.

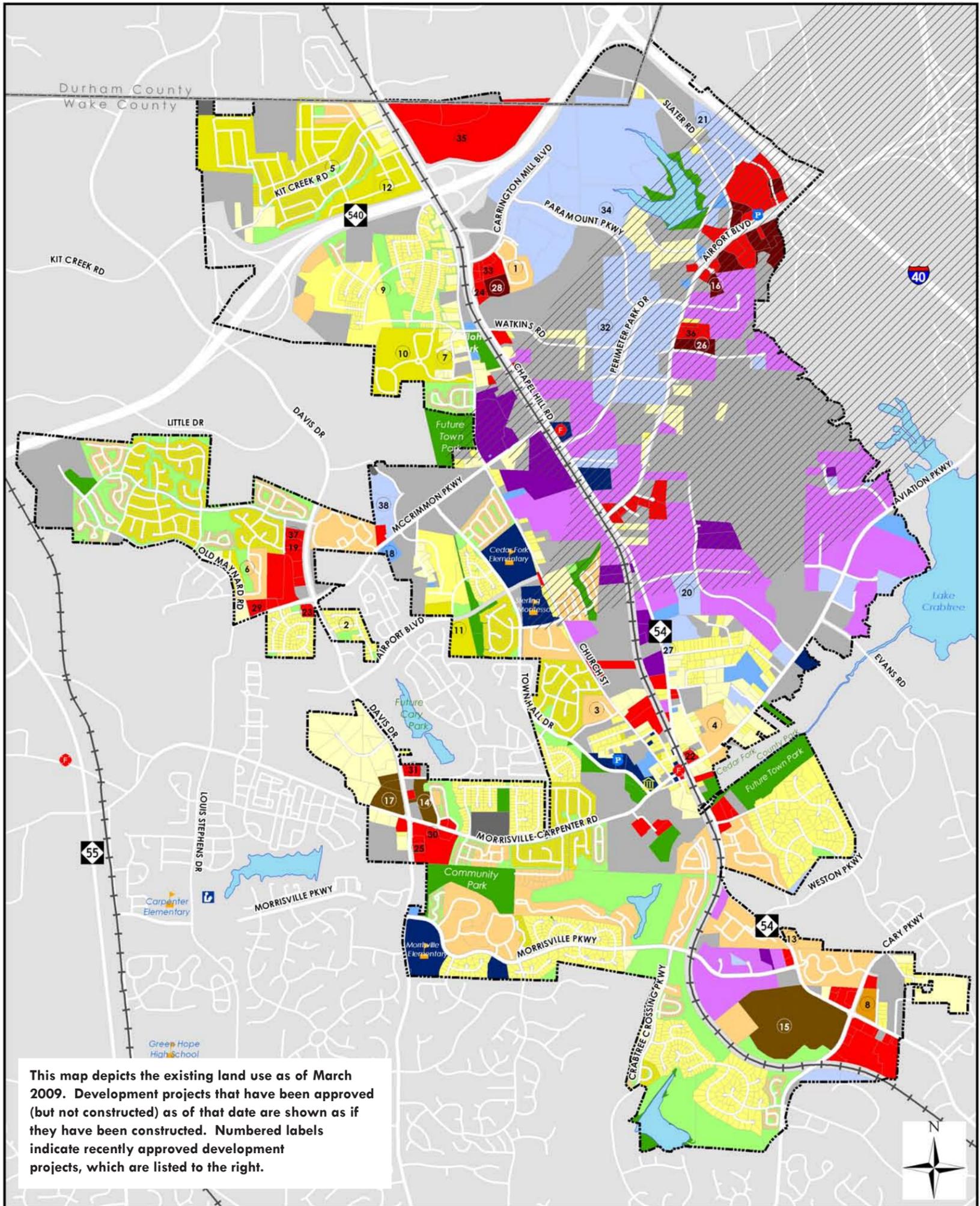
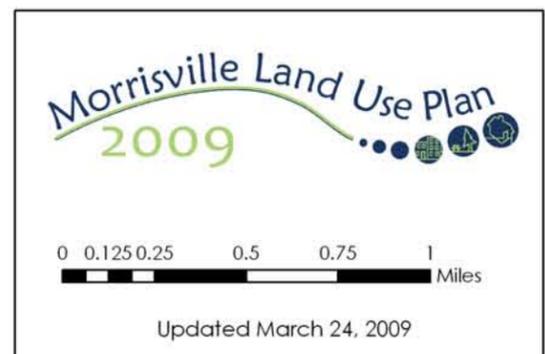


Figure 3.1 Existing Land Use



3.0 EXISTING CONDITIONS

The purpose of this section is to describe the current land use conditions in the Town of Morrisville, as well as the rapid change and development that is occurring so that planning for the future of Morrisville will have an accurate baseline.

3.1 Land Use

Existing land use in Morrisville is shown in Figure 3.1 to the left, with categories for different general land use types and some distinction by the density of residential development. The RDU Airport Noise Overlay District, shown on the map as black diagonal lines, indicates that for the most part residential development is only permitted west of NC 54 (although a few older residences pre-dating the restriction still exist in that area). A numerical version of this map, with percentages of land in each category, is shown in Figure 3.2.

The term "existing land use," as it is used in this Plan, refers to what is physically on the ground as of March 2009. The exception is that development projects that have been approved but not constructed at that time are shown as if they have been constructed. Existing land use is distinct from zoning (the legal control for how a property owner may develop his or her land) or future land use (the general land development pattern the Town would like to see in the future). Following are the existing major land use patterns in Morrisville:

- Residential areas of the town are largely dispersed throughout the western and southern sections, which are not subject to the airport noise overlay. A majority of the residential development is single family detached homes (at very low, low and medium densities), laid out in self-contained subdivisions with little connectivity to adjacent areas. There are several semi-attached and attached townhome communities and a number of apartment communities, all of which are classified as high density. Other than large developments where housing types have been mixed (such as Breckenridge and Kitts Creek), residential housing types are largely separated.
- Retail shopping in Morrisville is concentrated in several locations. One is at the Airport Boulevard interchange with Interstate 40. This area includes an outlet mall, several hotels and restaurants, which are largely used by visitors rather than residents. Two shopping centers with current or pending grocery store anchors are located at the far south of Morrisville (NC 54 and Cary Parkway) and the far west (Davis Drive and McCrimmon Parkway, and Davis Drive and Morrisville-Carpenter Road). Very little retail is located in the Town Center.
- There are three schools in Morrisville - two elementary schools and one Montessori school. Public facilities, such as Town Hall and the police station, are mostly located in the center of town along Town Hall Drive. These facilities are well-sited

Figure 3.2 Percentage of Existing Land Uses

Existing Land Use Type	Percentage of Town Area
Very Low Density Residential	6%
Low Density Residential	10%
Medium Density Residential	8%
High Density Residential	9%
Group Living Facility	< 1%
Mixed Use	2%
Commercial - Lodging	1%
Commercial - Retail/Services	6%
Office	9%
Place of Worship/Cemetery/Civic Group	1%
Public Facility/School/Institution	2%
Industrial - Distribution/Warehouse	10%
Industrial - Manufacturing	2%
Private Open Space/Recreation*	7%
Public Park/Greenway/Open Space	4%
Utilities	< 1%
Vacant/Undeveloped	23%

* All development must have on-site greenspace. This category includes only properties that are exclusively greenspace or recreation.

Figure 3.3 Development Recently Approved and Under Construction (October 2004 - March 2009)

Residential			Commercial, Industrial and Office		
1. Carrington Park Apartments	Apartments	266 du	16. Best Western	Hotel	70,800 sf
2. Chessington Subdivision	Single Family Detached Houses	53 du	17. Bethany Village	Retail, Office	99,500 sf
3. Church Street Townes	Townhomes	81 du	18. Church of Jesus Christ of Latter Day Saints	Place of Worship	16,587 sf
4. Cotten Place	Attached cottages, Townhomes	113 du	19. Circle K	Convenience Store, Gas Station, Car Wash	5,415 sf
5. Kitts Creek Subdivision	Single Family Detached Houses, Townhomes	722 du	20. Coastal Carolina Pumping	Office	11,800 sf
6. McCrimmon at the Park	Single Family Detached Houses, Townhomes	131 du	21. Copley Place - Building B	Office	80,982 sf
7. Morrisville Gardens	Single Family Detached Houses	8 du	22. Cruizers	Convenience Store, Gas Station, Car Wash	4,944 sf
8. Morrisville Manor	Congregate Care Facility	214 du	23. Davis Corners	Retail	17,001 sf
9. Providence Place	Single Family Detached Houses, Townhomes	575 du	24. Duke Medical Office	Medical Office	20,000 sf
10. Shiloh Grove	Townhomes	211 du	25. Dunkin Donuts	Restaurant	2,190 sf
11. Town Hall Terraces	Townhomes	70 du	26. eSuites Hotel	Hotel	153,294 sf
12. Townes at Everett Crossing	Single Family Detached Houses, Townhomes	203 du	27. Green Drive Office Building	Office	3,342 sf
13. Stephen's Gate	Townhomes	37 du	28. Hotel Sierra	Hotel	90,248 sf
			29. McCrimmon Pointe	Office, Daycare	36,258 sf
			30. McDonalds	Restaurant	4,882 sf
			31. Morrisville Animal Hospital	Animal Hospital	11,208 sf
			32. Perimeter Park- 2200 & 2250	Office	212,862 sf
			33. Perimeter Park Retail	Retail	32,400 sf
			34. Time Warner Cable Offices	Office	250,000 sf
			35. Shiloh Crossing	Wal-Mart, Other Retail	538,427 sf
			36. Shoppes at Airport Boulevard	Retail, Office, Day-care, Restaurant	45,449 sf
			37. The Goddard School	Daycare	8,290 sf
			38. Town Hall Commons Office Building #2	Office	75,030 sf

Notes:
 Residential development reported in dwelling units (du)
 Nonresidential development reported in square footage of building space (sf)
 Some figures are approximate and subject to change during the development review process

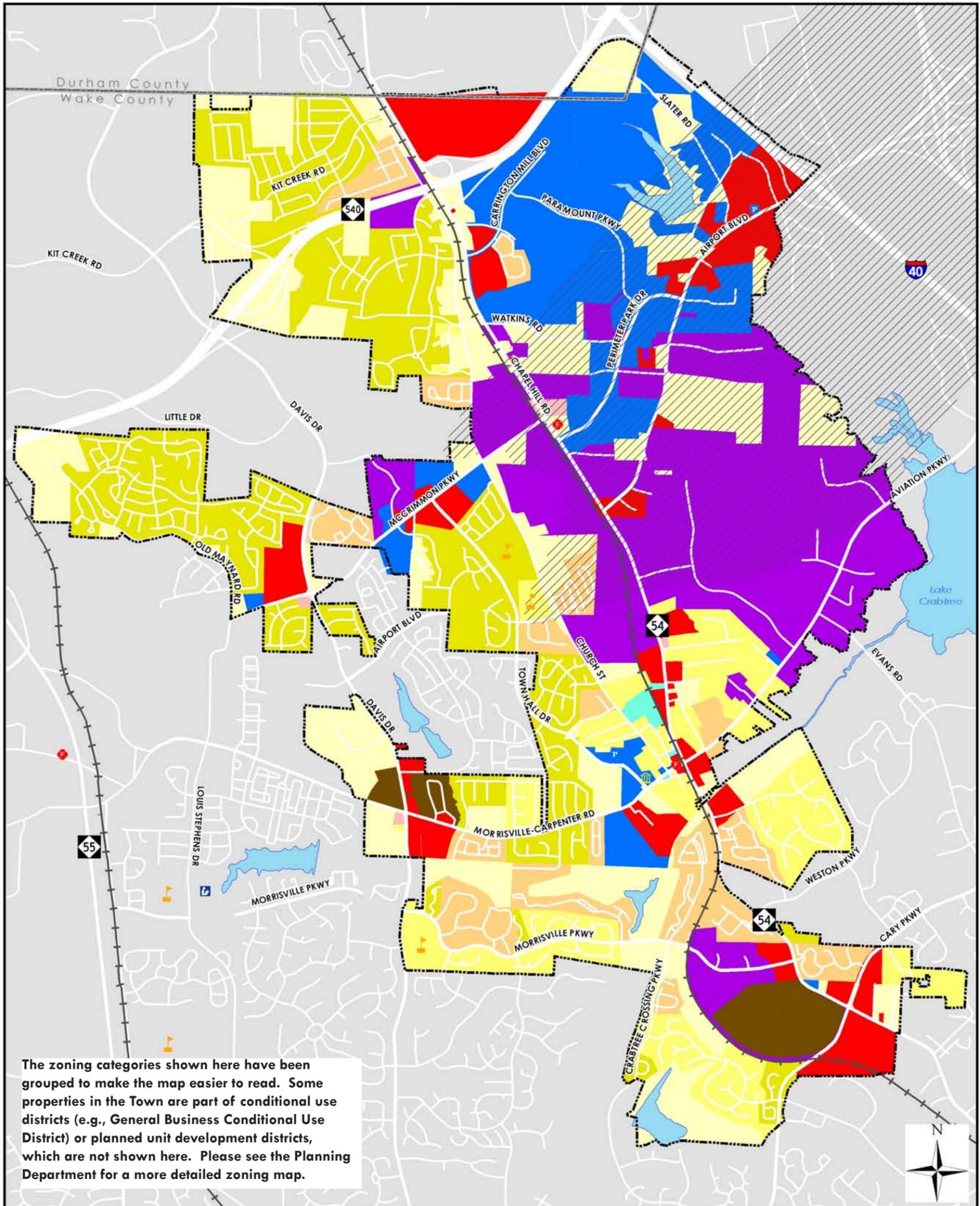


Figure 3.4 Current Zoning

Town Hall	Very Low Density Residential (Agricultural District)
Library	Low Density Residential (R-10 & R-12)
Police Station	Medium Density Residential (R-8 & R-6)
Fire Station	High Density Residential (RMF)
Schools	Office and Institutional
RDU Airport Noise Overlay District	Village Core
County Boundary	Neighborhood Business
Morrisville Planning Jurisdiction	General Business
Lakes	Industrial Management
Railroad	Mixed Use
Roads	

Morrisville Land Use Plan
2009

Updated March 24, 2009

3.1 Land Use cont'd

and within walking distance of some of Morrisville's residents.

- Parks in Morrisville are dispersed throughout the town, with the exception of the eastern area between Airport Boulevard and Aviation Parkway.
- Offices in Morrisville, which comprise 9% of the total land area, are clustered north of Airport Boulevard and east of NC 54. This area is home to the Perimeter Park office complex, which includes older 1- to 2-story buildings as well as newer mid-rise buildings. While some of the buildings are within walking distance of each other, they are largely separated from other uses, such as restaurants or convenience retail.
- The Airport Noise Overlay District, which does not permit residential uses east of NC 54, is largely comprised of industrial uses, vacant land and some offices. There is a large piece of vacant land located between Airport Boulevard and Aviation Parkway. This is the largest undeveloped area remaining in the town.
- Industrial uses are prominent in Morrisville, comprising 12% of the total land area. There are relatively few industrial manufacturing facilities, but many distribution facilities. This is not surprising because Research Triangle Park does not permit distribution facilities in its jurisdiction, and the adjacent Raleigh-Durham International Airport creates a significant volume of truck freight traffic. These facilities are a concern from a planning perspective because they place a large number of heavy trucks on Morrisville's roadways.
- Vacant land in Morrisville, while comprising 23% of the total area, is largely confined to the eastern, noise-restricted area. The remaining vacant land outside the Airport Overlay District, located at the intersection of McCrimmon Parkway and Town Hall Drive, is planned as an office and neighborhood retail center. A large piece of vacant land north of Perimeter Park Drive has been purchased by Wake Technical Community College for a future campus.



Residential construction at the Savannah subdivision.

3.2 Recent Development

In addition to showing existing land uses, Figure 3.1 shows recently approved developments. These are categorized according to their final land use on the map even though they may not have completed construction at this time. Numbers on the map correspond to the numbered list of recently approved developments shown in Figure 3.3. The total number of approved developments since October 2004 is 3,062 residential dwelling units, and 2,691,499 square feet of nonresidential building space.

The quantity of recently approved development for a small town like Morrisville is quite substantial. Several of the projects are large, and are likely to have considerable impact on the character of the town. Two major residential projects have taken up much of the remaining vacant land outside the airport noise overlay (Kitts Creek and Providence Place subdivisions). These subdivisions are in the process of constructing more than 1200 new homes in Morrisville. Two major development projects with commercial space are Shiloh Crossing, at the far north end of town, and Park West Village, at the far south end of town. These two developments, while very different in style and composition, will together contribute 1,428,427 square feet of commercial building space. Shiloh Crossing will offer a Wal-Mart and other major retail stores in one-story highway retail buildings. Park West Village will include multi-story buildings, structured parking and commercial uses including office space, a movie theater, major retail anchor, hotel and restaurants. Park West Village also incorporates a substantial residential component.

Some of the public comments received during the planning process were centered around the need for more shopping and other services in the town. Unfortunately for residents, there is an inevitable disconnect between residential and commercial development. Commercial businesses cannot afford to locate in an area that does not have the population to support them; many will go out of business waiting for the population to catch up. So businesses follow the population. In the meantime, especially in areas experiencing rapid growth, there is a disconnect between the residential population and the commercial services available to them. As the amount of available land for residential development dwindles in Morrisville, the commercial development will catch up.



Mixed use construction (rental flats over retail) at Grace Park.

3.3 Zoning

Current zoning in Morrisville is shown in Figure 3.4 for the purpose of documenting the current baseline conditions. Unlike a land use plan, zoning has the weight of law and determines how a property owner may develop his or her land. New developments sometimes require rezoning to an appropriate category to permit the desired development type. Rezoning involves an application and public hearing process. Much of the vacant land that is left in the town is currently zoned either Industrial Management (in the case of the eastern portion), Office & Institutional, or Agricultural (which allows very low density residential). For full information on what is allowed in each zoning category, please see the Town Ordinances (a link is provided in the References section in Appendix B).

The Town of Morrisville currently plans to revise its zoning codes starting in 2009, creating a Unified Development Ordinance (UDO). A UDO combines the zoning ordinance and the subdivision ordinance into one document, which is easier to understand and interpret. Additional changes to better address future development, such as allowing for small-scale mixed use development (the current zoning ordinance allows mixed use only on parcels larger than 10 acres), may be included.

4.0 POLICY DIRECTION

4.1 Vision

From January 26th through January 28th of 2007, the Town Council and staff conducted a retreat to establish a future Vision and Goals to serve as a shared understanding of the challenges the Town of Morrisville faces today, and a collective sense of the direction in which the Town would like to focus its resources. Through a collaborative planning process, seven Town goals with associated initiatives were established.

On February 26, 2007, the Morrisville Town Council unanimously approved those goals and initiatives for FY 2007. These goals and initiatives were used as a starting point for the Vision and Land Use Plan Goals and Policies listed below. In addition to the Town Council's Vision, the input of the citizens and the Plan Advisory Committee were incorporated into the final Goals and Policies for this Plan.

The Vision for Morrisville established by the Town Council is as follows:

The Town of Morrisville will be an innovative crossroads where cultural heritage meets the next generation nurturing vibrant communities of thriving families and businesses while preserving small-town values.

Innovation is one of the central themes of this Plan, and is a necessity to provide services and opportunity to a diverse and increasingly older range of citizenry. Providing non-motorized transportation and housing options are important factors in establishing opportunities for aging baby boomer populations around the country, and in Morrisville.



Morrisville Road Race, 2007.

4.2 Goals and Policies

The development of goals is crucial to the land use and transportation planning process. Adopted goals and policies form the framework for adding or amending ordinances and regulations that guide the development of land within the Town's planning jurisdiction. Goals are unifying statements of a community's preferred future direction. Policies attached to Goals provide a means for translating Vision into action, and represent a set of guidelines for decision making for the Town on land use and transportation issues, programs and projects in the future.

It is expected that the Goals and Policies in this Plan will be used by the Town as a framework for many future decision-making processes and actions, including:

- Decisions on rezoning and special use permit applications
- Funding and fiscal priorities
- Departmental priorities and action plans

All elements of the Morrisville Land Use and Transportation Plans must be administered fairly, equitably and consistently in order to ensure that the Town's goals are met. The intent of these goals is to preserve and enhance community character, encourage pride in our community, and augment the quality of life desired by the Town's citizens. In order to fully implement the Plans, the goals are accompanied by targeted Action Items (Section Seven) to ensure that the future Vision will be realized.

The goals from the Board's Vision were used as the primary basis for developing the Goals and Policies. In addition, the input from the public workshops, the Plan Advisory Committee and the goals from the existing 1999 *Land Use Plan* were also used to establish the following comprehensive set of land use goals and policies for the future of the Town.

Growth and Development Pattern

Goal 1: Ensure a diverse development pattern that sustains livability and the environment by encouraging future development and public infrastructure that is complementary with existing development.

Policy 1A: Promote growth and development that contributes to and builds upon the Town's overall image as a well-planned, attractive, livable, and unique community in the Triangle Region.

Policy 1B: Promote and plan for the future of Morrisville as an environmentally friendly and energy efficient community.

Policy 1C: Plan, develop and support vibrant, walkable gathering places at Morrisville's historic crossroads.

Policy 1D: Concentrate higher-density, mixed-use development near existing and proposed transit centers, and at activity centers to provide services to Town citizens and daytime employees in a pedestrian-friendly environment.

Policy 1E: Develop and re-develop with detached residential land use outside activity centers when in context with surrounding uses.

Policy 1F: Implement strategies that minimize threats to life and property from natural and man-made disasters.

Character and Quality of Development

Goal 2: Ensure that Morrisville retains a small town atmosphere by integrating attractively and sustainably designed communities of complementary uses.

Policy 2A: Promote development that fosters a sense of place by improving the character of the built environment, including visually appealing buildings, streetscapes, amenities, and public spaces.

Policy 2B: Protect water quality and quantity in the Town's streams, lakes, and groundwater and consider the potential regional impacts on water supply and wastewater management of proposed developments.



Unveiling of the Shiloh Historic Marker, October 14, 2006.

4.2 Goals and Policies, cont'd

- Policy 2C: Provide a system of interconnecting greenways and natural corridors that link parks, natural areas, and open space, as well as residential and non-residential destinations.
- Policy 2D: Clearly communicate the character of development that is encouraged in the Town, including land use, design and development standards, utility extensions, and transportation needs/design.
- Policy 2E: Promote lifecycle housing options that allow residents to continue to live in our community even as their needs change over time.

Transportation and Land Use Integration

Goal 3: Improve transportation mobility by integrating land uses with transportation infrastructure.

- Policy 3A: Establish development patterns supportive of a walkable, multi-modal community, including higher-density residential development and complementary land uses in the Town Center and around planned and potential transit and activity centers.
- Policy 3B: Actively encourage pedestrian-oriented development through site design, building orientation, interconnected parking facilities, and streetscape improvements.
- Policy 3C: Encourage infill and redevelopment of existing areas as a way to promote compact, efficient development, and support transportation options.
- Policy 3D: Provide a variety of recreational opportunities connected to residential areas and places of employment by streets, greenways, sidewalks, and bicycle facilities that protect and enhance sensitive environmental areas.
- Policy 3E: Encourage interconnected street patterns in new development and redevelopment that promote effective circulation of car, transit, bicycle, and foot traffic.
- Policy 3F: Ensure that transit provisions, such as turn-outs, shelters, right-of-way, and good pedestrian connections are accommodated.
- Policy 3G: Consider acquiring control of streets within the Town where it is fiscally prudent to expand the opportunities available for designing and creating travelways that complement and support adjacent land uses.

Community Facilities and Services

Goal 4: Provide community services and public infrastructure to maintain and enhance the quality of life for Town citizens of today; the elderly that have enriched our past, and future generations.

- Policy 4A: Incorporate an understanding of the tax revenue and fee benefits of potential new development in land use decisions; ensure that these benefits are balanced against the infrastructure and service costs needed to serve various kinds of new development and redevelopment.
- Policy 4B: Encourage building and site design that conserves water and energy; reduces wastewater; reduces future infrastructure costs; and lengthens the lifespan of existing and future infrastructure.
- Policy 4C: Ensure that Morrisville has adequate resources and prepared responses for potential natural or man-made emergencies, such as evacuation plans and hazard response programs.
- Policy 4D: Provide excellence in educational opportunities that are accessible to all citizens, including convenient access to libraries, schools, and other institutional and cultural arts facilities that serve as community focal points, as well as sponsoring unique educational opportunities for citizens of all ages.
- Policy 4E: Provide parks, recreation and cultural opportunities for citizens of all ages.

Cooperation and Coordination

Goal 5: Foster a collaborative environment internally and with relevant local, regional, state, and federal partners to develop new opportunities for Morrisville's residents and business community.

- Policy 5A: Encourage cooperation/coordination with other governments and agencies to ensure that sufficient land areas are retained for future needs of schools, parks, greenways, streets and other public purposes.
- Policy 5B: Consider the consolidation of services and sharing of expenses with other agencies and surrounding communities, including mutual agreements for fire, transit, and police services.
- Policy 5C: Work closely with and take into consideration other local government and regional plans when making day-to-day and long-term land use and transportation decisions.
- Policy 5D: Take a lead in creating a joint development review process that describes how Morrisville and neighboring entities can review and comment on developments along the borders of the Town and their anticipated impact to services and facilities.
- Policy 5E: Continue to create meaningful public involvement opportunities in town government programs and processes that are responsive to public input.
- Policy 5F: Ensure the availability of information and the transparency of town government actions and functions.



Day at the Park, 2006.

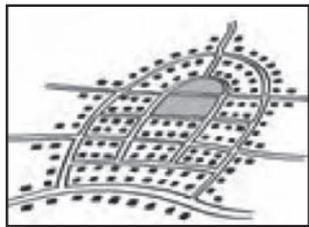


Civil War Re-Encampment, March 15, 2008.

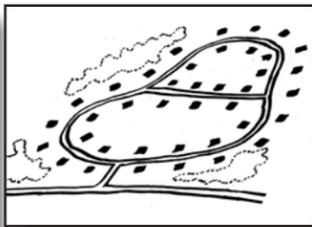
5.0 RECOMMENDED FUTURE LAND USES

5.1 Development Principles

The following Design Principles set a framework for guiding the design of development throughout Morrisville. New and infill development should strive to realize these principles to ensure the development of high-quality, well connected places that minimize land consumption, balance pedestrian and vehicular traffic, foster a vibrant civic environment, and balance the small town qualities of Morrisville with its vital economic future. A mix of land use and development types also supports the diverse population mix that is the hallmark of healthy and vibrant communities.



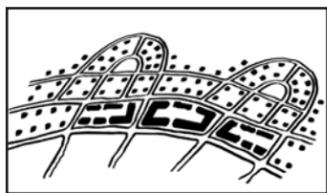
compact development



dispersed development

Preserving Open Space

Development in a growing community like Morrisville presents a unique set of design challenges. Paramount among these is the efficient use of land and the arrangement of buildings, roads and open space in a visually harmonious manner. Carefully planned green space is necessary to maintain the natural beauty and quality of life of Morrisville over time. Environmental and natural features should be integrated into open space planning. Viewsheds and natural features, including water bodies, wetlands, and steep slopes, should be preserved as open space wherever possible. The contrasting development strategies illustrate the difference between dispersed development and more compact development, which better protects open space. When compact development is combined with a connected network of streets and circulation paths, it allows better connections within a neighborhood and ultimately enriches the range of choices and experiences for the Town's residents.



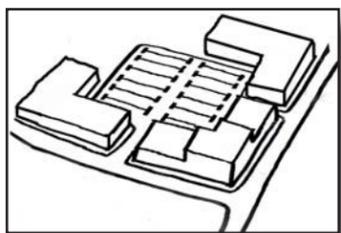
interconnected development



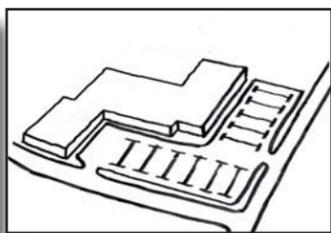
conventional development

Street Connectivity

Portions of Morrisville have been developed with conventional transportation patterns that minimize any connections between neighborhoods or surrounding roadways. While this achieves more privacy, particularly for residential developments, it also can limit accessibility, impair emergency response times, and increase traffic congestion. Creating a more interconnected circulation pattern allows more choices, and provides the advantages of enhanced access, reduced congestion, and more responsive emergency services. The image to the left contrasts conventional development patterns with an interconnected development pattern. Well-connected neighborhoods and centers promote pedestrian activity and encourage walking in place of driving for local trips. Additionally, this framework promotes smaller block sizes and a greater diversity of building types within close proximity. Small blocks are an important element within a walkable area, because they create a comfortable scale for pedestrians through an increased sense of location and direction, breaking down the space between intersections and destinations, and providing increased visibility for businesses and offices. As new development or redevelopment occurs in Morrisville over time, consideration should be given to ensuring street connectivity with the existing and proposed road, bicycle, pedestrian and transit systems in the area.



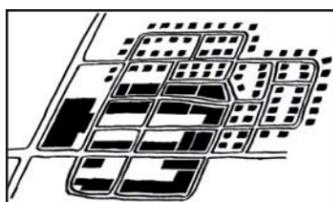
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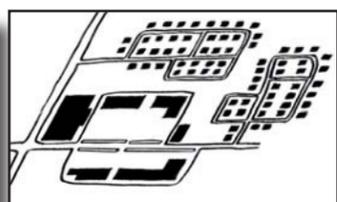
conventional development

Site Design + Parking

Successful site design balances car and pedestrian accessibility and creates an environment that is welcoming to both drivers and pedestrians from the street. A key factor is the organization of buildings and parking relative to adjacent streets. Many of the commercial developments in Morrisville have been designed in a way that places buildings far back from the road, leaving a large, open expanse of pavement visible to visitors from the roadway. A more desirable alternative reverses this placement, drawing the building to the street edge and moving parking to the rear. Doing so provides a prominent and pedestrian-friendly edge for the site - one where buildings frame the street, giving them a town-like quality with entrances fronting the sidewalk while presenting a more attractive and inviting look to the public. Additionally, the visual impact of parking is minimized, as it is shielded to the rear of the buildings. It is important to note that standard parking requirements can lead to an oversupply of parking spaces and open expanses of asphalt. The Town should consider further reducing minimum off-street parking requirements and allowing mitigation strategies such as shared parking and on-street parking in place of peak-usage standards to reduce parking needs and required development area.



mixed-use development



conventional development

Land Use

The land use pattern of much of Morrisville has developed around separate areas for residential, commercial and employment uses. This results in additional traffic congestion on major arterial roadways as people need to get onto the main road to get from home to shops, parks, schools and workplaces. Future development should strive to integrate better connections between uses and foster more of a mixed use development pattern in the Town. To be successful, mixed-use development must provide strong connections between different uses, allowing residents, employees, and patrons to naturally overlap and cross between uses. The illustration to the left shows the use of connections to draw together residential and commercial blocks into a unified center. Additionally, the diversity of uses balances activity between the daytime, nighttime, and weekend hours, fostering a busier, safer, and more exciting environment for all residents, employees, and visitors and at all times of day. Certain areas of Morrisville may not be conducive to a full complement of mixed uses - for example, areas within the Airport Noise Overlay District or areas of predominantly existing residential neighborhoods.

5.2 Future Land Use Map

The purpose of the Future Land Use Map (Figure 5.1) is to graphically depict a general land development pattern that seeks to achieve the goals of the Plan. A numerical summary of the percentage of land in each category is also provided in Figure 5.2. Using a 20-year planning horizon, the Future Land Use Map projects preferred locations for different land use types. In creating this map numerous interests had to be balanced, including maintaining the quality of life for a small town and the demands of the growing Triangle region. There was also a need to balance the need for residential housing and the restrictions placed upon the town by the Airport Noise Overlay District.

The Future Land Use Map evolved through the public input process and the application of goals and policies of the Plan. As part of the Town-wide public planning forums, several conceptual future land use scenarios were evaluated by the public and the Plan Advisory Committee. In addition, questions about the relative amounts of development of different land use types were a key feature of the public survey. These comments and evaluations were incorporated into the final Future Land Use Plan. For example, survey respondents and many public workshop participants commented that they would not like any more apartments in Morrisville, but would like more greenspace and recreational opportunities. These have been addressed in the Land Use and Transportation Plans by including no new high density residential development outside of activity centers (low or medium density only) and incorporating specific new park locations as well as recommendations for general park locations in undeveloped areas (see Section Six). These are just part of the public comments received relating to land use. For more information, many of the themes of the public comments received and results of the survey are included in Appendix C, and a detailed description of the future land use mapping process is included in Appendix E.

It is important to note that this map only addresses broad density and land use objectives, not detailed standards. In most cases, proposed densities and intensities are expressed in terms of ranges that are appropriate for the types of uses proposed. In the case of activity centers, several compatible land use types are discussed, without restricting the area to a single land use. These ranges of intensity and use are intended to provide flexibility in two ways: first, to allow the Town and property owners to adapt to the changing needs of the future population without rewriting the plan; second, to apply development principles to the unique characteristics of individual properties as they are evaluated during the review of a specific development proposal. The focus is on the quality of development, not just the use.

Future events and the evolution of the town will undoubtedly change the Future Land Use Map. The Future Land Use Map should be reviewed and evaluated on a regular basis, with minor updates every other year and a major update every five years, to determine what amendments are appropriate as inevitable variations from the projected land development patterns are to be expected. To be effective, the Land Use Map must be consistently consulted as a guide in reviewing and evaluating proposed property rezonings and land development plans. It is important to note that the Future Land Use Map cannot be interpreted independently from the written land use goals and policies presented in Section Four.

Comparisons to Existing Land Use, Zoning and the 1999 Future Land Use Map

Direct comparisons between the percentage of existing land uses (Figure 3.2) and future land uses (Figure 5.2) are difficult due to the different purposes of the maps. Existing land uses are intended to be very specific according to what exists on the ground, whereas future land uses are broader, more flexible categories, applied to larger areas of the town. Although effort has been made to employ the same residential density categories in both maps, it would be inaccurate to make conclusions by comparing the percentage of land area of each category. While some residential areas, such as those on very large lots within the Airport Noise Overlay District, are planned for redevelopment to another use, most others are not planned to change density categories. Differences in percentage are mostly due to the fact that many existing residential areas are within other planning areas, such as the Town Center Planning Area or activity centers, and that is how they are categorized in the Future Land Use Map.

The future land use categories, while broad, are intended to translate roughly to the current zoning categories for ease of interpretation. The zoning categories may well be altered in the future, as in the planned conversion to a Unified Development Ordinance (UDO) starting in 2009. For this reason, the plan is specific where the future land use categories differ from current zoning. To further assist in interpreting the Future Land Use Map, more detailed place-specific recommendations are included in Section Six, and design guidelines for different land use types are presented with the category descriptions in Section 5.3.

Comparing the 2009 Future Land Use Map to the map adopted in the 1999 Land Use Plan (which has been updated to reflect map changes as a result of development since the adoption of the plan), several general trends emerge:

- The 2009 map increases the low and medium residential areas in town by 227 acres. In other words, 227 acres of town were previously designated for nonresidential use, but are designated as residential in the 2009 map. There have been some changes in residential categories between the two maps as a result of development between 1999 and 2009, and differences in the definitions of the low and medium density categories.

Figure 5.2 Percentage of Future Land Uses

Future Land Use Category	Percentage of Town Area	Page # of Description
Regional Activity Center	8%	page 23
Neighborhood Activity Center	3%	page 24
Southern Activity Center	4%	page 25
Business Activity Center	3%	page 26
Corridor Commercial	4%	page 27
Heritage Preservation Area	1%	page 28
Offices	7%	page 29
Public/Institutional	3%	page 30
Industrial	8%	page 31
Very Low Density Residential	1%	page 32
Low Density Residential	15%	page 32
Medium Density Residential	9%	page 32
High Density Residential	7%	page 32
Private Open Space/Recreation	7%	N/A
Public Park/Greenway/Open Space*	5%	page 33
Future McCrimmon Small Area/ Master Plan	6%	page 34
Town Center Plan	9%	page 35
Superfund Redevelopment Site	1%	page 36

* This category includes only properties that are exclusively greenspace or recreation. Additional greenspace exists in nonresidential developments and is not included in this number. Additional private open space is expected as part of new residential and nonresidential development (at least 440 acres or 8%) according to current ordinance requirements. In a large area such as the McCrimmon Small Area Plan, planners may be able to negotiate a public park, rather than private open space, to meet the ordinance requirement.



Historic Page House in the Town Center

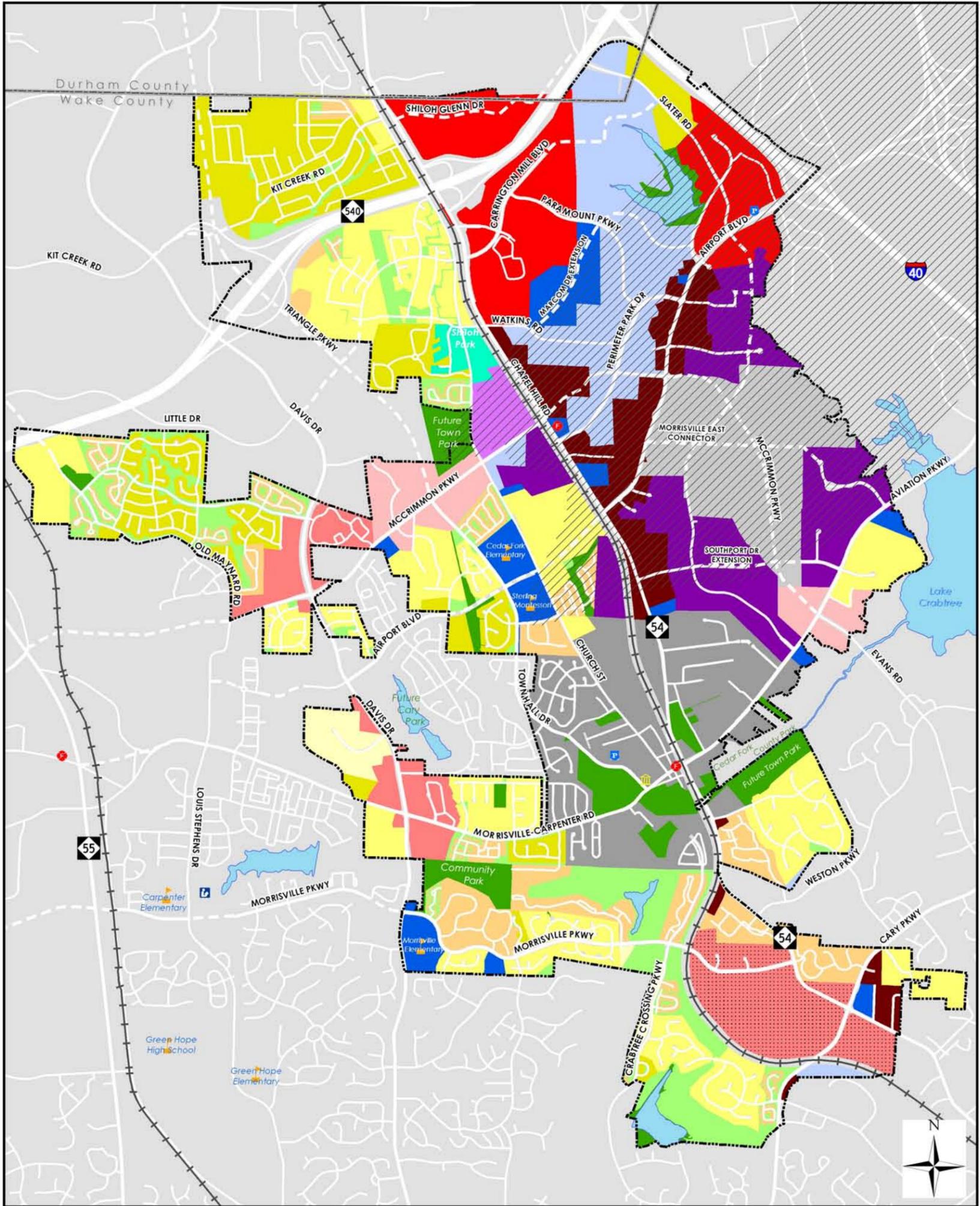


Figure 5.1 Future Land Use



5.2 Future Land Use Map, cont'd

The following images illustrate the Future Land Uses. Page numbers refer to the full description for each category.



Regional Activity Center (Page 23)



Neighborhood Activity Center (Page 24)

Southern Activity Center (Page 25)



Business Activity Center (Page 26)



Corridor Commercial (Page 27)



Heritage Preservation Area (Page 28)



Office (Page 29)



Public/Institutional (Page 30)



Very Low Density Residential (Page 32)
≤ 1 du/ac net density
Single family detached houses
Ex: Crabtree Crossing Estates, Holly Creek Road



Low Density Residential (Page 32)
> 1 and ≤ 4.5 du/ac net density
Single family detached houses
Ex: Providence Place, Weston Estates, Preston, Town Hall Commons, Addison Park



Medium Density Residential (Page 32)
> 4.5 and ≤ 7.5 du/ac net density
Single family detached houses, semi-attached or townhouses
Ex: Savannah, Breckenridge (single family)



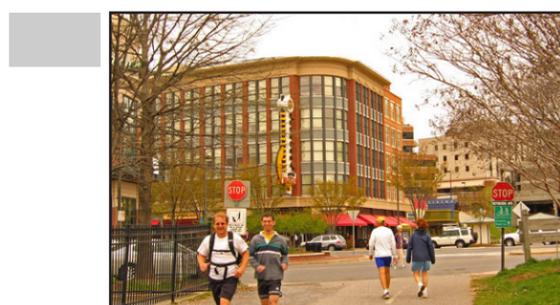
High Density Residential (Page 32)
> 7.5 du/ac net density
Semi-attached houses, townhouses or apartments
Ex: Gables @ Town Hall Commons, Kitts Creek (townhouse), Breckenridge (townhouse), apartment complexes



Industrial (Page 31)



Private Open Space/Recreation



McCrimmon Small Area Plan (Page 34)



Public Park/Greenway/Open Space (Page 33)



Town Center Planning Area (Page 35)



Transit Oriented Development (Page 36)

Note: The TOD district is a "floating district" and, therefore, not mapped. This district may be applied to the Superfund Redevelopment Site.

5.2 Future Land Use Map, cont'd

- More park space is included, showing parcels recently acquired by the Town for future park development.
- The 2009 map reduces the overall acreage of industrial use, but keeps the designation in core areas around existing industrial development. The previous plan map showed industrial use for virtually all land east of NC 54 south of Airport Boulevard and north of Aviation Parkway. This has been changed to a combination of office, corridor commercial, and future master planned areas.
- The name and purpose of some of the categories have changed. Mixed use and commercial categories from the 1999 plan have been traded in favor of several different activity center categories and a corridor commercial category. A floating Transit Oriented Development category has been created so that it may be applied via rezoning to land in the future when transit services exist. These category name and definition changes reflect the desire for flexibility in the future land use map.



Cedar Fork Elementary School and Community Center.

School Siting

During the planning process, numerous comments were received from members of the public requesting the plan to call out locations suitable for future schools in the town, specifically for a middle school, so that their children can attend school close to home. Although the Town is responsible for land use planning, Wake County Public School System (WCPSS) is responsible for locating school sites and pursuing their development. The Town can only make suggestions to the school system, which is not currently pursuing school sites in the vicinity of Morrisville. For a middle school, WCPSS requires a minimum of 30-40 acres of land that is not too expensive (e.g., not located near highway interchanges or along major commercial corridors). Given the shortage of vacant land located outside the Airport Noise Overlay District in Morrisville, few sites meet those criteria. The following potential sites were discussed:

- Build "up" at the current Cedar Fork Elementary School site. A community center currently located on the site may move to another location, providing enough space for a 6th grade center.
- Redevelop areas within the Town Center Planning Area.
- Redevelop the Holly Creek subdivision, located off Davis Drive, which is currently a very low density residential area. This site was considered and removed as a potential site.

Following are strategies recommended by the Town Council for staff to pursue additional educational opportunities in Morrisville:

- Continue coordination with Wake County Public School System.
- Consider "adaptive reuse" (redevelopment) of sites within Morrisville for schools.
- Work collaboratively with Cary and RTP to locate suitable sites outside Morrisville's jurisdiction for schools that would serve Morrisville residents. Potential sites may include vacant land west of Davis Drive (in Cary's jurisdiction) between Morrisville-Carpenter Road and McCrimmon Parkway; and vacant land in RTP on the east and west sides of Davis Drive, just north of the town's boundary.
- Pursue attracting private schools to locate in Morrisville.
- Coordinate with Wake Technical Community College for the proposed campus in Morrisville to offer the "Earn and Learn" program, which provides unique high school and college classes addressing the health and sciences theme.



Morrisville residents enjoy a day at the Morrisville Aquatic and Fitness Center.

5.3 Future Land Use Categories

Following is a description of land use categories from the Future Land Use Map. The categories were modified from those used in the 1999 Land Use Plan, in order to address the changing circumstances in the Town since the adoption of the 1999 Plan and to better reflect the public and Plan Advisory Committee input received during the Plan update process.

The overall land-development strategy in the Land Use Plan is to protect existing, stable residential areas where a continuation of the compatible low-density residential pattern is envisioned and to encourage compact, mixed-use developments that provide people with the opportunity to live, work, recreate, and shop in a pedestrian-friendly environment in strategic locations. The exceptions are for areas within the Airport Noise Overlay District east of NC 54, where residential uses are not allowed.

Because much of the Town's land area is already developed, this Plan envisions that new projects will be modest in scope and therefore will be evaluated based on their compatibility with the larger community of which they will be a part.

However, there are a few larger areas of vacant land in Town as well, such as the large, vacant area in the McCrimmon Master Plan area. The overall future land use categories and policies guiding their development for the Town are described on the following pages. For each future land use type, function, preferred uses, and policies are listed, with photos illustrating encouraged and discouraged design.

In addition, Section Six divides the town into several community areas in order to describe how the recommended future land uses described in this section will combine with the recommended improvements from the Transportation Plan to affect the look, feel, and function of areas of the town.

5.3 Future Land Use Categories, cont'd

1. REGIONAL ACTIVITY CENTER (RAC)

A. Function

- i. Provide significant regional employment, retail, education, health care, entertainment or mixed use destinations at key interchanges/intersections of major transportation corridors in Town.
- ii. Provide improved access to jobs, a compatible mix of uses and access to a variety of transportation options.

B. Preferred Uses

- i. Land uses should include a mix of uses, such as of office and institutional (including medical, senior, and child care related institutional use), entertainment, retail and major commercial land uses. Medium and high density residential uses should be included as part of an RAC if the area is located outside the Airport Noise Overlay District.
- ii. Commercial uses within the RAC should not include destination retail uses such as a building supply, nursery operation, or auto dealership that would require significant outdoor display or storage. Outdoor display or storage associated with major retail or shopping centers is allowed.

C. General Policies + Development Character

- i. Regional Activity Centers should be planned with the highest density and intensity of uses centered within 1/4 mile of a thoroughfare or transit stop, tapering to less dense and intense uses at the edges.
- ii. Land uses within the RAC district should be mixed – including vertically and horizontally (i.e. among separate buildings, or within the same floor of a building or among floors in multi-story buildings) - to create a diverse center to live, work, play and shop.
- iii. RAC districts should contain a complementary mix of land uses that promote pleasant, safe and convenient access for pedestrians and bicyclists, and provide a strong orientation to existing or potential future transit service.
- iv. Multi-modal transportation connections or easements should be provided to link surrounding uses to each RAC, and link the RAC to activity centers in adjacent areas.
- v. Connections to undeveloped parcels should be designed and built to the property line and in a manner that can be continued.
- vi. The RAC should feature well-configured squares and greens and a traditional network of landscaped streets with pedestrian-friendly activities and frontages. Rectilinear pattern of small blocks and the location of civic buildings that act as landmarks and symbols of community identity are desired.
- vii. For the purpose of providing a transition from the RACs to surrounding areas, each RAC district should be designed to center on a compact core where the development of highest intensity/density should be located, with progressively lower-density and intensity spreading outwards. Where existing uses and built areas do not fit this pattern, it is intended that as redevelopment occurs over time this pattern should be encouraged in the future.
- viii. Major land development proposals within the RAC area should consider the provision of a full complement of public facilities and services, the adequacy of roads and utilities, and the compliance of the proposal with the community-design policies and guidelines of this Plan.
- ix. Parking areas should be de-emphasized through location, landscaping, fencing, or other decorative elements to minimize visual impact from the public right of way.



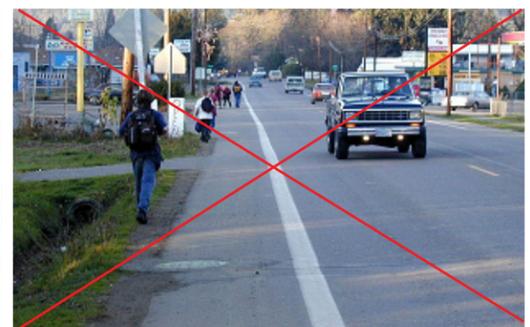
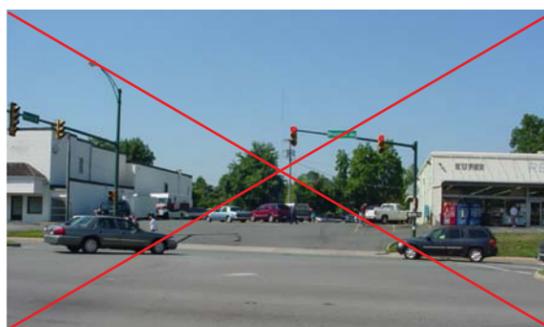
This fountain and plaza located at the entrance of a large retail establishment act as a central meeting and gathering place.



The Morrisville Outlet Mall, although located at an important transportation crossroads in Town, does not have the mix of uses and other features of a Regional Activity Center.



encouraged



discouraged

Brick sidewalks, street trees, small setbacks, and store fronts with plenty of windows create an inviting pedestrian shopping experience. Street trees and on-street parking buffer pedestrians and diners from traffic. The street tables for cafes and restaurants are located near the curb so people walking past get the sense of being a part of a gathering space.

Where possible, it is desirable for building frontages to span the entire width between side lot setbacks on primary streets, creating an uninterrupted street wall to promote a vibrant and active streetscape. Large gaps in street wall are incompatible with the design intent of the RAC. Interrupting the street wall can discourage pedestrian activity by increasing the distance between potential destinations.

Trails provide walkers and cyclists access to neighboring communities. Multi-use trails should be a minimum of 8' wide. Where adjacent to roadways, trails can replace sidewalks. Trails should be paved, with the exception of those in environmentally sensitive areas, where pervious surfaces are recommended. Trails should be clearly marked and easily accessible to pedestrian and bicycle traffic.

5.3 Future Land Use Categories, cont'd

2. NEIGHBORHOOD ACTIVITY CENTER (NAC)

A. Function

- i. Provide for moderate scale, mixed use activity centers that serve as convenient, walkable service and retail destinations for surrounding neighborhoods.
- ii. Provide for a mix of residential, retail, cultural, entertainment and office opportunities in a mixed use village center, with street-level uses that generate pedestrian activity and upper-story uses that provide complementary residential and employment uses to "keep the street level active."

B. Preferred Uses

- i. A compatible mix of land uses including housing (if located outside the Airport Overlay District), commercial and office uses, restaurants, entertainment, personal and household service establishments, institutional uses, public facilities, parks, playgrounds and other similar uses meeting the needs of the adjoining neighborhoods.
- ii. In general, residential uses should be located above the first floor, reserving first floor storefront space for activity-generating uses such as retail shops, restaurants or grocery stores.

C. General Policies + Development Character

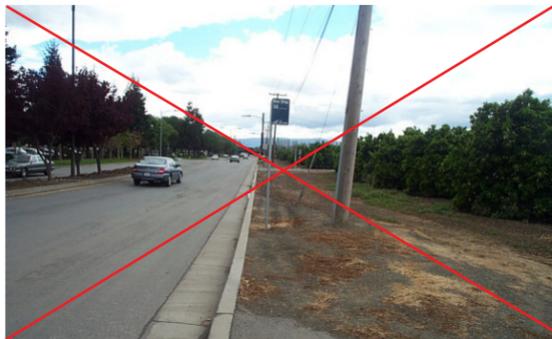
- i. Neighborhood Activity Centers should include, where feasible, a vertical mix of residential and non-residential uses within buildings to create a complementary mix of uses and activities and foster a sense of identity and place. NACs should provide a pedestrian-friendly environment with short block lengths and connected, walkable streets.
- ii. Development density and intensity should be sufficient to permit maximum use of small lots and the development of structures that support ground-floor shops and upper-level residential and office uses. However, buildings should remain small scale and compatible with the surrounding neighborhood – generally from two to four stories.
- iii. Development should combine uses vertically, as well as horizontally (i.e. mixing uses among buildings and within individual buildings), to achieve convenience, variety and walkability in the center.
- iv. Design elements should be integrated with wide sidewalks, street trees, pedestrian-scaled lighting, benches, and entrances to buildings at the edges of street rights-of-way. Bicycle facilities, on-street parking, and usable public spaces should be provided.
- v. Connections to undeveloped parcels should be designed and built to the property line and in a manner that can be continued.
- vi. Land use or intensity/density transitions should be provided between non-residential uses and existing residential communities.
- vii. Development should be oriented away from sensitive natural resources, such as floodplains and ponds to minimize the environmental impacts of new development.
- viii. Development proposals in Neighborhood Activity Centers should combine open and civic space in features such as pedestrian promenades and plazas, public art, entrance features, linear parks and trails, outdoor seating, lawns or greens and similar design features that invite pedestrian activity.
- ix. Parking areas should be de-emphasized through location, landscaping, fencing, or other decorative elements to minimize visual impact from the public right of way.



Neighborhood Activity Centers incorporate multiple uses into a walkable, pedestrian-friendly environment with compact block sizes.



encouraged



discouraged



The sidewalk is one of a variety of design elements that together contribute to an active and vibrant streetscape. Promoting a walkable environment requires safe, accessible, and connected sidewalks that unite the pedestrian with a desired destination or activity. Public sidewalks on both sides of urban roadways should be designed to a width that encourages pedestrian activity desired in a particular area.

Building setbacks strongly influence street character. Minimal front setbacks are recommended to encourage pedestrian activity along the sidewalk. Additional setbacks may be used where necessary for outdoor dining, pedestrian promenades, courtyards, or plazas. Development that lacks street frontage may discourage pedestrian activity and/or require automobile access.

Bicycle racks should be placed in safe, visible locations, preferably near building entrances and transit stops, and should not obstruct pedestrian traffic. Effective racks support the bicycle frame upright in two places. The rack must be anchored and resistant to metal cutting tools to prevent theft or vandalism. Covered racks are encouraged to prevent damage to bikes from rain.

5.3 Future Land Use Categories, cont'd

3. SOUTHERN ACTIVITY CENTER (SAC)

A. Function

- i. Provide community-wide employment, retail, education, health care, entertainment or mixed use destinations at key intersections of major transportation corridors in Town.
- ii. Provide improved access to jobs and daily institutional and service needs, a compatible mix of uses and access to a variety of transportation options.

B. Preferred Uses

- i. Land uses should include a mix of uses, such as of office and institutional (including medical, senior, and child care related institutional uses), entertainment, retail and major commercial land uses. Low, medium, and high density residential uses should be balanced with existing residential uses both within and near the SAC. New residential uses on redeveloped parcels are discouraged from being stand-alone multifamily housing.
- ii. Commercial uses within the SAC should not include destination retail uses such as a building supply, nursery operation, or auto dealership that would require significant outdoor display or storage. Outdoor display or storage associated with major retail or shopping centers is allowed.

C. General Policies + Development Character

- i. The Southern Activity Center should be planned with the highest density and intensity of uses centered at the Park West Village Development, tapering to less dense and intense uses at the edges that are compatible with the adjacent neighborhoods.
- ii. Land uses within the SAC district should be mixed – including vertically and horizontally (i.e., among separate buildings, or within the same floor of a building or among floors in multi-story buildings) - to create a diverse center to live, work, play and shop.
- iii. The SAC district should contain a complementary mix of land uses that promote pleasant, safe and convenient access for pedestrians and bicyclists, and provide a strong orientation to existing or potential future transit service.
- iv. The SAC district should have an integrated and high-quality design, with consideration for the adjacent land uses and adjacent neighborhoods.
- v. Multi-modal transportation connections or easements should be provided to link surrounding uses to the SAC, and link the SAC to activity centers in adjacent areas.
- vi. Connections to undeveloped parcels should be designed and built to the property line and in a manner that can be continued.
- vii. The SAC should feature well-configured squares and greens and a traditional network of landscaped streets with pedestrian-friendly activities and frontages. Rectilinear pattern of small blocks and the location of civic buildings that act as landmarks and symbols of community identity are desired.
- viii. For the purpose of providing a transition from the SAC to surrounding areas, the district should be designed to center on a compact core where the development of highest intensity/density should be located, with progressively lower-density and intensity spreading outwards. Where existing uses and built areas do not fit this pattern, it is intended that as redevelopment occurs over time this pattern should be encouraged.
- ix. Major land development proposals within the SAC area should consider the provision of a full complement of public facilities and services, the adequacy of roads and utilities, and the compliance of the proposal with the community-design policies and guidelines of this Plan.
- x. Parking areas should be de-emphasized through location, landscaping, fencing, or other decorative elements to minimize visual impact from the public right of way.
- xi. Design elements should be integrated with wide sidewalks, street trees, pedestrian-scaled lighting, benches, and entrances to buildings at the edges of street rights-of-way. Bicycle facilities, on-street parking, and usable public spaces should be provided.



This rendering of Park West Village, currently under construction within the Southern Activity Center, illustrates its small-scale mixed use buildings and pedestrian-friendly streetscape.



encouraged



discouraged

Pedestrian amenities should be continuous and appropriately sized to their setting. Where appropriate, they should incorporate transit facilities such as bus shelters.

Buildings should be incorporated into a site plan that includes gathering and open spaces, aesthetically pleasing design, and pedestrian connectivity between buildings.

Building storefronts should be well-designed, with adequate space for outdoor uses (such as café seating) to avoid blocking the sidewalk.

5.3 Future Land Use Categories, cont'd

4. BUSINESS ACTIVITY CENTER (BAC)

A. Function

- i. Provide access to daily retail and service needs within walking distance of primary office/industrial uses.
- ii. Provide for a mix of residential, local retail, and office opportunities in the nature of a small mixed-use community center, primarily oriented around a surrounding office or industrial concentration.

B. Preferred Uses

- i. Land uses in this district should be small-scale mixed commercial uses including local services, workshops, professional offices, institutional, housing (if located outside the Airport Overlay District) and specialty shops catering to local workers.
- ii. Retail uses should generally provide the goods and services needed by local employment and residential communities in the vicinity of the BAC.

C. General Policies + Development Character

- i. The Business Activity Center use should be compatible with and should illustrate a coordinated design, transportation connection or other relationship with the surrounding communities that exist or have been approved.
- ii. Buildings should remain compatible with the surrounding neighborhood – generally from two to six stories.
- iii. Development should combine uses vertically, as well as horizontally (i.e. mixing uses among buildings and within individual buildings), to achieve convenience, variety and walkability. In general, residential uses should be located above the first floor, reserving first floor storefront space for activity-generating uses such as retail shops, restaurants or grocery stores.
- iv. New automobile-oriented retail uses such as building supply, nursery operations, auto dealers, truck terminals, warehousing, service stations, furniture stores, drive-through restaurants and drive-through banks are not intended for Business Activity Centers.
- v. Design elements should be integrated with wide sidewalks, street trees, benches, and entrances to buildings at the edges of street rights-of-way. Bicycle facilities, on-street parking, and usable public spaces should be provided.
- vi. Land use or intensity/density transitions should be provided between non-residential uses and existing low-density residential communities.
- vii. Development should be oriented away from sensitive natural resources, such as floodplains and ponds to minimize environmental impacts and provide open space.
- viii. Access to surrounding major thoroughfares should be limited, but local vehicular, transit, bicycle and pedestrian links to adjacent parcels should be provided.
- ix. Vehicular, bicycle, and pedestrian links should extend into the surrounding development.
- x. Development proposals in BACs will combine open and civic space in features such as pedestrian promenades and plazas, public art, entrance features, linear parks and trails, outdoor seating, lawns and greens or similar design features that invite pedestrian activity.

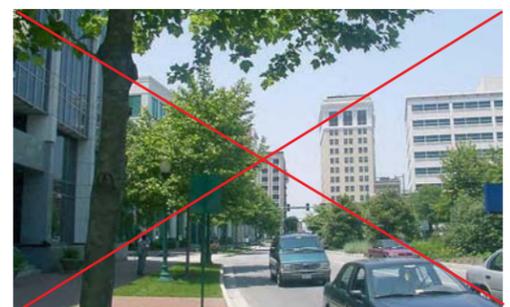
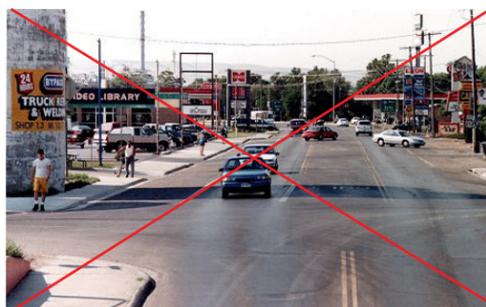
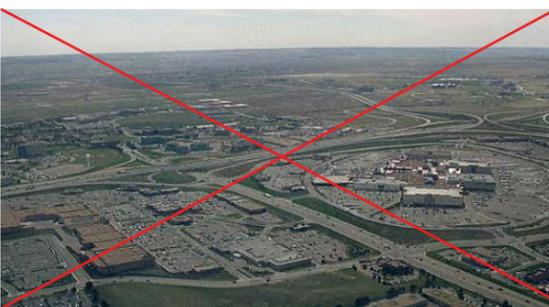


Mixed use buildings that locate residences above retail or service uses, known as live-work units, allow people to conveniently access daily destinations.

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Development should combine uses vertically, as well as horizontally (i.e. mixing uses among buildings and within individual buildings), to achieve convenience, variety and walkability. In general, residential or employment uses should be located above the first floor, reserving first floor storefront space for activity-generating uses such as retail shops, restaurants or grocery stores.

Access to surrounding major thoroughfares should be limited, but local vehicular, transit, bicycle and pedestrian links to adjacent parcels should be provided.

Buildings should remain compatible with the surrounding neighborhood – generally from two to six stories.

5.3 Future Land Use Categories, cont'd

5. CORRIDOR COMMERCIAL

A. Function

- i. Provide commercial areas located along transportation corridors to meet local and regional needs for sale of goods and services.
- ii. Ensure that streets, buildings, structures and sites located along the primary transportation corridors and gateways to Morrisville present a positive visual image of the community and support Morrisville's small town character.

B. Preferred Uses

- i. Land uses should include retail uses, office and service uses, small scale business park uses (light industrial, office), institutional uses, cultural/public uses, entertainment, and residential (if located outside the Airport Overlay district).
- ii. Retail buildings offering residential or office uses on upper floors are encouraged.

C. General Policies + Development Character

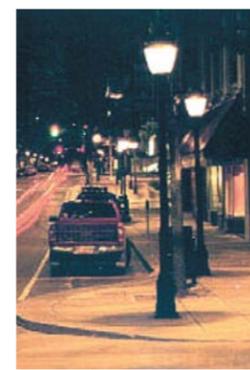
- i. Design standards and signage requirements for this district should be consistent with those in the Town Center area.
- ii. Within this district, new development, re-development, infill development and structural additions to existing development should be sensitively designed to reflect a positive image of the community as expressed through architectural guidelines and appearance standards for development and redevelopment.
- iii. Retail development within this designation should establish and maintain a pedestrian scale, walkable shopping experience offering such features as entrances immediately adjacent to sidewalks, pedestrian amenities, outdoor eating areas, screened parking, on street parking (where feasible), plazas and open spaces, and a variety of small retail shops and services.
- iv. New development should avoid large expanses of blank walls, should provide frequent street level entries, and should provide sidewalk amenities such as street furniture, seating areas, trash cans, and lighting that enhance pedestrian use.
- v. Building entrances should be placed close to the street, with ground floor windows, articulated façades, appropriately scaled signs and lighting, and awnings or other weather protection to encourage pedestrian activity.
- vi. Parking and vehicle drives should be located away from building entrances, and not located between a building entrance and the street. Surface parking should be oriented behind or to the side of a building, accessed from an alley when possible, and not on street corners.
- vii. Development should be oriented away from sensitive natural resources, such as flood-plains and ponds to minimize the environmental impacts of new development and provide green space.
- viii. Parking lots should be screened from adjacent street frontages and residential uses.
- ix. Vehicular, bicycle, and pedestrian links should extend into the surrounding development.



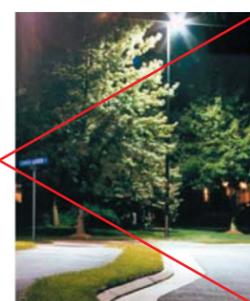
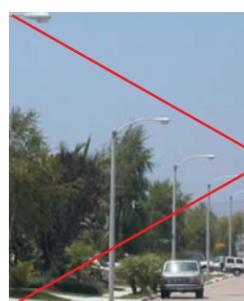
This mixed-use project features local and national stores and restaurants, office space, housing, public open space, and public parking, along a formerly declining commercial corridor.



This Morrisville example incorporates some of the policies and development character featured in the proposed district, but could better accommodate parking behind the buildings and additional landscaping to support Morrisville's small town character.



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Signs that are sensitive to nearby uses, respect the scale and proportion of buildings, and contribute to the sense of place can help secure and maintain a healthy economic climate. Facade-mounted and street level signage is preferred to tall, isolated signs that create visual clutter and distract motorists.

Transparent building façades generate interest for the pedestrian and improve security through enhanced visibility. Storefront windows and doors help create an inviting environment for pedestrians by breaking up monotony of a street wall and welcoming pedestrians along the sidewalk. Awnings, typically used to highlight entryways or windows, appear out of place when not part of a window or door.

In pedestrian-oriented areas, lighting should be scaled to the pedestrian (not the automobile,) and oriented towards the sidewalk and the roadway to help maintain safety and visibility. Scale, intensity, and fixture design vary between areas of different densities and uses. Ornamental light posts and fixtures help to create an attractive streetscape and should be consistent with the architectural character of the immediate area.

5.3 Future Land Use Categories, cont'd

6. HERITAGE PRESERVATION AREA

A. Function

- i. To protect and preserve the important historic and cultural features of the existing Shiloh Community in Morrisville.

B. Preferred Uses

- i. Land uses in this designation should consist primarily of single-family attached and detached dwellings with some multi-family houses, including those containing 2-4 dwelling units per structure, and single-family houses which have been converted into two-family or multi-family dwelling units.
- ii. A number of publicly owned lands and buildings currently exist in this district, in addition to the Shiloh Baptist Church, Luther Green Center, Park, and residences. New uses that support the civic and recreational needs of Town residents are appropriate in this designation if they are compatible with the existing residential character of the area.

C. General Policies + Development Character

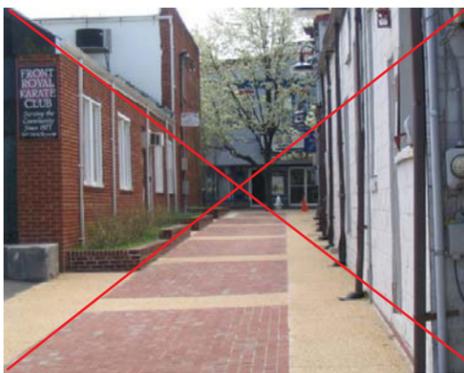
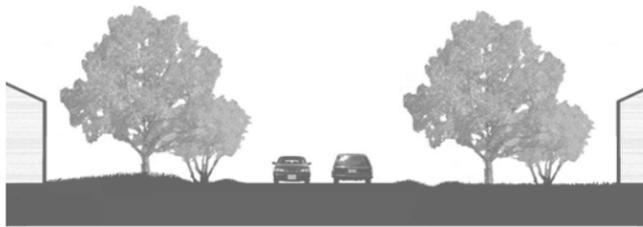
- i. Alterations and additions to heritage buildings should maintain or enhance rather than detract from the existing architectural style and character of the building and those surrounding it.
- ii. New buildings, alterations, and additions to historically unrated existing buildings should be designed to be compatible with the heritage buildings in terms of scale, massing, height, setback, and entry level.
- iii. The general open space character of the existing Shiloh community should be reinforced by maintaining spacious setbacks and large frontage for new development.
- iv. Parking lots should not front on existing or new streets to maintain the area's historic visual character. The Town should promote a parking strategy for the district that protects streetscape character.
- v. Existing trees that lend a scenic character to the streetscapes in the community should be protected from damage due to site development, redevelopment and paving modifications, street and infrastructure works.
- vi. Future design and infrastructure investment in the community should include the following compatible streetscape components: heritage street signage, improved lighting, plantings, enhanced paving, and rural landscaping to enhance the visual character of existing streets and help establish gateways to the community.



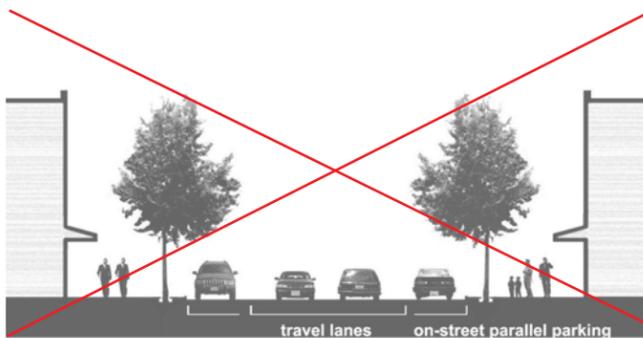
Appropriate signage helps to reinforce the significance of the Shiloh community as an important destination in the Town.



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New buildings, alterations, and additions to historically unrated existing buildings should be designed to be compatible with the heritage buildings in terms of scale, massing, height, setback, and entry level.

To maintain historic character, homes and buildings are substantially set back from the roadway. The placement of residences should be sensitive to viewsheds and open spaces to preserve the rural experience along the roadway.

Street trees help to integrate the roadway with the surrounding area. Street trees buffer the sidewalk from the roadway and break down the scale of the street. They provide shade, aesthetically enhance the streetscape, and can be used to highlight important gateways or districts.

5.3 Future Land Use Categories, cont'd

7. OFFICE

A. Function

- i. Provide a broad spectrum of local and regional employment that offers high quality employment opportunities and supports a balanced tax base.
- ii. Provide suitably located sites for single-use with the ancillary services necessary to support the predominant office use, in locations with good regional transportation accessibility.

B. Preferred Uses

- i. Land uses in the designation should consist of large-scale regional office developments that feature high visual quality and high trip-generating uses, including office parks, research and development parks, corporate headquarters, and emerging technologies facilities that support local and regional employment opportunities balanced with the Town's small town historic character.
- ii. Open space and recreational uses, such as walkways, greenways, and public plazas and promenades, should be incorporated within this designation as an important amenity to the Town and employees that work there.

C. General Policies + Development Character

- i. Projects should be designed architecturally and functionally as a well-integrated unit. Vehicular, transit, pedestrian and bicycle circulation should tie the district together internally and provide linkages with surrounding office, service and residential areas.
- ii. Concentrations of office uses have high visibility along major corridors, their structures accented with heavily landscaped greens and tree-lined boulevards, and reflect the Town's growing prominence as a local crossroads for business.
- iii. Office buildings should be located close to the roadways with parking behind, or underneath and/or located in the interior of the development, so that building fronts and entrances face the street.
- iv. The use of structured parking, shared parking or parking contained within buildings is encouraged as a way of minimizing impervious surfaces and large expanses of surface parking on sites.
- v. In general, buildings should be of moderate scale, from three to seven stories. However, land use or intensity/density transitions should be provided between this designation and surrounding areas.
- vi. Development along new or existing public streets should foster a walkable and enjoyable pedestrian environment. New development should avoid large expanses of blank walls, should provide frequent street level entries, and should provide sidewalk amenities such as street furniture and lighting that encourage year round pedestrian use.
- vii. Development should minimize impacts to sensitive natural resources, such as floodplains and ponds, and should consider green building design techniques as an approach to minimizing impacts.
- viii. Design elements should be integrated with transit shelters, wide sidewalks, pedestrian scaled lighting, street trees, benches, and entrances to buildings at the edges of street rights-of-way. Bicycle facilities and usable public spaces should be provided.
- ix. Alleys, thoroughfares, and service ways should be utilized to ensure trash pickup and deliveries for commercial establishments do not take place along public right of ways.



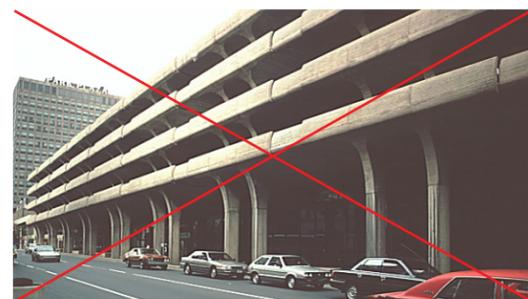
Office buildings can reduce the loss of green space and increase energy efficiency by incorporating green building design techniques. In this example, the roof of the building is covered with native grasses and wildflowers, which provides habitat for plants and animals, slows water run-off into local storm drains, and provides extra insulation to help heat and cool the building.



This Morrisville example shows an attractive but singular building isolated from the roadway and nearby buildings, and surrounded by parking. Such a design conflicts with the desire to create a walkable center that is connected to surrounding neighborhoods with building frontages facing the street.



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Reducing impervious surfaces on site, such as parking lots, rooftops, sidewalks, and roads, helps to minimize water velocity and storm-water run-off associated with rain events. Incorporating planting strips in parking lot design, narrowing road widths, replacing driveways/parking lots with porous paving, adding green roofs and other green building techniques, will aid the reduction of pollutants and sediment deposits in waterways.

Planted medians help to create a sense of place, enhance roadway aesthetics, and improve air quality. Median landscaping includes low landscape shrubs, grasses, flowers, or well-manicured street trees that are limbed high enough to preserve visibility between cars, bicycles and pedestrians. The Town should work with NCDOT to request waivers to allow median landscaping where appropriate.

Structured parking should be hidden behind or under buildings, rather than fronting on the streetscape.

5.3 Future Land Use Categories, cont'd

8. PUBLIC/INSTITUTIONAL

A. Function

- i. Accommodate such civic or institutional activities as governmental and public buildings, schools, and places of worship and ensure that they are compatible with the overall character of the town and their surroundings.

B. Preferred Uses

- i. This designation includes government-owned administration buildings and offices, fire stations, hospitals and health care facilities, utilities, day care centers, senior centers, community centers, community facilities, schools, colleges and educational research facilities.

C. General Policies + Development Character

- i. Civic and institutional facilities are "focal points", both visually and functionally, within the Town. Unlike other land uses, these facilities are often seen as landmarks that should visually stand apart from their surroundings while compatible with other uses in their setting.
- ii. When possible, locate facilities adjacent to or within publicly accessible open spaces.
- iii. Public entrances should be clearly defined and face the street. Porticoes, awnings and other entryway features that are integral to the building design are encouraged.
- iv. Service areas such as refuse containers, transformers, and loading docks should not be visible from public areas
- v. Access to civic and institutional facilities should provide for safe and convenient access by pedestrians, bicycles, automobiles and public transit. Pedestrians should be given the ability to safely cross at intersections near civic and institutional facilities. Special consideration should be made where high concentrations of youth, senior, and disabled persons exist. Marked crosswalks, medians, and pedestrian activated signals should be used to promote safe crossings. In addition, appropriate pedestrian amenities should be provided, such as pedestrian scale lighting, seating, and trash receptacles.
- vi. Off-street parking should be provided primarily by parking lots located to the rear or other sides of buildings that face away from public streets.
- vii. Parking areas should be screened by buildings or landscaping. Long, unbroken rows of parking should be avoided. Large parking lots should be adequately landscaped.
- viii. Development should minimize impacts to sensitive natural resources, such as floodplains and ponds.
- ix. Vehicular, bicycle, and pedestrian links should extend into the surrounding development.

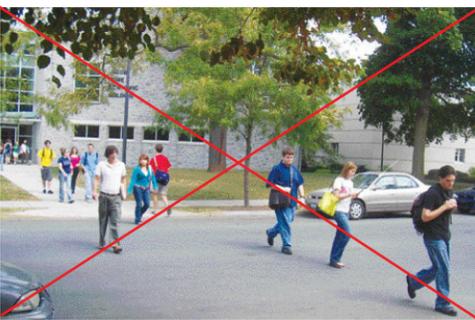


The Morrisville Town Hall is a good example of a landmark building that stands apart from its surroundings, but is compatible with neighboring uses.

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Civic and institutional facilities are "focal points", both visually and functionally, within the Town. Unlike other land uses, these facilities are often seen as landmarks that should visually stand apart from their surroundings while compatible with other uses in their setting.

Safe and convenient crosswalks make a sidewalk system usable and appealing, encouraging pedestrian activity. Pedestrian crossings should be designed to reduce the crossing distance and provide high visibility to both the pedestrian and oncoming vehicular traffic. This can be accomplished by changing pavement color or texture, and making use of white paint striping and/or reflective materials.

Parking, particularly surface parking lots, occupy an increasing percentage of developed land. Carefully considered landscaping, lighting, and paving can minimize the impact of parking lots on pedestrians, surrounding land uses, and the environment. Trees and landscaping may be used to break-up large expanses of surface parking, provide refuge for pedestrians, shade vehicles, and collect stormwater runoff.

5.3 Future Land Use Categories, cont'd

9. INDUSTRIAL

A. Function

- i. To provide for industrial uses as an integral component of the Town's employment land use areas.
- ii. To encourage the co-location of industrial uses that are compatible with office, commercial, and other employment or institutional uses in the Town in an integrated and harmonious development character.
- iii. Campus-style industrial parks are appropriate along the major corridors of the Town. Warehouse, manufacturing and repair uses should be located along the less visible industrial collector roads.

B. Preferred Uses

- i. Within the Industrial classification, land uses should include manufacturing, distribution, wholesale operations, warehouses, research facilities, flex space, business parks and nonresidential planned developments, and telecommunications facilities such as cell towers.
- ii. Limited retail and commercial services that serve the needs of adjacent industrial uses are appropriate in this designation.

C. General Policies + Development Character

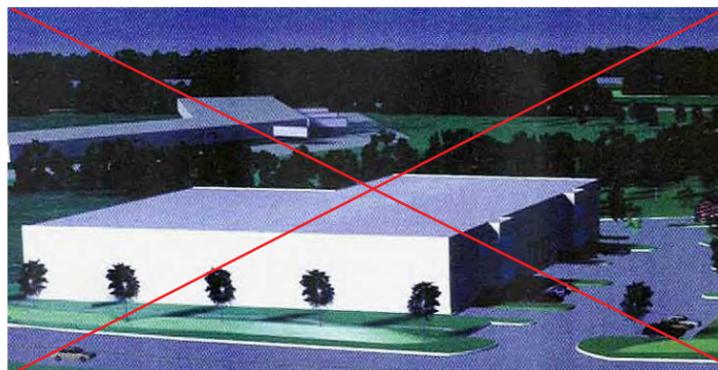
- i. Industrial projects should be compatible with the overall character and visual improvements in the surrounding areas.
- ii. Industrial uses are appropriate in this designation that are compatible with office, commercial, and residential development by virtue of size and the lack of outdoor storage, or manufacturing activities, and other activities or emissions that could have a detrimental impact on surrounding residential or business uses.
- iii. Building placement, design details, and landscaping and screening should be used to minimize visual impacts on adjacent residential and other mixed uses. Heavy Industrial uses should be screened from major roads, public amenities, and surrounding uses that are not industrial.
- iv. Industrial uses should locate in areas where public utilities and facilities are adequate to support such uses. The provision of adequate facilities such as roads, water, sewer, electrical, telephone, and natural gas systems should be considered in review of an industrial rezoning request.
- v. Industrial districts should incorporate the provision of safe, convenient, and attractive pedestrian access to nearby residential areas and to local businesses for ancillary retail services and goods.
- vi. Development should be oriented away from sensitive natural resources, such as floodplains and ponds to minimize the environmental impacts of new development.
- vii. Vehicular, bicycle, and pedestrian links should extend into the surrounding development.



This example of an industrial building features generous landscaping to reduce the visual impact along major roadways.



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Building placement, design details, and landscaping and screening should be used to minimize visual impacts on adjacent residential and other mixed uses. Heavy Industrial uses should be screened from major roads, public amenities, and surrounding uses that are not industrial.

Industrial projects should be compatible with the overall character and visual improvements in the surrounding areas. Incorporating design features such as brick and extensive window openings helps to integrate industrial uses into the Town's character.

5.3 Future Land Use Categories, cont'd

10. RESIDENTIAL

A. Function

- i. To provide a variety of housing options that support the existing character of the Town.
- ii. To encourage residential neighborhoods that incorporate a mix of housing types and lot sizes to provide options for a range of lifestyles and incomes, as well as a mix of land uses to allow residents the opportunity to work and shop nearby.

B. Preferred Uses

- i. Land uses in this designation should consist primarily of residential uses.
- ii. Housing is the principal function in Residential districts, but small scale business, entertainment and service uses also are permitted to provide support services to local residents.

C. General Policies + Development Character

- i. Residential neighborhoods should have a variety of housing types and lot sizes, and should be developed in accordance with design guidelines and performance standards for efficient site layout, a pedestrian-friendly scale, and adequate open space (active, passive, and natural).
- ii. Compact site layout is encouraged to reduce trips within the neighborhood, facilitate alternative forms of transportation, preserve natural features and reduce transportation and utilities infrastructure costs.
- iii. Pedestrian circulation should be designed as an integral part of the development project. In addition, vehicular, bicycle, and pedestrian links should extend into the surrounding development.
- iv. Residential areas should provide for a combination of neighborhood parks, squares, and greens located throughout the neighborhood within 1,500 feet of all residences, and a formal civic square or other public space located in conjunction with a civic facility, Neighborhood Center, or other use, to create a focal point for the community.
- v. Public and civic uses such as places of worship, daycares, and community centers may be located in prominent sites to act as landmarks within the neighborhood.
- vi. Off-street parking lots should be located to the rear of civic and business uses to ensure the building is the prominent sight from the street.
- vii. The following scales of residential uses are provided for in this plan (photo illustrations appear on page 21):
 - a. Very low density residential (Less than or equal to 1 unit per acre net density)
 - b. Low density residential (Greater than 1 <= 4.5 units per acre net density)
 - c. Medium density residential (Greater than 4.5 <= 7.5 units per acre net density)
 - d. High density residential (Greater than 7.5 units per acre net density)
- viii. Residential development should consider green building and site design techniques as an approach to minimizing environmental impacts.



A range of residential densities are mixed in a compact neighborhood with both attached and detached single family dwellings of various sizes, usually centered around a communal green or open space. This type of design is compatible with Morrisville's small town character, allows for a diversity of housing and incorporates environmentally-sensitive site planning principles.

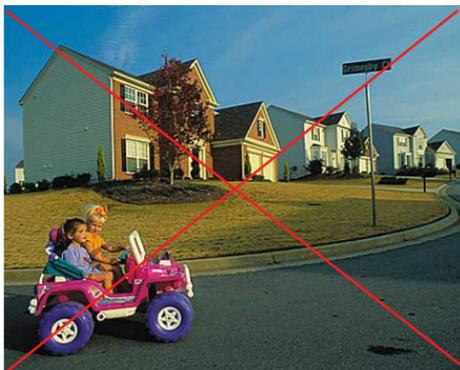
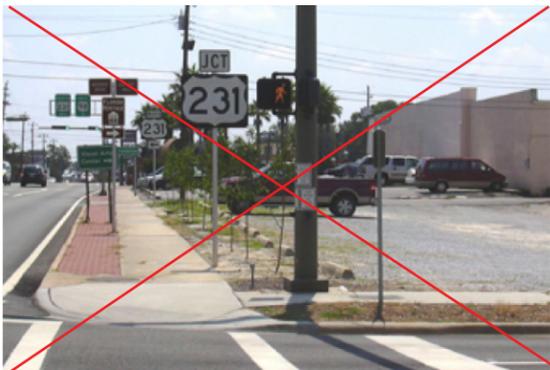


This Morrisville example incorporates a variety of housing styles and design elements that promote a pedestrian friendly scale.

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Parking lots relegated to the rear of buildings or internal to the block (rather than adjacent to the roadway) allow buildings to be drawn to the street edge and contribute to the pedestrian atmosphere of the street. This also provides convenient building entry access from the sidewalk and transit. This strategy reduces walking distances and enlivens the streetscape while still providing for adequate parking.

Sidewalks should be designed as an integral part of the development project and be separated from the road to provide a buffer between pedestrians and vehicular traffic. Street trees are recommended to provide shade for pedestrians and are also an effective way to ensure a comfortable pedestrian zone protected from moving traffic.

Residential areas should provide for a combination of neighborhood parks, squares, and greens located throughout the neighborhood within 1,500 feet of all residences.

5.3 Future Land Use Categories, cont'd

11. PARK/GREENWAY/OPEN SPACE

A. Function

- i. Provide open space and recreation areas to meet the physical and natural resource needs of the Town and its residents.
- ii. Enhance the Town's aesthetic appeal within its neighborhoods and along transportation corridors.
- iii. Reduce stormwater runoff with increased pervious surfaces that allow water infiltration.

B. Preferred Uses

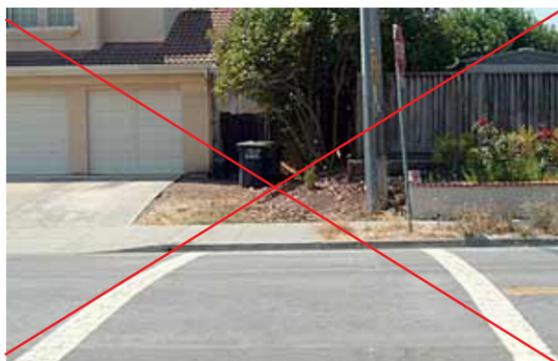
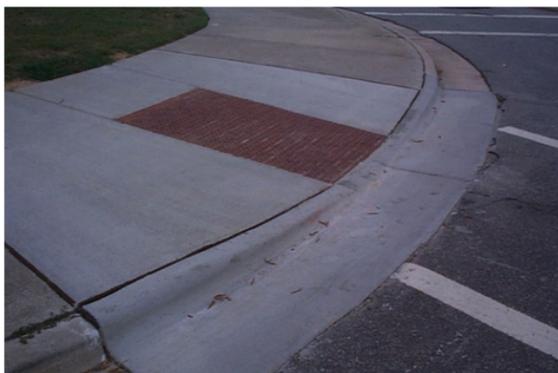
- i. Land uses in the Park/Greenway designation should consist of passive and active recreational uses, natural resource protection and conservation, and landscaped buffers.
- ii. Types of active recreation areas include ball fields, tennis or basketball courts, swimming pools, tot lots, golf courses, dog parks, and other areas for recreational sports or games. Types of passive recreation areas include trails (hiking, biking, walking), picnic, camping, or fishing areas. Natural open space is land left in a mostly undeveloped state including forests, meadows, hedgerows, and wetlands.

C. General Policies + Development Character

- i. Park/Greenway/Open Space areas should retain existing vegetation where possible, particularly mature trees and woodlands. Reforestation and revegetation of open areas of the site with native plant materials should be encouraged.
- ii. Where feasible, currently damaged or degraded landscapes and wildlife habitats should be restored and enhanced creating new natural areas and wetlands on the site.
- iii. All active recreation open space should be readily accessible to pedestrians, wheel-chairs, strollers, and cyclists by sidewalk, path, trail, and/or bike lane.
- iv. Site elements should be arranged to protect and enhance special land characteristics, natural features, rare or endangered species areas, historic resources, archeological sites, and other unusual natural or man-made site features.



The open space network should consist of a range of open space types, including large natural areas, passive and active recreational uses, landscaped buffers and small pocket parks are critical components of the open space network.



Curb ramps should be included at all intersections and pedestrian crossings, and be directed towards crosswalks to improve safety and connectivity.



Integrating parks and open space into the community both provides local active and passive recreational opportunities and can contribute to localized stormwater management. By incorporating design elements, such as open swales and infiltration areas, parks can serve critical environmental functions.



Pocket parks act as scaled-down neighborhood parks, but still meet a variety of needs, including small event space, play areas for children, spaces for relaxing or meeting friends, taking lunch breaks, etc. Pocket parks can be tucked into and scattered throughout the community where they serve nearby residents and businesses.

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5.3 Future Land Use Categories, cont'd

12. FUTURE McCRIMMON SMALL AREA/MASTER PLAN AREA



This example of contemporary planned development uses diverse building types to blend office, residential, and retail uses on the same streets.

A. Function

- i. Encourage creative master planning for the large undeveloped area east of NC54 between Airport Boulevard and Aviation Parkway, which should incorporate office, small scale retail (e.g., restaurants, convenience services such as dry cleaning), and parks in an integrated design.
- ii. The Town is looking to coordinate with stakeholders to preserve a large contiguous area for open space or recreation in this area, ideally open for public use.

B. Preferred Uses

- i. Land uses within the Future McCrimmon Small Area Master Plan Area should be compatible with others in the town and immediate surroundings.
- ii. Regional office and light industrial uses will be the predominant component of this area. Small scale retail such as restaurants and convenience services should be included if they are primarily oriented toward serving the surrounding office and industrial uses, not a regional market.

C. General Policies + Development Character

- i. The Town anticipates the development of a coordinated master plan for this area with a mix of uses that will function as a planned business community with a harmonious design character. New residential uses and institutional uses are not permitted in this area because of the Airport Overlay district.
- ii. Commercial uses should be integrated with complementary uses to form compact, walkable, mixed use employment centers.
- iii. New development should achieve and maintain acceptable levels of transportation service by completing planned road networks and supporting alternative transportation modes. It is anticipated that new road and transportation improvements will be provided in the initial phases of new developments.
- iv. Multi-modal circulation should be designed as an integral part of the development project.
- v. Vehicular, bicycle, and pedestrian links should extend into the surrounding development.
- vi. The Town should encourage the submission of architectural guidelines for all new developments in this area. Particular emphasis should be placed on the architectural quality and site design of buildings along thoroughfares and in high visibility locations.
- vii. This area should feature well-configured squares and greens and a traditional network of landscaped streets within a framework of open spaces and recreational areas that unite the whole community and provide an amenity for the employees who work there.
- viii. Development should be oriented away from sensitive natural resources, such as floodplains and ponds, to minimize the environmental impacts of new development.

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Small scale retail such as restaurants and convenience services should be included if they are primarily oriented toward serving the surrounding office and industrial uses, not a regional market.

The Town should encourage the submission of architectural guidelines for all new developments in this area. Particular emphasis should be placed on the architectural quality and site design of buildings along thoroughfares and in high visibility locations.

Multi-modal circulation should be designed as an integral part of the development project.

5.3 Future Land Use Categories, cont'd

13. TOWN CENTER PLANNING AREA

The Morrisville Town Center Plan was adopted in 2007 and is currently being implemented through a variety of projects. Refer to the Town Center Plan for more detailed policies and standards for development in this district.

A. Function

- i. Create a vibrant Town Center at Morrisville's historic crossroads to help ensure that residents continue to enjoy the best qualities of small town living as the community grows.

B. Preferred Uses

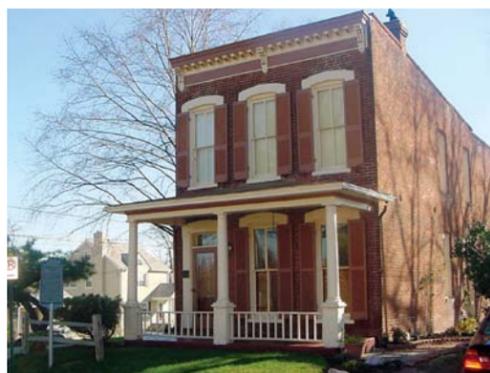
- i. Within the Town Center Planning Area, land uses could include residential, civic/cultural uses, professional offices, small-scale commercial, institutional, educational, small-scale entertainment, and park uses.

C. General Policies + Development Character (Also see Town Center Plan)

- i. Development in the Main Street area should generally have a small town character, such as that found around the historic Town crossroads, with a fine-grained land use pattern at a human scale.
- ii. Development should combine uses vertically, as well as horizontally (i.e. mixing uses among buildings and within individual buildings), to achieve convenience, variety and walkability in the district.
- iii. Design elements should be integrated with sidewalks, street trees, benches, and entrances to buildings at the edges of street rights-of-way. Bicycle facilities, on-street parking, and usable public spaces should be provided.
- iv. Vehicular, bicycle, and pedestrian links should extend into the surrounding development.
- v. Land use or intensity/density transitions should be provided between non-residential uses and existing residential areas.
- vi. It is important to maintain and improve the aesthetics of the Town Center for continued economic revival, and to protect historic buildings from demolition. Renovation in a historically appropriate manner should be encouraged.
- vii. In general, the scale of buildings should be two to three stories to ensure compatibility with the historic character of the area.
- viii. Consideration should be given to lowering the parking requirements in this district to allow the development of a compact traditional pattern of buildings, rather than wide expanses of surface parking.
- ix. Alleys, thoroughfares, and service ways should be utilized where possible to ensure trash pickup and deliveries for commercial establishments do not take place along public right of ways.



Morrisville's Town Center contains a number of already appropriate land uses, such as institutional and park uses. Additional small scale commercial and service uses, and multi-modal transportation connections would further support the center's development as a vibrant, historic crossroads.



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discouraged

Development in the Main Street area should generally have a small town character, such as that found around the historic Town crossroads, with a fine-grained land use pattern at a human scale.

It is important to maintain and improve the aesthetics of the Town Center for continued economic revival, and to protect historic buildings from demolition. Renovation in a historically appropriate manner should be encouraged.

5.3 Future Land Use Categories, cont'd

14. TRANSIT ORIENTED DEVELOPMENT (TOD) DISTRICT **

The Transit Oriented Development (TOD) District is not mapped on the Future Land Use Map, but will be located based on the future location of one or several planned rail transit stops in Town. The purpose of the TOD District is to provide supportive development around a transit center. Transit centers are places where transit services connect in the transportation network and where passengers transfer between transportation modes. The TOD District should be structured as a floating zone in the Zoning Ordinance so that a rezoning is needed in order to map this district in a particular location.



Transit Oriented Development emphasizes the creation of compact, walkable communities centered around high quality transit systems and multi-modal design features, making it easier to live a high quality life without complete dependence on a car for mobility and survival.

** It is anticipated that the TOD district would be applied to the Superfund Redevelopment Site at McCrimmon Parkway and Church Street.

A. Function

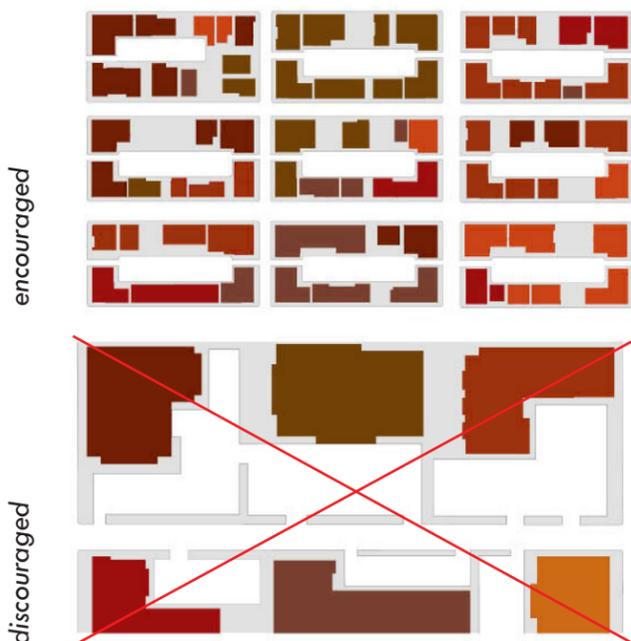
- i. To provide the "critical mass" of development types and intensities needed to support rail transit.
- ii. To provide a development alternative that promotes the separation of automobile-oriented land uses from transit-oriented land uses.
- iii. To provide a pedestrian-scale environment with a mix of residential, commercial, public, and employment uses to support the adjacent transit center.

B. Preferred Uses

- i. The TOD will contain a mix of uses including residential uses as well as two or more significant tax-producing land uses that are mutually supporting.
- ii. TOD land uses should include convenience retail uses and civic uses, such as public plazas, libraries, day care, and postal services. The commercial core of the TOD will contain the highest land use intensities. Use intensities will step down from the commercial core to the edges.

C. General Policies + Development Character

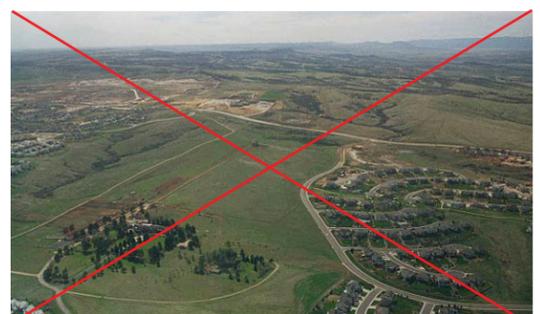
- i. The location of a TOD should clearly provide a transit opportunity that can serve the TOD, such as along the existing rail line in the Town. The location of the TOD should not harm the planned regional road network or planned regional transit facilities.
- ii. The location of a TOD should not negatively affect established neighborhoods by promoting through-traffic and other such intrusions to the neighborhood.
- iii. The TOD should consist of a commercial core and an outer core. Transit stations should be located in the commercial core, which should extend 1/4- mile from the transit stop. The outer core should extend from 1/4-mile to 1/2-mile out from the transit stop.
- iv. The TOD should provide pedestrian-scale development with a surrounding mix of high-density uses. Pedestrian circulation should be enhanced by short blocks arranged in a rectilinear grid-street pattern.
- v. The TOD should have an "urban feel" with pedestrian-oriented building facades, ground-floor shops, and streets culminating in distinctive public spaces.
- vi. The surrounding street network should complement and support the TOD area street network by providing multiple and direct vehicular, bicycle, and pedestrian connections to the transit station.
- vii. A vertical mix of uses is encouraged in multi-story buildings in the commercial core, with ground floor retail and upper story residences or offices.
- viii. The provision of structured parking garages is encouraged in the design of the transit station and TOD in order to make a more compact, walkable environment.
- ix. The TOD land use intensity should be phased as alternative modes of transit are available. Use intensities may increase as the specified mode of transit is planned, scheduled, designed, and funded to serve the TOD.



Land use diversity and inter-connectivity support transit-oriented development by making connections between destinations accessible and convenient. A greater diversity of land uses in the core area creates more opportunities for short trips, which are more likely to be made by walking. Fostering the walkability of the district as a whole ultimately encourages people to leave their cars behind and use transit.



Well designed shelters should be integrated into the streetscape and provide a safe and comfortable place for transit patrons. Bus stops and shelters must be clearly marked and identifiable.



Transit oriented design improves mobility and leverages public investment in transit systems through the support of transit-friendly development patterns. These development patterns encourage a compatible mix of residential, commercial, and other land uses, facilitate employment opportunities convenient to transit, and enhance connectivity to transit stations and surrounding land uses.

6.0 COMMUNITY AREAS

While the Future Land Use Map and category descriptions present a general idea of how the town should grow and develop in the future, the community areas depicted in Figure 6.1 can help describe some of the specific land use and transportation changes in the town. These descriptions do not constitute formal recommendations, but rather provide additional background on the development of different areas of the town and an opportunity to document some of the more specific ideas collected from the public during the development of this Plan. Some discussion includes mention of planned transportation improvements, which are discussed and depicted in greater detail in the *2009 Transportation Plan*.

Several photo illustrations are included, intended to show examples of how the policies and principles of the Transportation and Land Use Plans could be applied to real places in Morrisville. These drawings and photo-simulations are purely for illustrative purposes and do not represent a specific intent by property owners or the Town to develop any particular site. However, they show one particular way that both the land use and transportation policies could be applied to a particular location. The intent is to represent how transportation improvements, land use mix and community design features can be integrated into a well-designed whole.

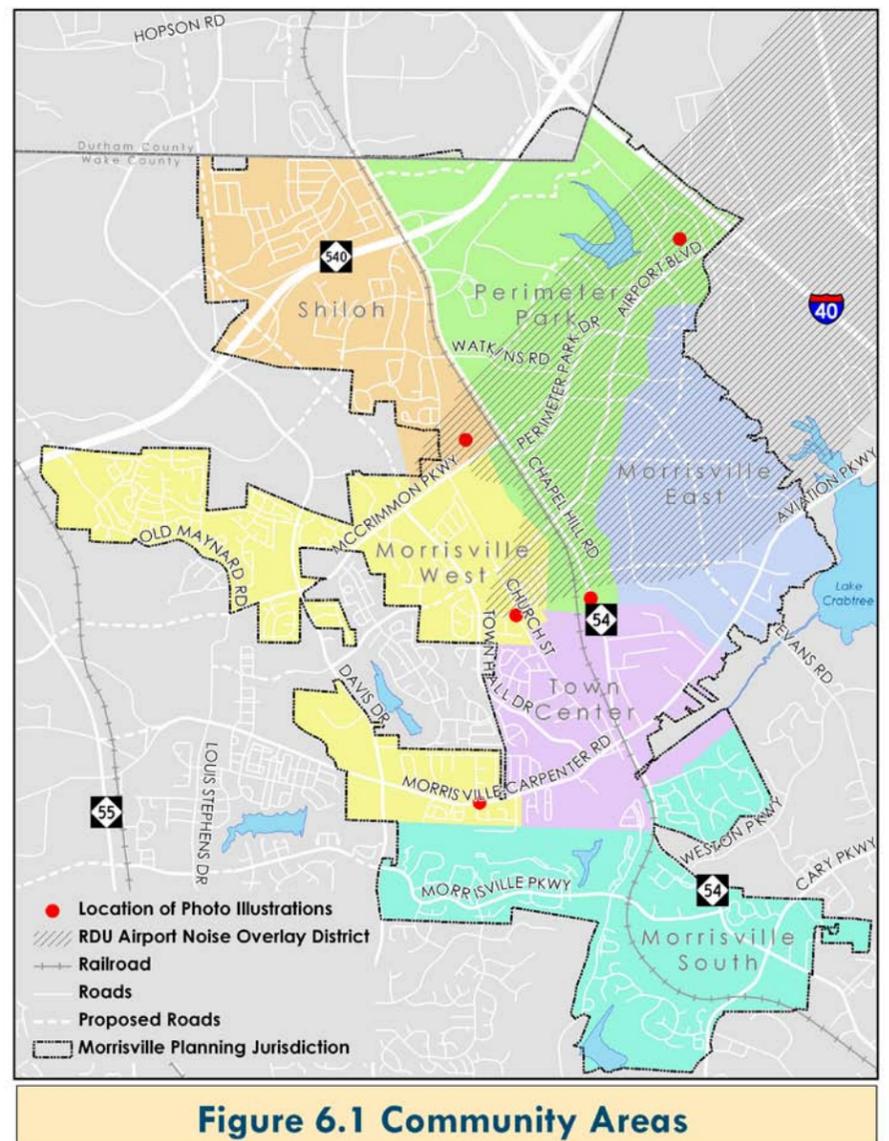
6.1 Shiloh

This northwestern area of Morrisville is oriented around Church Street and includes an historic church and historic residences dating to the late 1820s. It was the focus of the North Morrisville – Shiloh Small Area Plan (SAP), adopted on January 6, 2003. Many of the future land uses shown on Figure 5.1 for this area were derived directly from the SAP, after some corrections for development that has occurred since the SAP was written. Objectives from the SAP, such as keeping commercial development east of NC 54, protecting existing homes, making transit work, and including parks and greenways, have been addressed directly in this Plan.

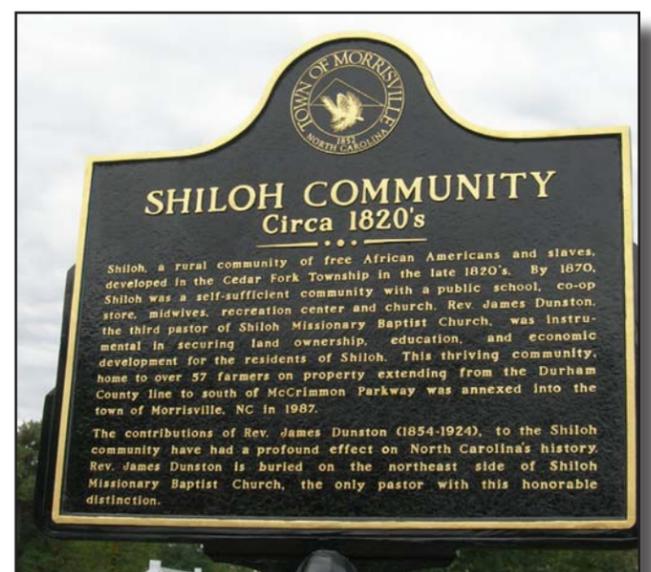
Since the North Morrisville – Shiloh Small Area Plan was previously adopted by the Town Council as a formal planning document, the Town Council will be asked to formally approve its integration into this Plan.

Recent and upcoming changes in the Shiloh area include:

- Development of two large subdivisions (Kitts Creek and Providence Place), claiming much of the remaining vacant land in the area.
- NC 54 has been constructed, essentially dividing the area, leaving Church Street as the only connection.
- As a result of restrictions on at-grade railroad crossings, two key connections between the Shiloh area and the eastern part of Morrisville will be closed. The railroad crossing of Church Street (connecting to NC 54) at the northern end of town will be restricted (right-turn-in, right-turn-out) in 2009 and will be closed completely when the grade separation under the railroad at Hopson Road in Durham is completed in 2011-2012. Before that grade separation is completed, Church Street will be extended north in Durham to Hopson Road. The railroad crossing at Barbee Road/Watkins Road will be closed about six months after the completion of improvements at NC 54 and Morrisville-Carpenter Road in 2010. In addition, Kit Creek Road has been closed at the western boundary of Kitts Creek subdivision. Unfortunately, these changes will further isolate this area from the rest of Morrisville in the short-term.
- The North Carolina Turnpike Authority is expected to reconnect Kit Creek Road with the construction of Triangle Parkway from NC 54 north to NC 147. That construction is estimated to be complete in 2012. A grade separated crossing is proposed in the *2009 Transportation Plan* for Carrington Mill Boulevard/Mason Farm Road to facilitate connectivity between the Shiloh area and NC 54 and the eastern part of Morrisville. In addition, improvements are proposed for Church Street, such as adding bike lanes, sidewalk on both sides, and planted medians in some areas. These changes are described in greater detail in the *Transportation Plan*.
- The Town of Morrisville has recently purchased land west of Church Street and north of McCrimmon Parkway as a future park site. This park space will be a great asset to residents of the Shiloh area and will facilitate the extension of the Indian Creek greenway north to Providence Place.
- The Superfund site on the northwest corner of McCrimmon Parkway and NC 54, described in more detail in Section 2.4, has been discussed as a possible future location for a passenger rail station. The photo illustration in Figure 6.2 shows what such a redevelopment might look like.



NC 54 crossing over Church Street.



The Shiloh Community Historical Marker.

6.1 Shiloh, cont'd

Figure 6.2 Superfund Site Redevelopment Illustration

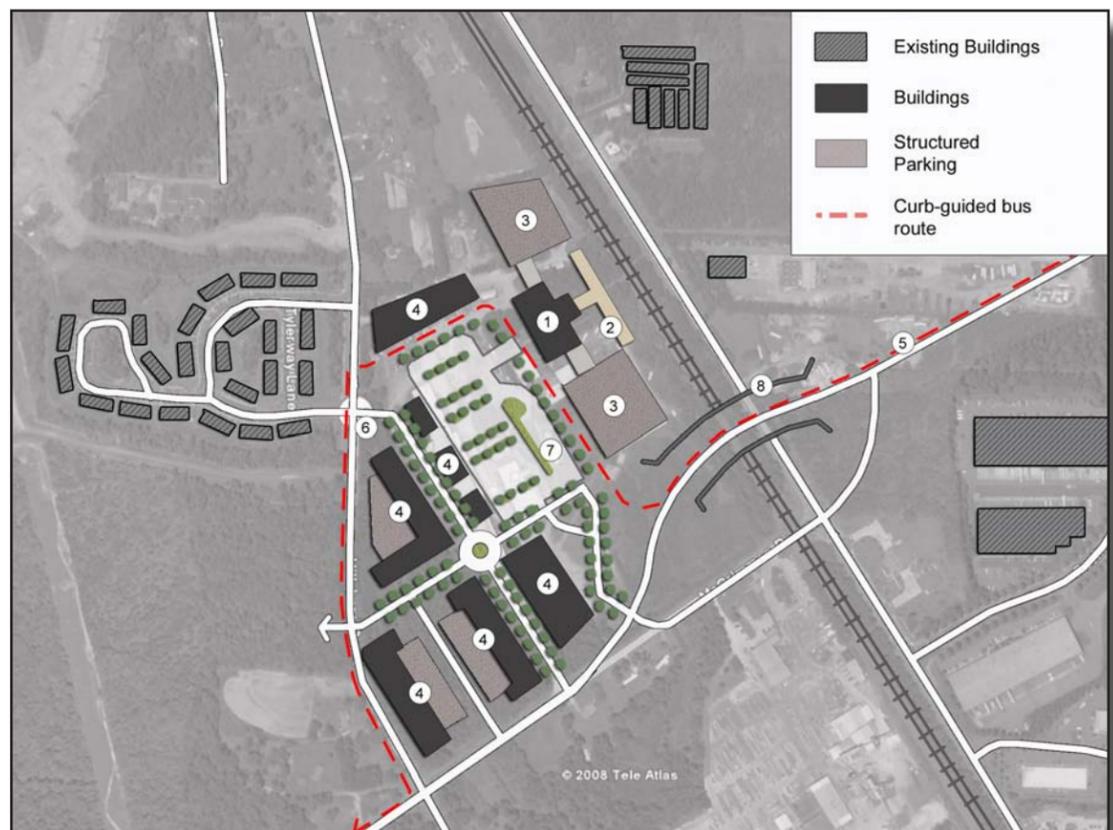
The plan below shows a possible future evolution of the Superfund site at the intersection of NC 54 and the future McCrimmon Parkway extension. Features of this potential future plan include:

- The elevated extension of McCrimmon Parkway over NC 54 and the Railroad.
- A future commuter railroad station on the site, with eventual mixed use transit-focused development clustering around the station area
- The extension of a curb-guided bus link to the site, along with inter-modal connections to rail and local bus transit
- Connections from the site to Church street and existing and future development sites in the area.



Existing site

1. Mixed Use Station Building
2. Sheltered Platform - min. 450 SF
3. Future Parking Expansion
4. Future Mixed-Use Development
5. Dedicated Curb-Guided Bus Lane
6. Curb-Guided Bus Loop
7. Bus Parking
8. McCrimmon Parkway Overpass



6.2 Morrisville West

The western area of Morrisville includes concentrations of residential neighborhoods along the Town Hall Drive, Church Street, and Morrisville-Carpenter Road corridors, with retail located at major intersections along Davis Drive. Substantial new residential development in the Cary jurisdiction around Twin Lakes, which is nearly surrounded by Morrisville, along with the potential for business development in the large undeveloped tracts in Research Triangle Park north of McCrimmon Parkway, have the potential to affect this portion of Morrisville. Indian Creek Greenway is under construction along Town Hall Drive, with future connections expected to the north at Providence Place. Most of this area is built out, except for a substantial undeveloped area at Town Hall Commons. Town Hall Commons has been designated as a Business Activity Center including office and neighborhood retail uses, near the intersection of Town Hall Drive and McCrimmon Parkway. There is some undeveloped land and redevelopment potential along the east side of Church Street south of McCrimmon Parkway, and the Town has recently decided to allow residential development in this area although it is in the RDU Airport Noise Overlay Area.

Church Street is planned to be a two-lane boulevard with planted median, bike lanes and sidewalks (Figure 6.3), except south of Jeremiah Street in the Town Center and north of McCrimmon Parkway, where the road will narrow to avoid impacts to existing development. Morrisville-Carpenter Road and McCrimmon Parkway are both planned to be four-lane boulevards with planted medians, bike lanes and multi-use paths (Figure 6.4). Town Hall Drive is planned to be re-striped for bike lanes. Davis Drive is currently being widened to four lanes, with plans to eventually be six lanes with a wide outside lane for cyclists and multi-use paths along both sides. Old Maynard Road will be renamed Louis Stephens Drive and connected to RTP, providing a north-south corridor. The southern portion of Triangle Parkway, discussed in greater detail in the Transportation Plan, is planned to be a four-lane boulevard connection to the four-lane expressway portion north of NC 540 (expected to be complete by 2012; the southern portion has not received any funding as yet). The completion of the Airport Boulevard extension from NC 54 west to Davis Drive, with a grade separation at NC 54, will also provide additional transportation connections in this area.

6.2 Morrisville West, cont'd



Existing roadway

Figure 6.3 Church Street Streetscape Illustration

The image below highlights the transformation of Church Street to a more attractive and safe, pedestrian-oriented, local road, similar to Town Hall Drive to the west. The images show the recommendation for this street to be a two-lane boulevard with a planted median and multi-use paths on both sides. Over time, residential development fills in, bringing more vitality to the corridor.

Note: The montage reflects the community's desire for landscaping. However, NCDOT currently typically requires a median of at least 16' in width in order to landscape with small trees.



Figure 6.4 Morrisville-Carpenter Road Streetscape Illustration

The future vision of Morrisville-Carpenter Road respects the existing residential character of the area. Through gradual future upgrades, Morrisville-Carpenter Road becomes a four-lane median-divided facility with sidewalks and bike lanes on both sides of the road. The planted median separates opposing lanes of traffic and reduces the crossing distance from the curb to allow pedestrians to cross a shorter roadway width.



Existing roadway



6.3 Town Center

The Town Center Plan (2007) described a vision for creating a vibrant Town Center at Morrisville's historic crossroads to help ensure that residents continue to enjoy the best qualities of small-town living as the community grows. Key elements of the plan include:

- Protecting the historic structures around Church Street;
- Creating a community gathering place lined with small businesses and anchored by a civic/cultural facility;
- Establishing a Civil War park and a rural heritage park;
- Linking the parks and other destinations with a network of sidewalks and greenways;
- Investing in a variety of transportation improvements, including reworking Chapel Hill Road (NC 54) into separate northbound and southbound segments in the Town Center area, improving the intersection of Morrisville-Carpenter Road and Chapel Hill Road, and installing roundabouts at selected locations to mark the transition into the Town Center.



Historic Reverend R.E. Atkins House in the Town Center along Church Street.

Transportation improvements in this area include widening Morrisville-Carpenter Road and Aviation Parkway to four lanes, and improving NC 54 as described under Section 6.5. In the Town Center, the proposed NC 54 cross-section will narrow to have fewer impacts on existing development in this area. Improvements are planned for Church Street as well, with a relatively narrow two-lane cross-section in the Town Center and a roundabout at the intersection with Jeremiah Street.

6.4 Morrisville South

The southern area of Morrisville is nearly completely built out, along with the surrounding land in Cary. The area has a suburban feel with a private golf course and larger homes. Although vacant land is minimal, there is some potential for redevelopment. Park West Village, a large mixed use project that will redevelop an industrial site, is located at the western corner of the intersection of NW Cary Parkway and NC 54 and will change the character of the intersection as well as potentially spur additional redevelopment in the area. The parcels near Park West Village are included in the Southern Activity Center (SAC) category, which means that redevelopment proposals for these parcels will be considered within the context of the entire SAC, and design standards can be applied to them to ensure compatibility with surrounding parcels. The area north of Park West Village, currently occupied by smaller industrial distribution centers, offices, and apartments could potentially redevelop as a result. Several land uses that the public would like to see in that area are institutional, such as medical facilities and/or a senior center, to complement the nearby senior housing. An older shopping center (Park Place) on the southern corner of the intersection would also likely redevelop, probably replaced with similar retail uses. Just east of the SAC, at the edge of Morrisville's planning jurisdiction, are several vacant or very low density residential parcels that have been designated for low density residential in the future.



Rendering of pedestrian facilities and gathering spaces in the upcoming Park West Village development.

Morrisville Parkway is planned to be re-striped for bike lanes. Cary Parkway will remain a four-lane median-divided roadway with wide outside lanes. Both roadways have sidewalk on both sides. Bus service through C-Tran (Cary) will be available along Cary Parkway and Weston Parkway, with potential future service along NC 54, and a greenway is planned along the railroad in Park West Village, which will connect to another planned greenway running from Community Park in the west to Cedar Fork County Park in the east.

6.5 Morrisville East

The eastern area of Morrisville is characterized by existing industrial uses and the largest vacant area remaining in town. Major transportation improvements are planned in this area with the extension of McCrimmon Parkway from Airport Boulevard to Aviation Parkway. International Drive, where many of the industrial facilities are located, is proposed to be extended north to Airport Boulevard to offer a more direct truck route to the industrial facilities. Two smaller connectors will provide additional east-west access in the area. Aviation Parkway is proposed to be widened to four lanes with a planted median, bike lanes, and multi-use paths. Combined with the planned widening of Aviation Parkway across Lake Crabtree in the Town of Cary's jurisdiction, the improvements will provide more efficient access to I-40.

In order to best utilize this area, this Plan recommends that a small area plan or master plan be developed. Following are some of the considerations that such a plan would need to address:

- The following mix of uses may be appropriate in this area: offices, small scale retail (e.g. restaurants, convenience services such as dry cleaning), and park space. The Town is looking at coordination to preserve a large contiguous area for open space or recreation in this area, ideally open for public use. Any retail in this area should be specified to be for convenience uses within walking distance of offices, rather than regional attractions. The small area plan should consider limiting the size of retail establishments.
- Although specific land uses are not recommended in this Plan, the area shall apply design standards as described under this future land use category in Section 5.3.
- Access management should be addressed on the proposed McCrimmon Parkway extension, as CAMPO plans currently call for it to be designated as NC 54. Incorporating access management into plans would reduce the number of driveways along the road, leading to smoother thru-traffic flow. It also would provide a safer



Lake Crabtree at dawn.

6.5 Morrisville East, cont'd

environment for pedestrians and cyclists on adjacent paths.

- Higher densities of nonresidential uses would be needed to compensate for the substantial private investment needed to complete the street network and provide utilities in this undeveloped area.

This Plan proposes to largely maintain the existing industrial uses and provide for limited expansion in this area, but this represents a departure from previous plans. There is also potential for redevelopment within the Morrisville East area, where low-density development may be replaced with more intense uses. In particular, public comments noted that the area south of Aviation Parkway adjacent to Lake Crabtree may be appropriate for low-density residential development, with neighborhood retail closer to the intersection with Evans Road. This area is currently actively used for industrial and office uses, so any redevelopment in this location most likely would occur in the long-term.

6.6 Perimeter Park

This northeast area of Morrisville covers the Perimeter Park office complex, the Airport Boulevard corridor, and properties with frontage on the northern portion of NC 54. The area is characterized by office complexes and retail uses at the I-40 interchange. Recent development includes additional office buildings, a large retail center, including a Wal-Mart, on the north side of the NC 540 interchange, and a hotel and small retail center at NC 54 and Carrington Mill Boulevard. Perimeter Park has an approved master plan to build more office buildings, which accounts for most of the remaining undeveloped land in this area. Wake County Technical Community College has purchased land north of Watkins Road on the east side of NC 54 for a future community college campus. Since much of this area is covered by the Airport Noise Overlay District, which does not permit residential uses, having this area develop as the center of office and institutional uses in Morrisville, anchored by major retail at the interchanges, makes sense. Some vacant land exists along Slater Road outside the noise restriction area, which this Plan recommends for medium density residential use because of its proximity to employment centers and existing transit service.

To address traffic congestion on NC 54, the Transportation Plan recommends a four-lane roadway with possible later expansion to six lanes on one segment if approved by Town Council (Figure 6.5 provides an illustration). Grade separations (overpasses) are planned for NC 54 at Airport Boulevard, McCrimmon Parkway, Carrington Mill Boulevard and Morrisville Parkway to facilitate traffic flow from east to west. Airport Boulevard will be improved with bike lanes, a planted median, and multi-use paths. Carrington Mill Boulevard will be extended northeast to Slater Road, and an extension of Marcom Drive is planned to connect to Watkins Road.

Redevelopment possibilities in the area include the Morrisville Outlet Mall, some of the older one to two story office buildings, and some industrial facilities. An illustration of what a redevelopment of Morrisville Outlet Mall might look like is presented in Figure 6.6 on the following pages.



Local office building.

Figure 6.5 NC 54 Streetscape Illustration

This example shows the redevelopment potential along NC54 as it transforms into a four-lane roadway with bike lanes and sidewalks. Planted medians and street trees complement the new roadway environment and corridor commercial land uses fill in along both sides of the road to support increased pedestrian use.



Existing roadway



6.6 Perimeter Park, cont'd

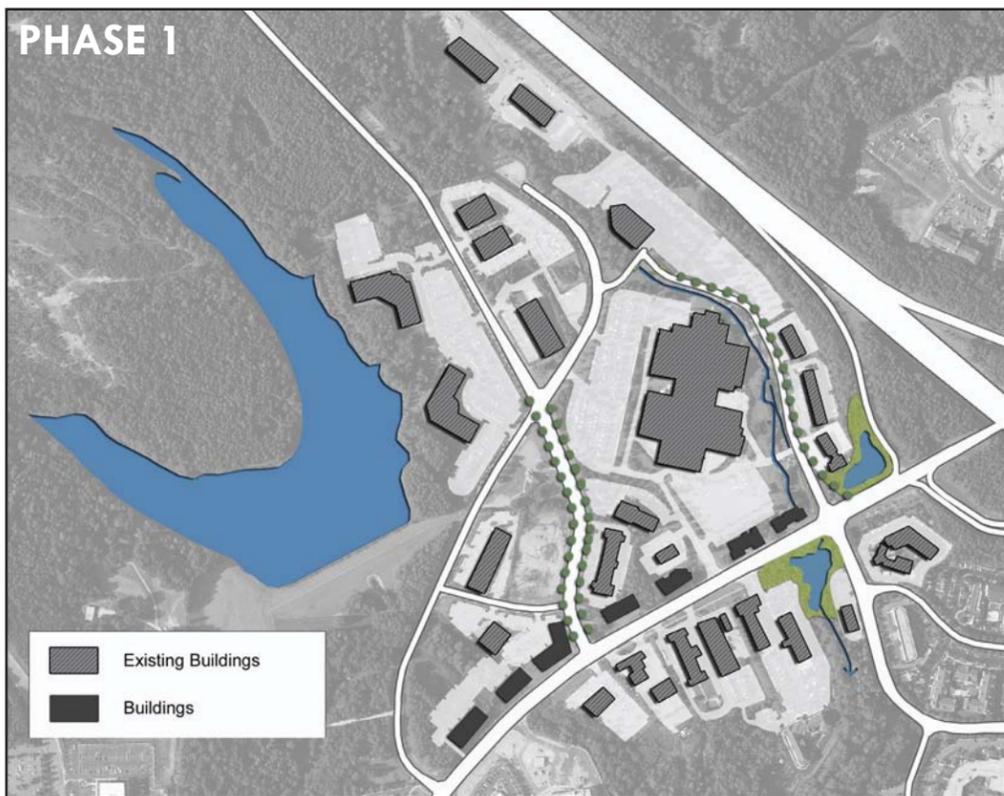
Figure 6.6 Morrisville Outlet Mall Redevelopment Illustration

The plans on these pages show one possible way that the Airport Outlet Mall and surrounding areas could evolve over 20-30 years. This sequence shows a gradual redevelopment over time incorporating the following features:

- The potential extension of curb-guided bus (RDU-RTP Circulator) along Sorrel Grove Church Road
- Accommodating a curb-guided bus transit stop adjacent to the Outlet Mall as part of a future landscaped transit plaza adjacent to Airport Boulevard
- Gradual infilling of sites adjacent to the Mall with buildings fronting on new or existing roadways that have been enhanced with pedestrian and bike ways
- The evolution of the area into a more compact walkable center, through a gridded street network, replacing surface parking with structured parking, and a vibrant streetscape lined with wide sidewalks and shopping and recreational opportunities.



existing site



This is a general illustrative plan of one possible way that development could be phased over time. It shows structured parking in Phases 2 and 3, to support higher densities that are consistent with both the policies in the Land Use Plan and the proximity to high-speed regional transportation at the site. However, the density could be phased in over time with surface parking as well. For example, the buildings could be lower in height, or not fully built out along all sides of the block, both of which would allow some of the parking areas to be surface instead of structured in the near term, gradually transitioning to structured parking and higher densities as the land values increase over time.

6.6 Perimeter Park, cont'd



Existing view of the Airport Outlet Mall site



The same view showing potential reconfigured streets and buildings in outline form



Potential redevelopment of the Mall site in 20-30 years, showing a new boulevard entry, transit service, and pedestrian-scaled retail and mixed use along the streetscape.

7.0 ACTION ITEMS

With any long-range and comprehensive plan, the need is paramount for a set of specific strategies to take a community from its current state to its desired future. Seen at a glance, the combined Transportation and Land Use Plans that have been developed have a considerable amount of information. However, when broken down into discrete parts, the Plans become more manageable, more real to the staff and citizens.

The following action items describe short-term (3 years or less, shown in green), longer-term (longer than 3 years, shown in blue), and ongoing (shown in orange) strategies that the Town and its partnering agencies can undertake to realize the goals and policies stated in the Plans. Year One Goals/Activities refer to the first year that the item is to be implemented, regardless of what year that is. Years shown are calendar, rather than fiscal, years. The reader is encouraged to refer to the complete listing of Goals and Policy Statements in Section Four to provide additional clarity on the intent of these action items.

Action Items	2009	2010	2011	2012	2013	2014-2035
Goal 1: Ensure a diverse development pattern that sustains livability and the environment by encouraging future development and public infrastructure that is complementary with existing development.						
<p>1.1 Amend Zoning Ordinance. Ensure that current zoning district descriptions are compatible with the general intent of the land use districts in the plan. Incorporate zoning categories for small-scale mixed use and transit oriented development. Note that this does not imply rezoning properties to match the land uses in this plan - only ensuring that matching zoning categories exist to allow rezoning upon a property owner's request. This is a short-term solution; development of the Unified Development Ordinance in item 1.4 is the long term solution for amending the zoning ordinance.</p> <p>Year One Goals/Activities: Staff review of zoning ordinance and land use plan. Year 2-5 Goals/Activities: Propose amendment to zoning ordinance as soon as possible Performance Measures: Completed amendment in 2010</p>						
<p>1.2 Update Language for Traffic Impact Analyses (TIA). TIAs are intended to ensure that traffic generated from a proposed development is appropriate to the transportation infrastructure. Recommendations should include bicycle, pedestrian, and roadway improvements, including adjacent connections to facilities near schools and parks.</p> <p>Year One Goals/Activities: Identify weaknesses in current TIA policy; recommend changes; acquire adoption by Boards Year 2-5 Goals/Activities: None Performance Measures: Completed amendment in 2011</p>						
<p>1.3 Maintain and Enhance GIS System. Maintain the data on development impacts created for the plan updates in Synchro and CommunityViz models, and identify additional data to be acquired. This practice will assist in analyzing impacts of development proposals, to ensure consistency with the Plans.</p> <p>Year One Goals/Activities: Transfer files from consultant and ensure that Planning staff understand how they can be used. Identify additional data to be acquired as well as metadata protocols to ensure long-term understanding of the data structures Year 2-5 Goals/Activities: Continue updating and enhancing the system Performance Measures: None, but the program should be adjusted as new data becomes available</p>						
<p>1.4 Create Unified Development Ordinance. This ordinance revision will allow for important updates and clarification of existing codes, making it easier for developers to understand the Town's needs. It will provide an opportunity to formalize the future land use map presented in this Plan. In particular, the UDO will take a focused look at the design of Regional Activity Centers and address compatibility with and transitions to surrounding uses.</p> <p>Year One Goals/Activities: Develop and approve scope of services, including specific target areas for modification; Retain consultant Year 2-5 Goals/Activities: Develop and adopt new ordinance; create educational seminar for developers to explain the changes in the development ordinance components Performance Measures: (1) Retain consultant in 2009; (2) gather input from at least 50 stakeholders on the draft ordinance</p>						
<p>1.5 Develop Specific Plans for Redevelopment of Koppers (former Superfund) Site. This site has an excellent location in Morrisville and holds potential to be an asset to the community. Creating clear options for how it could be redeveloped, as well as reaching out to developers, would hasten reaching the potential of this central property. A Plan should include how transit oriented development might be used to redevelop the site. Related to Item 3.17.</p> <p>Year One Goals/Activities: Retain development consultant, create, and approve action plan for marketing Year 2-5 Goals/Activities: Implement action plan Performance Measures: (1) Retain consultant in 2012; (2) Implement action plan in 2013</p>						

7.0 ACTION ITEMS, CONT'D

Action Items	2009	2010	2011	2012	2013	2014-2035
<p>1.6 Create Small Area Plan or Master Plan for McCrimmon Parkway Extension Area. This area, the largest vacant land left in Morrisville, needs specific attention to ensure that land uses are balanced and meet the needs of the Town. Such a plan could involve a full public involvement process led by staff, possibly also with the involvement of a developer.</p> <p>Related Policies: 2A-E, 3A-G, 4A-E, 5A-F Estimated Cost: 380 hours staff time + \$80,000 consulting fees Lead Agency(ies): Morrisville Planning Department, in conjunction with private developers, public involvement, and stakeholder steering committee</p> <p>Year One Goals/Activities: Retain consultant after developing discrete scope of services Year 2-5 Goals/Activities: Develop the master plan for this area, including transportation and utility infrastructure, design elements, stormwater control measures, and key design elements as part of a small area plan Performance Measures: Complete plan with a major public involvement effort in 2013.</p>						

Action Items	2009	2010	2011	2012	2013	2014-2035
<i>Goal 2. Ensure that Morrisville retains a small town atmosphere by integrating attractively and sustainably designed communities of complementary uses.</i>						
<p>2.1 Prepare Ordinance Language for Green Building and Neighborhood Standards. Morrisville will create stormwater, building design/orientation, and materials codes that represent LEED standards for commercial and residential structures to reduce energy consumption, pollution, and help achieve long-term sustainability. Related to Item 1.4.</p> <p>Related Policies: 1A-F, 2A-E, 3A-G, 4A, 4B, 4C, 4E, 5A, 5C, 5E, 5F Estimated Cost: 120 hours staff time + \$20,000 consulting fees Lead Agency(ies): Morrisville Planning and Engineering Departments</p> <p>Year One Goals/Activities: Review the finalized neighborhood, commercial, and residential LEED standards published by the US Green Building Council Year 2-5 Goals/Activities: Adopt flexible standards during the Unified Development Ordinance process Performance Measures: Adoption of green building standards concurrent with UDO update</p>						
<p>2.2 Prepare Updated Ordinance Language for Floodplain Development. Reducing the amount of development allowed within the 100-year floodplain will prevent loss of life and property, assist in addressing stormwater runoff and water quality problems, and provide additional greenspace for town residents. Related to Item 1.4.</p> <p>Related Policies: 1F, 2B, 2C, 3D, 4B, 4C, 4E Estimated Cost: 80 hours of staff time Lead Agency(ies): Morrisville Planning and Engineering Departments</p> <p>Year One Goals/Activities: Engage the staff's certified floodplain manager to prepare, review, and adopt revised ordinance language Year 2-5 Goals/Activities: None Performance Measures: Adoption of revised floodplain ordinance in 2011</p>						
<p>2.3 Examine Possible Expansion of Required Riparian Buffers from 50 feet to 100 feet. Similar to increasing the floodplain regulation, this change would help address water quality and flooding issues in town. Such a policy should be examined for its potential costs and benefits to the Town for greenfield and redevelopment projects. Address as part of UDO.</p> <p>Related Policies: 1F, 2B, 2C, 3D, 4B, 4C Estimated Cost: 40 hours staff time Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Research and develop new policy, considering Phase II standards developed by NCDENR Year 2-5 Goals/Activities: Adopt riparian buffer policy Performance Measures: Adoption of new riparian buffer policy in 2011</p>						
<p>2.4 Restrict Fast-Food Restaurants and Drive-Through Window Establishments. Revise permitted use table to exclude by-right allowance of drive-through operations in selected districts that are more pedestrian friendly in order to limit traffic, air quality, and aesthetic issues, and encourage sit-down eating establishments. Address as part of UDO.</p> <p>Related Policies: 1A, 1B, 1D, 3A, 3B, 3F Estimated Cost: 40 hours of staff time Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: None Year 2-5 Goals/Activities: Review legal standing and develop draft language restricting (A) food-operation drive-through windows; and, alternatively, (B) additional restrictions on all (e.g., banking) drive-through windows Performance Measures: Ordinance amendment adopted in 2012</p>						
<p>2.5 Prepare Ordinance Language for Neighborhood Protection Overlay for Shiloh Community. Create a protection overlay district to protect historic structures in the Shiloh community. Could potentially be included as part of the UDO process.</p> <p>Related Policies: 1C, 5E Estimated Cost: 120 hours of staff time Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Research history of the Shiloh area and identify key cultural elements and buildings for preservation; appoint a Neighborhood Protection Committee to develop ordinance. Year 2-5 Goals/Activities: Finalize and adopt ordinance. Performance Measures: Ordinance completed by end of 2012</p>						

7.0 ACTION ITEMS, CONT'D

Action Items	2009	2010	2011	2012	2013	2014-2035
<p>2.6 Evaluate Possible Additional Mechanisms for Protecting Greenspace in a Nonresidential Context. Ordinances in place in Morrisville that require developers to reserve open space are currently focused on residential development. This item will explore the possibilities for additional open space protection as part of nonresidential development, within the Town's existing legal limits.</p> <p>Related Policies: 1F, 2B, 2C, 3D, 4B, 4C, 4E Estimated Cost: 120 hours of staff time Lead Agency(ies): Morrisville Planning Department, Parks and Recreation Department</p> <p>Year One Goals/Activities: Coordinate with Parks, Recreation, & Cultural Resources Department on study scope Year 2-5 Goals/Activities: Work with IOG and other partners to evaluate additional options for protecting non-residential green space in the town Performance Measures: Complete recommendations for action by the end of 2012</p>						

Action Items	2009	2010	2011	2012	2013	2014-2035
Goal 3: Improve transportation mobility by integrating land uses with transportation infrastructure.						
<p>3.1 Establish Sidewalk Design Standards Linking Residential and Commercial Areas. In some instances, sidewalks have been built very close to residential homes. While having connections between residential and commercial areas is important, they need to be designed to minimize impact on residents. Address as part of UDO.</p> <p>Related Policies: 1B, 3E Estimated Cost: 80 hours of staff time Lead Agency(ies): Morrisville Planning and Engineering Departments</p> <p>Year One Goals/Activities: Research and develop revised sidewalk connectivity policy Year 2-5 Goals/Activities: None Performance Measures: Complete policy revisions in 2011</p>						
<p>3.2 Establish a Provision for Bicycle and Pedestrian Amenities. Policies need to cover the provision of bicycle and pedestrian amenities during roadway construction and widening (to ensure that bicyclists and pedestrians are not negatively impacted during construction activities), and requirements for bicycle parking (quantity, type and location) as part of new development. See Figure 6.3 in the Transportation Plan for more information on bicycle parking. Address as part of UDO.</p> <p>Related Policies: 1C, 3B, 3C, 3D, 3E Estimated Cost: 40 hours of staff time Lead Agency(ies): Morrisville Planning Department, Engineering Department, and Inspections Department</p> <p>Year One Goals/Activities: Complete construction and parking policies; implement policies and construction inspection procedure Year 2-5 Goals/Activities: None Performance Measures: Implement pedestrian-bicycle construction and parking policies in 2010</p>						
<p>3.3 Update Zoning Code for Future Transit Stops and Easements. This will include establishing a policy for developers to install or plan for transit amenities where future stops are indicated. Standards will include pedestrian, cycling, lighting and stop design to accommodate future public transit services. Related to Item 1.2; could be conducted at the same time. Address as part of UDO.</p> <p>Related Policies: 1A, 3A, 3F Estimated Cost: 120 hours of staff time Lead Agency(ies): Morrisville Planning Department, with coordination between C-Tran and Triangle Transit organizations</p> <p>Year One Goals/Activities: None Year 2-5 Goals/Activities: Establish transit station policy (refer to Transit Design Section of Transportation Plan) Performance Measures: Adopt transit station policy/ordinance code in 2010</p>						
<p>3.4 Conduct a Detailed Study to Determine the Most Cost-Efficient Transit Service. The study will address a range of transit services, focusing on creating a service agreement with the Town of Cary to expand C-Tran service into Morrisville at a pace that synchronizes with the Cary planned improvements.</p> <p>Related Policies: 1D, 5A-F Estimated Cost: 200 hours of staff time + \$50,000 consultant fees Lead Agency(ies): Morrisville Planning Department in conjunction with C-Tran and Triangle Transit operators</p> <p>Year One Goals/Activities: Complete coordination with C-Tran and Triangle Transit to devise scope of services for a detailed study; retain consultant (if needed); and develop/adopt Morrisville Transit Service Plan Year 2-5 Goals/Activities: None Performance Measures: Adoption of Morrisville Transit Service Plan in 2012. Evaluate on a periodic basis</p>						
<p>3.5 Consider Whether to Increase Participation in the Wake County TRACS Service to Accommodate Additional Riders As Needed. Currently, there is not a need to expand the number of guaranteed seats beyond the current three.</p> <p>Related Policies: 5C Estimated Cost: \$10,000 annually (fee to Wake County Coordinated Transit Services) Lead Agency(ies): Morrisville Planning Department in cooperation with Wake County</p> <p>Year One Goals/Activities: Dedicate funding to Wake County for doubling the number (from 3 to 6) guaranteed riders; conduct marketing through existing outlets Year 2-5 Goals/Activities: Review and adjust funding, as needed Performance Measures: Increase the number of Morrisville riders on the TRACS service</p>						

7.0 ACTION ITEMS, CONT'D

Action Items	2009	2010	2011	2012	2013	2014-2035
<p>3.6 Initiate a Universal Pass for Town Employees, and Work with Businesses of a Certain Size to Provide Discounts for their Employees who use Public Transportation, Carpool/Vanpool Riders, and Bicycle/Pedestrian Commuters. To support local transit (especially improvements noted in transit component of Transportation Plan) and regional transit options, work to adopt a pass system discounted to Morrisville residents and businesses.</p> <p>Related Policies: 1B, 1C, 1D, 5B, 5C Estimated Cost: \$10,000 annually Lead Agency(ies): Morrisville Planning Department, Public Information Office and Human Resources Department, in cooperation with Triangle Transit and C-Tran transit operators</p> <p>Year One Goals/Activities: Create and implement marketing and discount pass program Year 2-5 Goals/Activities: None Performance Measures: Increase number of Morrisville transit riders (origin or destination) transit trips by 25% at end of 2012 (compared to 2010)</p>						
<p>3.7 Work with Triangle Transit to Improve the NC 54 Corridor to Accommodate the 301 Bus Route. Triangle Transit has proposed to relocate this route off I-40 (and Morrisville Outlet Mall stops) to NC 54. Identify stop locations and finance shelters and pedestrian facilities, lighting, and other improvements to these locations.</p> <p>Related Policies: 3A, 3E, 3F Estimated Cost: 200 hours of staff time + infrastructure costs Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Conduct series of meetings with Triangle Transit staff to determine stop locations and slate of amenities Year 2-5 Goals/Activities: Construct or work with private developers to construct transit stop facilities Performance Measures: (1) Identify stop locations / amenities by end of 2010; (2) implement transit stop facilities</p>						
<p>3.8 Continue to Work with Triangle Transit and Other Regional Partners to Develop a Circulator Route between Durham, Research Triangle Park, and Raleigh-Durham International Airport. This circulator, possibly using an automated transit system, has been proposed both through the Center of the Region Enterprise (CORE) and Special Transit Advisory Committee (STAC).</p> <p>Related Policies: 5A-F Estimated Cost: 300 hours of staff time (possible participation in consulting fees) Lead Agency(ies): Morrisville Planning and Engineering Departments, in cooperation with Triangle Transit, Research Triangle Foundation, Triangle J COG, and RDU Airport Authority</p> <p>Year One Goals/Activities: Possible participation in workgroup Year 2-5 Goals/Activities: Continue to work with regional partners to identify route and service characteristics; work to help implement project Performance Measures: Continue moving forward with planning, design and implementation of the Durham/RTP/RDU Circulator</p>						
<p>3.9 Explore the Development of Future Transit Routes with C-Tran. Preliminary routes have been discussed, but need to be further researched and developed in conjunction with C-Tran.</p> <p>Related Policies: 5A-F Estimated Cost: 300 hours of staff time + \$80,000 for service fees to C-Tran/Cary Lead Agency(ies): Morrisville Planning Department in cooperation with Town of Cary</p> <p>Year One Goals/Activities: Work with Cary to develop new / expanded C-Tran routes Year 2-5 Goals/Activities: Work with Cary to develop new / expanded C-Tran routes Performance Measures: Develop C-Tran route (one) that services Morrisville residents</p>						
<p>3.10 Identify Funding Sources for Bicycle/Pedestrian Improvements. The priority projects are initially identified in the pedestrian plan element of the Transportation Plan. Additional priorities will be added as more funding becomes available.</p> <p>Related Policies: 1B, 1D, 3A, 3D, 3E, 3F, 4D, 5B, 5C, 5D, 5E, 5F Estimated Cost: \$100,000 annually Lead Agency(ies): Morrisville Planning and Engineering Departments working with CAMPO and NCDOT</p> <p>Year One Goals/Activities: Commit the \$100,000 in the Capital Improvements Plan for pedestrian improvements to add sidewalks under the NC 540 overpass on the east side of NC 54. Identify priority projects to receive \$13,300 in annual bike/pedestrian funding from CAMPO. Identify and pursue additional funding sources. Year 2-5 Goals/Activities: Identify and pursue additional funding sources Performance Measures: (1) Complete sidewalk under NC 540 on east side of NC 54 by 2010; (2) construct additional sidewalk in priority locations connecting schools and parks; (3) Construct from public funds a minimum of one mile of sidewalk per year by 2012.</p>						
<p>3.11 Coordinate with the Town of Cary Transportation Planners. This coordination should include discussion on expanding C-Tran bus service to Morrisville; development reviews; and ensuring consistent and connected bicycle/pedestrian facilities along the same road in different jurisdictions.</p> <p>Related Policies: 3B, 3D, 3E, 3F, 5A-F Estimated Cost: 80 hours of staff time Lead Agency(ies): Morrisville Planning Department in cooperation with Town of Cary</p> <p>Year One Goals/Activities: Initiate quarterly coordination meetings with Town of Cary Year 2-5 Goals/Activities: Continue quarterly meetings Performance Measures: Conduct four coordination meetings with Town of Cary in calendar year 2009</p>						
<p>3.12 Conduct Pre-NEPA Work on New Location Roadways. This work will identify any potential environmental issues ahead of the engineering design of roadways, to avoid costly delays later in the process.</p> <p>Related Policies: 1A, 2B, 3D, 4B Estimated Cost: \$100,000 consulting fees + 450 hours of staff time Lead Agency(ies): Morrisville Planning and Engineering Departments</p> <p>Year One Goals/Activities: \$100,000 has been allocated from the town budget for this purpose. Priority projects should be identified and consultant hired to perform this work. Year 2-5 Goals/Activities: None Performance Measures: Complete new location studies in 2012</p>						

7.0 ACTION ITEMS, CONT'D

Action Items	2009	2010	2011	2012	2013	2014-2035
<p>3.13 Update Zoning Ordinance Regarding Connectivity Between Sites for Cross-Access Easements. Cross-access allows much shorter and more feasible walking trips, helping to provide alternatives to traffic congestion for many shopping and recreational activities. Address as part of UDO.</p> <p>Related Policies: 3B, 3E, 3F, 3G Estimated Cost: 40 hours of staff time Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Complete the zoning ordinance revision Year 2-5 Goals/Activities: None Performance Measures: Adopt the zoning ordinance revision requiring cross-access easements to adjacent properties and pedestrian/bikeways by the end of 2012</p>						
<p>3.14 Identify Funding Sources for Roadway Improvements. The Town has planned for future budget allocations for roadway improvements. Staff should also work with NCDOT and developers to facilitate planned roadway improvements and leverage local funds with public and private financing.</p> <p>Related Policies: 3G, 4A Estimated Cost: 120 hours of staff time annually Lead Agency(ies): Morrisville Planning, Finance and Engineering Departments</p> <p>Year One Goals/Activities: Identify funding opportunities through various mechanisms (TIF, public-private developer agreements, etc.) and create internal policies to streamline and promote partnering opportunities Year 2-5 Goals/Activities: Identify funding opportunities through various mechanisms (TIF, public-private developer agreements, etc.) and create internal policies to streamline and promote partnering opportunities Performance Measures: (1) Adopt policies by 2012; and (2) Implement and promote partnering arrangements with NCDOT and private development interests</p>						
<p>3.15 Create an Access Management Policy. Each additional driveway and cross-street increases the number of opportunities for vehicles to enter and exit the main traffic stream, producing conflict points and the potential for accidents. Access management limits these opportunities and decreases the number of accidents.</p> <p>Related Policies: 1A, 2D, 3A, 3B, 3E, 3F Estimated Cost: 240 hours of staff time Lead Agency(ies): Morrisville Planning and Engineering Departments</p> <p>Year One Goals/Activities: Research access management policies Year 2-5 Goals/Activities: Develop access management policy and adoption by Boards for specified roadways Performance Measures: (1) Create draft access management policy in 2011; and (2) Adopt policy/overlay districts by mid-2012</p>						
<p>3.16 Explore Potential Solutions to Connect Gaps in Sidewalk. Possibilities include lobbying the state legislature to allow creation of special taxing district to connect sidewalks in advance of development.</p> <p>Related Policies: 1A, 3E, 3F, 3G Estimated Cost: 240 staff hours Lead Agency(ies): Morrisville Planning and Public Works Departments</p> <p>Year One Goals/Activities: Explore opportunities to create a revolving tax fund to create sidewalk improvements Year 2-5 Goals/Activities: Explore opportunities to create a revolving tax fund to create sidewalk improvements Performance Measures: Provide for 8 gap projects / 0.5 miles of sidewalk construction annually beginning in 2012.</p>						
<p>3.17 Create a Small Area Plan for the Planned McCrimmon @ NC 54 Grade Separation Alignment. The ramp system and overpass will require additional engineering to refine the design of this area, making sure to accommodate the proposed cross-section of NC 54, cyclists, and pedestrians as well as the number of motor vehicles passing through this interchange. Related to Item 1.5, could be conducted at the same time.</p> <p>Related Policies: 1A, 1B, 3B, 3E, 3F Estimated Cost: \$75,000 (Preliminary Design fee) Lead Agency(ies): Morrisville Engineering Department</p> <p>Year One Goals/Activities: Develop scope of services; retain consulting firm; complete preliminary design Year 2-5 Goals/Activities: None Performance Measures: Completion of preliminary roadway design by end of 2012</p>						
<p>3.18 Continue to work with Triangle Transit and the North Carolina Railroad Company to Support Passenger Rail Service. Potential station locations are identified at McCrimmon Parkway, Aviation Parkway, or Cary Parkway. Land use considerations must account for the fact that this line occasionally carries hazardous waste and AMTRAK service, and is planned to carry high-speed rail service at some point in the future.</p> <p>Related Policies: 1A, 5A-F Estimated Cost: 100 hours of staff time/year Lead Agency(ies): Morrisville Planning Department in cooperation with Triangle Transit and the NCRR company</p> <p>Year One Goals/Activities: Initiate coordination Year 2-5 Goals/Activities: Continue coordination efforts Performance Measures: (1) Regular communication and information sharing with Triangle Transit and NCRR partners; (2) Reporting to Morrisville Boards semi-annually on progress</p>						

7.0 ACTION ITEMS, CONT'D

Action Items	2009	2010	2011	2012	2013	2014-2035
<p>3.19 Initiate Process to Change the Name of Existing Triangle Parkway to Southport Drive Extension (or other suitable name). There is an existing small road named Triangle Parkway located off NC 54, connecting to International Drive. In order to avoid confusion by residents, visitors, emergency services, and postal workers with the planned Triangle Parkway between NC 540 and NC 147, the name of the existing road should be changed. Plans call for it to connect to Southport Drive, so it could be called Southport Drive Extension.</p> <p>Related Policies: 5E, 5F Estimated Cost: 10 hours of staff time Lead Agency(ies): Morrisville Planning Department in cooperation with Public Safety departments, NCDOT and the U.S. Postal Service</p> <p>Year One Goals/Activities: Notify business owners along the existing Triangle Parkway and any vacant land owners of the proposed change. Follow the accepted process to change the name through NCDOT and the U.S. Postal Service. Year 2-5 Goals/Activities: None Performance Measures: Complete name change as soon as practical, ideally before new Triangle Parkway is constructed</p>	█					
<p>3.20 Conduct Engineering Design Study for Church Street Improvements. Church Street faces a number of complexities, such as a narrow and unclear right-of-way through the Town Center, a planned roundabout, and road realignment at the northern end. A full engineering study should be conducted to resolve some of these complications and create a specific plan so that improvements can move forward.</p> <p>Related Policies: 2D, 3A-G Estimated Cost: \$50,000 consulting fee + 60 hours of staff time Lead Agency(ies): Morrisville Planning and Engineering Departments</p> <p>Year One Goals/Activities: Prepare RFP and scoping language; advertise; and retain consultant. Conduct study and identify any specific actions that the Town needs to take in order to proceed with making the planned improvements to Church Street. Year 2-5 Goals/Activities: None Performance Measures: Complete study and make progress on securing right-of-way and funding to make improvements</p>			█			
<p>3.21 Study and Coordinate NC 54 Improvements. The Major Thoroughfare through Morrisville. Addressing traffic congestion on NC 54 is critical to the function of the overall transportation network, but it is important to maintain a small-town feel, especially in the Town Center area. Long-term cross-sections have been identified for NC 54 and are illustrated on pages E-15 and E-16 in the Transportation Plan appendices. Following are short-, medium- and long-term actions necessary to achieve the proposed improvements.</p> <p>Related Policies: 3A-F Estimated Cost: 350 hours staff time + 100 hours staff time annually + \$150,000 consulting fees Lead Agency(ies): Morrisville Planning and Engineering Departments</p> <p>Year One Goals/Activities: Continue requesting 124' right-of-way dedication from developers along NC 54 and requiring developers to build laneage on their side along frontage (to equal their half of 4-lane cross-section); begin planned intersection improvements at NC 54 and Aviation Parkway/Morrisville-Carpenter Road; continue pursuing state funds for improvements including grade separations; initiate NC 54 Corridor Study - Phase 1 Phasing Study (to provide instructions for staff and developers for improving the roadway along frontage properties; provide a more detailed plan for how and when improvements should be made in different segments to provide the most benefit to the town with the least interruption of capacity). Year 2-5 Goals/Activities: Complete planned improvements at NC 54 and Aviation Parkway/Morrisville-Carpenter Road; consider improvements to other intersections along NC 54 to improve flow after widening of Davis Drive has been completed; work to get project listed on the MTIP and STIP; maintain and update maps tracking the amount of right-of-way the town controls along NC 54 and set target dates for acquiring sufficient right-of-way; continue pursuing state funds for improvements including grade separations; continue requesting 124' right-of-way dedication from developers along NC 54 and requiring developers to build laneage on their side along frontage (to equal their half of 4-lane cross-section); Complete NC 54 Corridor Study - Phase 1 (described above) and Phase 2 Preliminary Design; Evaluate whether to proceed with NC 54 Corridor Study - Phase 3 Functional Design and NEPA (an additional \$150,000 consultant fee). Year 6-25 Goals/Activities: Work with NCDOT and Town of Cary to plan and conduct improvements to NC 54 as quickly as feasible, including additional intersection improvements, widening as funds and right-of-way are acquired, and construction of grade separations as funding is available. Performance Measures: Complete initial design for improvements and make progress on securing right-of-way and funding to make improvements.</p>	→					

7.0 ACTION ITEMS, CONT'D

Action Items	2009	2010	2011	2012	2013	2014-2035
<p>Goal 4: Provide community services and public infrastructure to maintain and enhance the quality of life for Town citizens of today; the elderly that have enriched our past, and future generations.</p>						
<p>Additional related items: 2.1 and 3.13</p>						
<p>4.1 Update Telecommunications Tower Ordinance. Revise language in zoning ordinance regarding cell towers and other telecommunications facilities to allow for this infrastructure while ensuring community safety, appearance, and appropriate location.</p> <p>Related Policies: 2A Estimated Cost: 40 hours of staff time + \$2,500 consulting fees Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Project is currently underway Year 2-5 Goals/Activities: None Performance Measures: Adopt revised ordinance by the end of 2009</p>	■					
<p>4.2 Create Tree Preservation Ordinance. To protect and conserve trees during development, maintain a rural atmosphere, and limit the heat island effect of urban development patterns.</p> <p>Related Policies: 2A Estimated Cost: 120 hours of staff time Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Complete the tree conservation ordinance study already underway, with the assistance of the working group; adopt new ordinance Year 2-5 Goals/Activities: Implement policy, and educate development community on specifics Performance Measures: Adoption of tree conservation ordinance by end of 2009</p>	■					
<p>4.3 Create Enhanced Infrastructure Tracking System. Develop system to better track infrastructure needs and planned improvements. Include component on infrastructure impacts of proposed development projects.</p> <p>Related Policies: 3A, 3G, 4A-E, 5A-F Estimated Cost: 200 hours of staff time + \$20,000 consulting fees Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Advertise and hire consultant; outline the needs of the town. Prepare a document for presentation to the Town Council summarizing the system that the Town currently uses to determine infrastructure requirements and how that system would work with the addition of an Enhanced Data Tracking System. Year 2-5 Goals/Activities: Complete new system design, test and implement Performance Measures: New system in place in 2011</p>	■					
<p>4.4 Perform a Lifecycle Housing Analysis. This analysis would determine the current affordable housing stock in Morrisville, compare the wages of Morrisville jobs to the cost of living in Morrisville, analyze the affordable housing need and lifecycle housing need in the town, and create an action plan for addressing this need. Consider universal design standards to accommodate the aging population.</p> <p>Related Policies: 2E Estimated Cost: 240 hours of staff time Lead Agency(ies): Morrisville Planning Department and Human Resources Department</p> <p>Year One Goals/Activities: Complete housing inventory and assessment, prepare report Year 2-5 Goals/Activities: Create/adopt action plan for improving housing options, as determined by the study Performance Measures: (1) Completion of affordable housing analysis, report, and action items in 2012; (2) implement thereafter</p>			■			
<p>4.5 Create Stormwater Utility. Evaluate the establishment of a stormwater utility to offset the associated costs of complying with the Town's National Pollutant Discharge Elimination System(NPDES) Phase II Permit and constructing the necessary stormwater improvements.</p> <p>Related Policies: 1F, 2B, 4B, 4C Estimated Cost: 300 hours of staff time Lead Agency(ies): Morrisville Engineering Department</p> <p>Year One Goals/Activities: Identify costs for needed improvements required by NPDES Year 2-5 Goals/Activities: Evaluate overall feasibility of establishing a stormwater utility to recover costs; implement the utility if determined feasible Performance Measures: Reach a determination on establishing the utility and implement if applicable in 2010</p>	■					

7.0 ACTION ITEMS, CONT'D

Action Items	2009	2010	2011	2012	2013	2014-2035
<i>Goal 5: Foster a collaborative environment internally and with relevant local, regional, state, and federal partners to develop new opportunities for Morrisville's residents and business community.</i>						
<p>5.1 Institute a Schedule for Regular Updates to the Future Land Use Map and Plan and the Transportation Maps and Plan. The comprehensive land use and transportation plans will rapidly go out-of-date and will need regular updating.</p> <p>Related Policies: None. Estimated Cost: 40 hours of staff time annually after 2009 Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Complete the review of the existing land use and transportation maps, and revise, as needed, every year following adoption (starting in 2010). Year 2-5 Goals/Activities: Complete a major update every fifth year. Performance Measures: (1) Completion of annual updates; and (2) complete major update every fifth year</p>		■	■	■	■	■
<p>5.2 Establish Performance Measures to Track Implementation of the Land Use and Transportation Plans. The implementation items herein are provided with discrete performance measures. The Planning Department will report on the progress of the Action Items annually.</p> <p>Related Policies: 5E, 5F Estimated Cost: 40 hours of staff time annually Lead Agency(ies): Morrisville Planning Department</p> <p>Year One Goals/Activities: Establish reporting template and complete first annual report Year 2-5 Goals/Activities: Complete assessment and report to Morrisville Boards, annually Performance Measures: (1) Complete annual assessments and report to Morrisville Boards; (2) use feedback to adjust performance measures in annual update of the Land Use and Transportation Plans; and (3) include record of each annual report/feedback session in appendix of both Plans</p>		■	■	■	■	■
<p>5.3 Develop a Hazardous Waste Transport Safety Plan. The Town should work with the NCRR and Norfolk Southern Railroad Companies to develop a hazardous waste transport safety plan that recognizes the danger in having hazardous waste shipments in close proximity to growing residential populations. Details of what should be included in the plan are described in Figure 5.14.</p> <p>Related Policies: 5B, 5C Estimated Cost: 80 hours of staff time + \$25,000 consulting fees Lead Agency(ies): Morrisville Planning Department in cooperation with NCRR and Norfolk Southern Railroad Company</p> <p>Year One Goals/Activities: Initiate series of meetings with NCRR and Norfolk Southern to outline and agree upon the contents of the plan. Year 2-5 Goals/Activities: Implement plan, which will include ongoing communication and review of procedures. Performance Measures: Concrete safety and coordination procedures in place by 2013</p>			■			
<p>5.4 Confirm with Wake County the Timing and Process for Development Proposed for Areas within Morrisville's Short Range Urban Services Area (SRUSA). Explore the possibility of the Town annexing these areas prior to development proposals. See Figure 1.1 for the location of SRUSA areas. The reconnection of Kit Creek Road and extension of Louis Stephens Road will change the development dynamic in these areas.</p> <p>Related Policies: 5A, 5C, 5D Estimated Cost: 80 hours of staff time Lead Agency(ies): Morrisville Planning Department in cooperation with Wake County</p> <p>Year One Goals/Activities: Coordinate with Wake County to confirm the process and timing for development in these areas Year 2-5 Goals/Activities: Submit an ETJ Extension Request to Wake County Performance Measures: Complete extension request by 2012</p>		■				

Appendices

APPENDIX A. GLOSSARY OF TERMS AND ACRONYMS..... A-1

Alphabetical list of some of the terminology used in the Land Use and Transportation Plans, for the easy reference of the reader. Some graphic and photo examples.

APPENDIX B. REFERENCES AND RESOURCES B-1

List of plans consulted in the planning process, and an extensive list of websites that may be of interest to readers, including neighboring jurisdictions, transit services, local points of interest, and state and national agencies.

APPENDIX C. HOW THESE PLANS WERE CREATED..... C-1

Public Involvement Methods..... C-1

Includes brief summaries of the three public workshops, three focus groups, and seven Plan Advisory Committee meetings. Also includes documentation of how town staff and consultants reached out to contact the citizens of Morrisville, through postcards, flyers and the plan updates website.

Public Survey Instrument C-3

A copy of the survey itself, which was distributed by paper and the internet from January through March 2008.

Summary of Public Survey Results C-5

Selected results of the survey are depicted graphically and summarized.

Public Comment Themes..... C-7

Table summarizing some of the common themes in the comments of the public, via workshops, focus groups, surveys, and Plan Advisory Committee meetings. Describes how each theme was addressed in the Plans.

Coordination With Regional Partner Organizations..... C-9

List of other jurisdictions and regional partner organizations that were consulted and coordinated with during the development of the Plans. Describes the nature of the input from each organization and if changes were made in the Plans directly as a result.

APPENDIX D. SUMMARY OF POLICY FRAMEWORK AND POLICY AUDIT..... D-1

The Policy Audit and Policy Framework are two separate documents created by the consultants during the planning process, describing the current policies in Morrisville and how they affect land use and transportation. This appendix briefly summarizes the content of those documents; the full versions are available by contacting the Town of Morrisville Planning Department (see below).

APPENDIX E. THE FUTURE LAND USE MAPPING PROCESS E-1

This appendix describes in detail how the Future Land Use Map was derived, covering the public input process and the scenario comparison process.

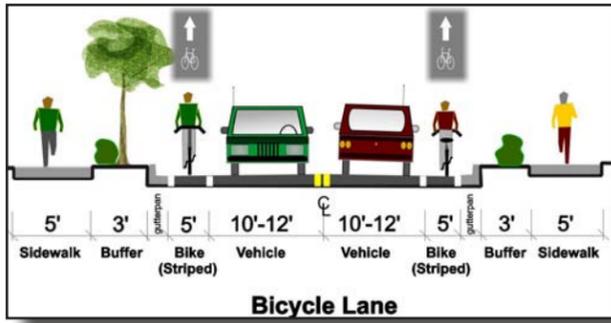
Looking for more information?

These appendices are included to provide additional information that might be helpful to the reader, can offer more detail on public input into the planning process, and further illustrates the results included in the Plan itself. In the interest of keeping this document a reasonable length, not all materials are included here. If you are interested, please contact Town of Morrisville Planning staff (919-463-6194) to receive a CD-ROM with the following additional files:

- Summaries of all three Public Workshops, including all public comments received and results of group exercises
- Minutes of all Plan Advisory Committee meetings
- Complete results of the public survey (the survey document itself and selected results appear in Appendix C)
- Policy Audit (described in Appendix D)
- Policy Framework (described in Appendix D)

APPENDIX A. GLOSSARY OF TERMS AND ACRONYMS

Bike Lane - A portion of the roadway that has been designated by striping, signing and pavement markings for the preferential and exclusive use of bicyclists.



CAMPO - Capital Area Metropolitan Planning Organization. A multi-jurisdictional agency with federal responsibility for long-range transportation planning for the Raleigh area including Morrisville.

CIP - Capital Improvement Plan. A CIP details the infrastructure improvements (streets, water and sewer facilities, as well as police and fire stations) that the Town will need to meet the needs of growth over the next five years.

Collector Street - Collect traffic from local roads and connects with thoroughfares. Lower speed and shorter distances than arterials.

Committed Land Use - Parcels that are developed and are likely to stay in their current use for the time period covered by the Land Use Plan, or parcels that are undevelopable for other reasons. E.g. parcels built 1996 or later, Town, State or Federally owned developed parcels.

ETJ - Extra-Territorial Jurisdiction. An ETJ is the area adjacent to and outside of the town limits in which the municipality has authority to exercise planning, zoning, building and subdivision regulation.

Freeway - Multi-lane roadway with limited access and relatively high speeds.

FAR - Floor Area Ratio. FAR is the ratio of the floor area of a building to the area of the lot on which the building is located. A 1:1 FAR might be reached with a one story covering the entire lot, 2 stories covering half of the lot, or 4 stories covering a quarter of the lot. A greater FAR implies a more intensive use of the land, although it need not be in terms of impervious surface coverage.

Future Land Use - The proposed future use for land in the town. This designation is made for planning purposes only and does not restrict the property owner in any way.

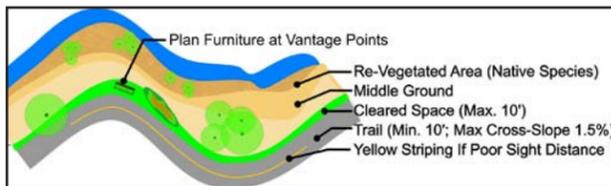


Diagram of a greenway.

Greenway - Similar to a Multi-use Path, but contained in an independent right-of-way, separated from roadways.

Gross Density and Net Density - Gross density is calculated by dividing the number of dwelling units by the total area of the subdivision, including roads, open space, and unbuildable areas. It results in a lower number of dwelling units per acre than net density, which is calculated by dividing the number of dwelling units by only the developed area, such as houses and private yards.

High-Visibility Crosswalk - Instead of two simple stripes, a bold pattern of reflective paint, combined with high-visibility signage.



High-Visibility Crosswalk in front of Cedar Fork Elementary.

Intensity - Related to the discussion of density of residential or commercial land uses, intensity refers more to the design of the facilities rather than the actual number of units per land area. Developments with the same density can have different intensities depending on how they are designed.

Land Use Plan - The vehicle for town staff and the public to express their vision for the town's future. It is intended to guide public officials in their consideration of proposed developments, but it does not legally bind the town or property owners to a particular land use.

Local Roads - All roads not defined as freeways, thoroughfares or collectors. Provide access to land with little or no through movement.

Multi-use Path - Wide sidewalk, typically 8 to 10 feet wide. Physically separated from motor vehicle traffic, but usually within the roadway right-of-way.

NCDENR - North Carolina Department of Environment and Natural Resources

NCDOT - North Carolina Department of Transportation

Net Density - See Gross Density above.

PAC - Plan Advisory Committee. Group of ten citizens and two alternates selected by the Town Council to provide input to the staff and consultants in drafting the Plans.

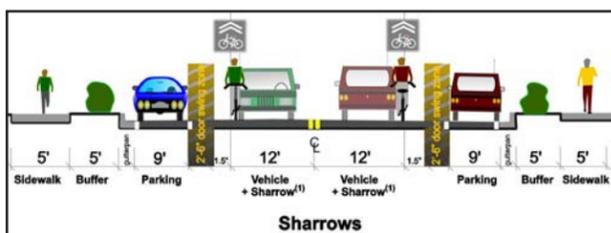
Planning Jurisdiction - The town limits, ETJ and SRUSA comprise the town's planning jurisdiction.

RDU - Raleigh-Durham International Airport. Located adjacent to and northeast of Morrisville.

Redevelopment Potential - Parcels that are developed but are underutilized for their location. Sufficient value exists in the location that developers may benefit from redeveloping it for a different or more intensive use. E.g. parcels with older/smaller buildings that are near major roadways.

RTP - Research Triangle Park. Office and industrial park covering 7,000 acres in Durham and Wake counties. Located northwest and adjacent to Morrisville.

Sharrow - Sharrows are streets marked with bicycle symbols to denote that bicycles "share" the travel lane with motorized traffic.



Short-Range Urban Services Area - All land in the jurisdiction that: (a) is projected and intended to be urbanized and served by municipal services in the next 10 years; and (b) is not located within a water supply watershed. A water supply watershed includes all land that drains down to an existing or planned surface water source of drinking water and is subject to the State's minimum water supply watershed protection regulations.

Signed Bicycle Route - Designated route with directional and informational markers. Designated along more lightly traveled secondary roads where additional facilities are not necessary.

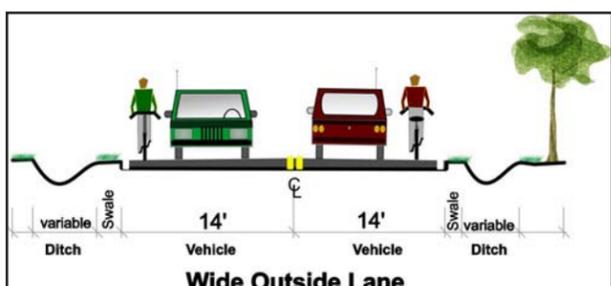
Thoroughfare - Relatively high level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.

TIP - Transportation Improvement Program. Plan that contains a seven-year forecast of transportation improvements. Forms the basis for state funding of transportation projects.

Travel Demand Model - Computer simulation to project traffic using future transportation network conditions. Described in more detail on page X of the Transportation Plan.

UDO - Unified Development Ordinance. A combination of zoning ordinances and subdivision ordinances, it also includes regulations such as nuisance regulations and sign regulations.

Wide Outside Lane - The through lane closest to the curb is wider (generally 14 feet, rather than 12 or 11 feet), allowing cars to more safely pass bicyclists.



Zoning Ordinance - The set of laws that govern how property owners can develop their land, stating the acceptable uses and densities for each category. Zoning is the legally-binding form of control on property, rather than the Land Use Plan.

APPENDIX B. REFERENCES AND RESOURCES

Plans and Documents Consulted

Many are available at <http://www.townofmorrisville.org/planning/downloads.asp>

Town of Morrisville Land Use Plan, 1999. Adopted November 8, 1999.

Town of Morrisville Transportation Plan, 2002.

Town of Morrisville Town Center Plan, 2007. Adopted January 22, 2007.

North Morrisville/Shiloh Small Area Plan, 2003. Approved January 6, 2003.

Town of Morrisville Parks, Recreation, Greenways & Open Space Comprehensive Master Plan, 2006. Adopted December 19, 2006.

Additional Sources and Websites of Interest

Town of Morrisville

<http://www.townofmorrisville.org/default.asp>

Town of Morrisville Zoning Ordinance

<http://www.townofmorrisville.org/planning/documents/ZoningOrdinance8.0.pdf>

Town of Morrisville Subdivision Ordinance

<http://www.townofmorrisville.org/planning/documents/Subdivision-Ordinance8.0.pdf>

Wake County

<http://www.wakegov.com/>

City and County of Durham

<http://www.durhamnc.gov/>

Research Triangle Park

<http://www.rtp.org/>

City of Raleigh

<http://www.raleigh-nc.org/>

Town of Cary

<http://www.townofcary.org/>

Raleigh-Durham International Airport

<http://www.rdu.com/>

Triangle J Council of Governments

<http://www.tjcog.dst.nc.us/>

Capital Area Metropolitan Planning Organization

<http://www.campo-nc.us/>

Wake County Public School System

<http://www.wcpss.net/>

C-Tran (Cary Transit)

<http://www.townofcary.org/ctran/ctranoverview.htm>

Wake Coordinated Transportation Service (TRACS)

<http://www.wakegov.com/humanservices/adult/transportation/default.htm>

Triangle Transit

<http://www.triangletransit.org>

Special Transit Advisory Commission (STAC)

<http://www.transitblueprint.org/index.shtml>

Umstead State Park

<http://www.ncparks.gov/Visit/parks/wium/main.php>

Lake Crabtree County Park

<http://www.wakegov.com/parks/lakecrabtree/default.htm>

Information on Superfund Site in Morrisville (Koppers Co., Inc, EPA ID: NCD003200383)

<http://cfpub.epa.gov/supercpad/cursites/csitinfo.cfm?id=0402647>

North Carolina Crash Data, Highway Safety Research Center

<http://www.hsrc.unc.edu/crash/datatool.cfm>

North Carolina Department of Natural Resources

<http://www.enr.state.nc.us/>

North Carolina Department of Transportation

<http://www.ncdot.org/>

North Carolina Department of Transportation Traffic Survey Maps

<http://www.ncdot.org/it/img/DataDistribution/TrafficSurveyMaps/default.html>

North Carolina State Demographer

<http://demog.state.nc.us/>

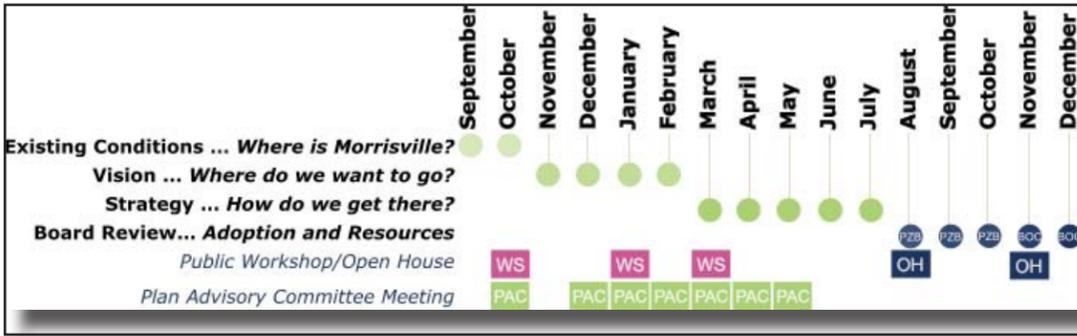
U.S. Census

<http://www.census.gov/main/www/cen2000.html>

U.S. Census Longitudinal Employer-Household Dynamics Survey

<http://lehd.did.census.gov/led/>

APPENDIX C. HOW THESE PLANS WERE CREATED



Public Involvement Methods

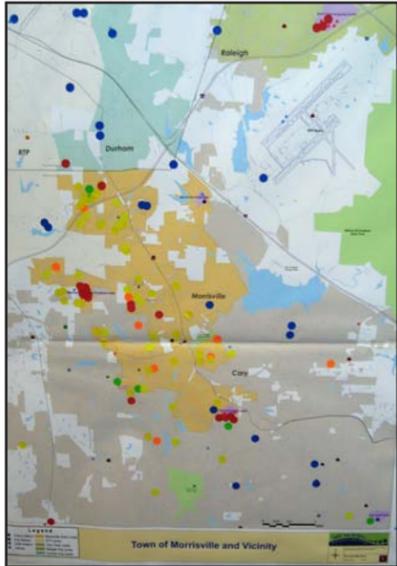
A true highlight of the Morrisville Land Use and Transportation Plans Update Project (the "Project") was the extensive and innovative use of public involvement. Over the course of the plans update process (October 2007 through May 2008), there were three public workshops with interactive group exercises, three focus group meetings, seven meetings of the Plan Advisory Committee (PAC), one online and paper public survey, and an ongoing project website and hotline phone number. The graphic to

Plans Update Schedule (September 2007 - November 2008).

the left illustrates the schedule of the planning process as well as the board review process.

Over the course of this public input process, there were at least 248 meeting attendees, equating to 180 unique individuals who took part in the active planning process, excluding town staff and consultants. In addition, 180 public surveys were received (the surveys were anonymous, so we don't know how much overlap existed with the meeting attendees).

At each public workshop and focus group meeting, a large map of Morrisville and the surrounding area was displayed, and participants were encouraged to place sticky dots on the map to represent where they live, work and shop. This map, pictured at left, allowed the staff and consultants to track the geographic diversity of the participants, Ensuring not only adequate numbers of participants but a diverse group of participants was a primary goal of this public involvement process. More detail on each of the outreach methods is included below.

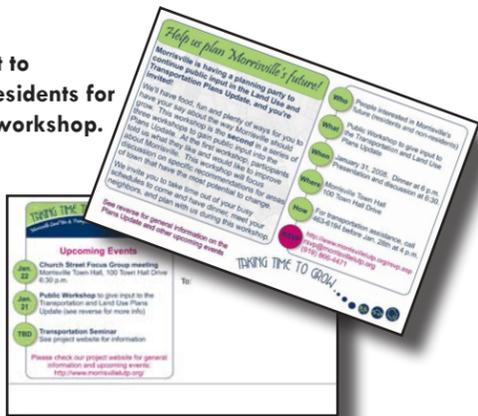


"Dots" map showing where meeting participants live, work and shop.

Public Workshops

Three public workshops and one Open House were conducted to engage the public on land use and transportation issues. Each public workshop followed a similar format but with a distinct focus. The workshop began with dinner provided to all attendees, followed by "meet & greet" time to eat and visit with other participants. Brief presentations by the consultants and staff were introduced by Mayor Jan Faulkner. Then the participants were divided into small tables of 6 to 8 people for the group exercises, where they could actively participate in the planning process. At the end of each meeting, the results of the small groups were presented to the large group. The focus and group exercises of each meeting are discussed in more detail below. Each workshop also featured handouts (information to take home as well as quick comment cards to fill out and hand back) and additional information presented on posters in the back of the room. Several Town Planning Department staff members and consultants were on hand to answer questions about the planning process or development in Morrisville in general. Raffle prizes were given away at each workshop as an incentive for participation. There was excellent attendance at the public workshops, with over 80 attendees at each.

Postcard sent to Morrisville residents for January 31 workshop.



Each of the three public workshops was advertised through an announcement in the town newsletter and citizen email listserv, as well as flyers posted at Town Hall, schools and other gathering spots. In addition, for the second and third public workshops, postcards advertising them were sent to each of Morrisville's 6,700 households and businesses.

October 29, 2007. The purpose of this first Public Workshop was to gain insight from community members about what they like about Morrisville and what issues they would like to see addressed in the future. The workshop also served to introduce the public to the Land Use and Transportation Plan Update process. Each small group was given a large map of Morrisville, colored sticky dots, markers, and a large sheet of paper. They were asked to answer the following questions: What elements of great communities does Morrisville have or lack? and What do you want to see for the future of Morrisville?. Then they marked on the large map the areas they would like to preserve, areas they would like to change/improve, and five road intersections that they would like to see improved. When groups were ready, a spokesperson from each small group presented a summary of their discussion to the larger group.

January 31, 2008. This workshop focused group discussion on specific land use recommendations for areas of town that have the most potential to change. Each group was given large maps of Morrisville showing the land that is vacant and has redevelopment potential, as well as transparent circles showing 1/4-mile and 1/2-mile walking distance, colored sticky dots, markers, a notepad. They were asked to place the circles on the map where activity "nodes" should be, write and use dots to mark desirable future land uses, and draw transportation connections that are needed to improve circulation in Morrisville. In addition, several posters and a computer display in the back of the room presented a Visual Preference Survey, showing photos and graphics of different design types for various land uses. Participants marked their preferences on handouts for the staff.



Attendees participate in group exercises, have dinner and take the visual preference survey at public workshops.

APPENDIX C. HOW THESE PLANS WERE CREATED, CONT'D

Focus Groups

To study individual areas in the Town, and to reach people that are often not engaged in general public forums, three focus meetings were conducted for youth, transit/bike/ped users, and the historic Church Street/Shiloh community. More detailed discussions were able to be held at these meetings, and "guest speakers" from transportation and other agencies talked about their perspectives on transit services, railroad impacts, and other issues. Each meeting was held in the evening during January/February 2008 and was advertised to the public, although the specific groups were the target audiences. One highlight of these meetings was the Youth Focus Group, which was attended by the Youth Advisory Committee for the Town of Morrisville. The small group was asked questions about their perspectives on Morrisville, drew "mental maps" of the Town to help highlight their values (see picture at right), and was interviewed for a television news segment.



Map of important places in Morrisville, from the Youth Focus Group.

Plan Advisory Committee

In September 2007, the Morrisville Town Council selected ten members and two alternates to serve on the Plan Advisory Committee (PAC). Members nominated themselves for consideration and were selected to represent a diverse range of viewpoints and interests. A photo of PAC members appears to the right. The role of the PAC was review and provide input to the planning process in a more detailed manner than members of the general public may be able to at the public workshops. A summary of the PAC duties is as follows:



Above: Members of the PAC. Below: PAC Members discuss future land uses.

1. Plan and staff exhibits at appropriate events as a representative of the PAC, such as public workshops, presentations to the public, Planning and Zoning Board and Town Council.
2. Review and comment on related events and suggestions.
3. Act as a representative or ambassador by seeking input from friends, associates, and acquaintances in the general public.
4. Participate with the staff and consulting team to review progress, discuss comments and suggestions from the public and provide feedback.
5. Recommend changes and or additions to the PAC.

The PAC met seven times, roughly once a month, from October 2007 through May 2008. Over the course of those meetings, all of which were open to the public, members were asked to offer their input and engage in discussion on a variety of topics, including future land uses, bicycle/pedestrian facilities, transportation priorities, and vision/goals/policies for the plans. The PAC also received and was solicited for comments on a draft version of the Land Use and Transportation Plans prior to their submittal to the Planning and Zoning Board. Minutes and materials from all of the PAC meetings are available from the Town of Morrisville Planning Department.

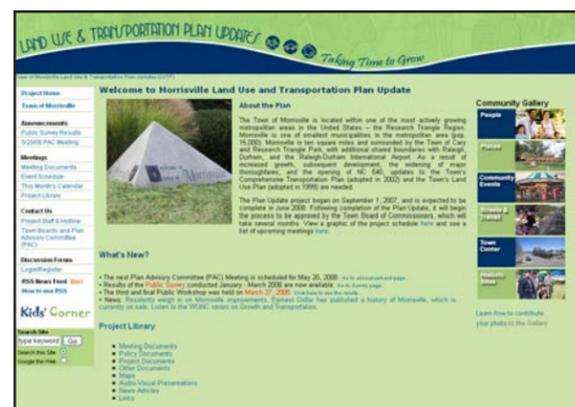


Public Survey

From January 10th through March 19th, 2008, the public was asked to participate in a survey to provide input to the plans. Questions covered respondents' bicycling and walking habits, key problematic intersections, and ideas for development types in different areas of town. The survey was conducted via hardcopy and internet, with paper copies available at Town Hall, the Planning Department, and other town meetings. The internet link was placed on the Town's website and distributed via the citizen email listserv and citizen newsletter. There were 180 survey responses. The survey instrument itself and selected survey results appear in Appendix D. Complete survey results are available by contacting the Town of Morrisville Planning Department.

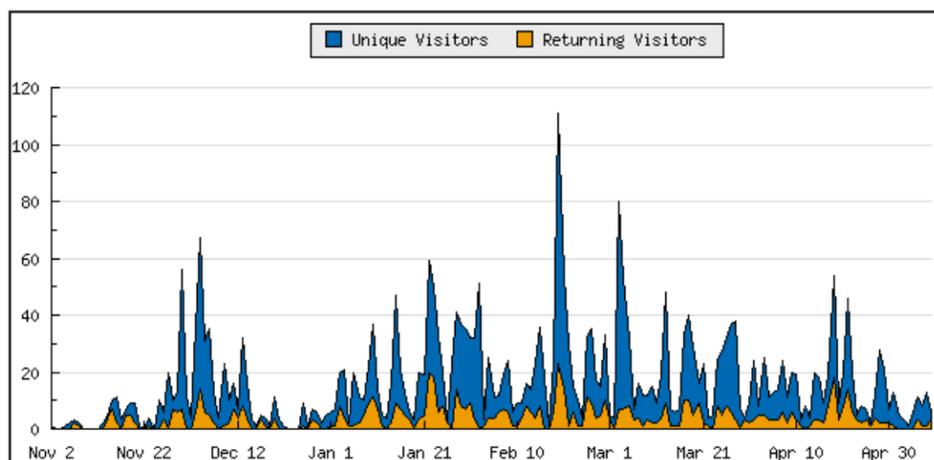
Plans Update Website

A key tool used to communicate with the PAC and the public, the project website (<http://www.morrisvillelutp.org>) developed for the Plans Update was instrumental to its success. The website both provided the public access to materials and offered opportunities for them to participate and give input to the process. The website featured a calendar of upcoming meetings and events; contact information for project staff and consultants; a project library with materials and minutes from past meetings including photos and videos, and related news articles, website links, policy documents and other materials; a community gallery with the option for the public to submit their own photos; a link to the public survey; an online discussion forum for people to post and respond to questions and comments; an RSS feed for participants to link to an automated news feed; a Kid's Corner with planning-related games; and an online RSVP function for public workshops. The website was updated at least once a week during the planning process, with the results of meetings often posted within two or three days. It was linked from the Town's website and promoted on all Plans Update materials.



Above: The Plans Update Website. Below: Website Unique and Returning Visitors November 2007 - April 2008.

The graph to the right shows the number of visitors per day to the project website over the planning period (November 2007 through April 2008). Over this period, there were 3,111 unique visitors to the site, of which 2,392 were first-time visitors, and 719 were returning visitors. Although these statistics are based only on computer "cookies" and therefore likely overstate the total number of visitors, it is nonetheless an impressive total. The website was overall a very successful means of both communicating with and receiving input from the public.



APPENDIX C. HOW THESE PLANS WERE CREATED, CONT'D
Public Survey Instrument



Town of Morrisville Transportation and Land Use Survey

Part I. Tell us About Yourself

1. Please tell us if you live or work in Morrisville. (check one)

- I live in Morrisville.
- I work in Morrisville.
- I live AND work in Morrisville.
- I neither live nor work in Morrisville.

2. Please tell us how long you have lived in Morrisville. (check one)

- I have lived in Morrisville less than two years.
- I have lived in Morrisville between two and five years.
- I have lived in Morrisville between five and ten years.
- I have lived in Morrisville longer than 10 years.

3. Please give us an idea of your family status (check all that apply).

- I live alone.
- I live with a spouse or partner.
- I live with one or more roommates (not a spouse or partner).
- I live with one or more adult family members (not a spouse or partner).
- I live with one or more children.
- If you have other living arrangements, please describe:

Part II. About Transportation in Morrisville

4. Please tell us how much you walk or bike to the following places NOW. If the location is not applicable to you, leave it blank.

	I walk/bike there now more than twice per week.	I walk/bike there now at least once per month.	I never walk/bike to this place.	I don't go to this place.
Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grocery Store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Park/Rec.Center	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friend's House/Visit Family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Please tell us how much you WOULD walk or bike to the following places if they were made safer. If the location is not applicable to you, leave it blank.

	I would walk/bike there more often if there were more sidewalks or bike lanes.	I would walk/bike there if the location were closer.	I would walk/bike there if one or more intersections were made safer to cross.	I would walk/bike there more often if there were benches, bike parking or other amenities.	I wouldn't walk or bike there even if conditions were ideal.	I don't go to this place.
Work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
School	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grocery Store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Park/Rec.Center	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friend's House/Visit Family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post Office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Many people say that they like the "small town feel" of Morrisville, but also appreciate its close proximity to work, entertainment, and shopping opportunities. Please RATE THE FOLLOWING future growth strategies in terms of their importance to you.

	1 Least Important	2	3 Neutral / No Opinion	4	5 Most Important
Develop the downtown with shops, residences, and entertainment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop cultural and arts center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promote and protect historic sites and buildings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make the town so that kids and elderly can walk or bike where they want	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discourage and new business development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promote more sit-down restaurants and small businesses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discourage any new residential development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promoter more single-family home development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Please tell us which locations or roadways in Town should be made more pedestrian-friendly (e.g. add sidewalks, crosswalks, push-button signals, etc).

1. _____
2. _____
3. _____

8. Please tell us which locations or roadways in Town should be made more bicycle-friendly (e.g. which roadways need bike lanes or wide shoulder, where should there be greenways).

1. _____
2. _____
3. _____

9. Please tell us which roadways you would like to see improved (adding lanes, turn lanes, or extending further) from those listed below, or you can only check your TOP THREE roads.

- Airport Boulevard
- McCrimmon Parkway
- Aviation Parkway
- Morrisville-Carpenter Road
- NC 54 / Chapel Hill Road
- Crabtree Crossing Parkway
- Other _____

10. Please tell us which three intersections need to be improved to make traffic move faster and / or safer. You may check only your TOP THREE intersections.

- Factory Shops Road and Airport Boulevard
- McCrimmon Parkway and Church Street
- Morrisville Parkway and Crabtree Crossing Parkway
- Morrisville-Carpenter Road and Town Hall Drive
- NC 54/Chapel Hill Road and Aviation Parkway
- NC 54/Chapel Hill Road and McCrimmon Parkway
- Other _____

Part III. Additional Comments

11. Please tell us if you have any other comments or concerns about TRANSPORTATION issues in Morrisville.

12. Please tell us if you have any other comments or concerns about LAND USE issues in Morrisville.

13. If you would like for us to contact you individually, please provide us with your name and contact information.

Please contact me - I have a question for you.

Please notify me of upcoming events.

Contact Information

NAME _____

ADDRESS _____

Phone _____

Email _____

Hurry!
Respond by
March 19th

Continued on back

APPENDIX C. HOW THESE PLANS WERE CREATED, CONT'D

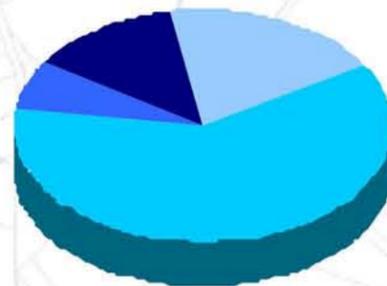
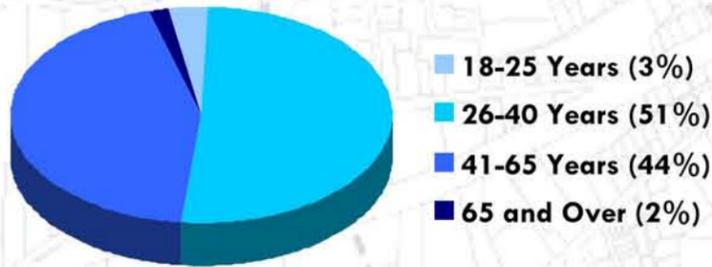
Summary of Public Survey Results

About The Survey...

There were 180 completed surveys overall; some people did not answer every question, but most (usually over 150 people) did answer every question. Here is what the survey respondents had to say about themselves and about Morrisville. The items in quotation marks scattered throughout are just some of the comments received; you can see the complete results and all of the comments by contacting Town of Morrisville Planning Department staff.

"Balance retail with residential and recreational uses..."

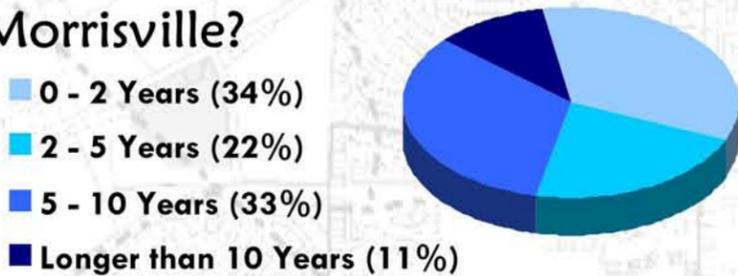
What is Your Age?



Do you live and/or work in Morrisville?



How Long Have You Lived in Morrisville?



Make roads safe for everyone (cyclists, walkers...) not just cars"

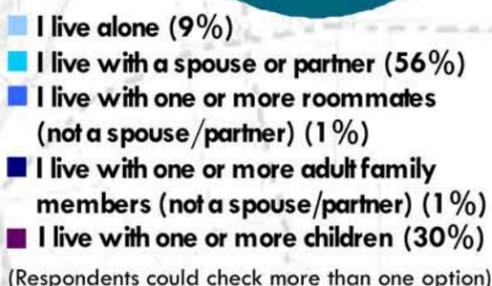
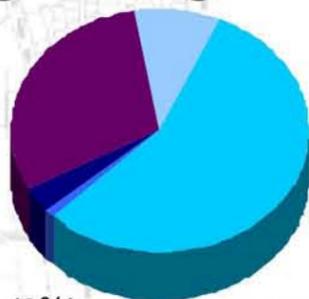
Demographics:

- Most survey respondents live in Morrisville but work elsewhere;
- A large majority live with their spouse/partner and kids; and
- Not many survey respondents have lived in Morrisville longer than 10 years; a lot of them are under the age of 40.

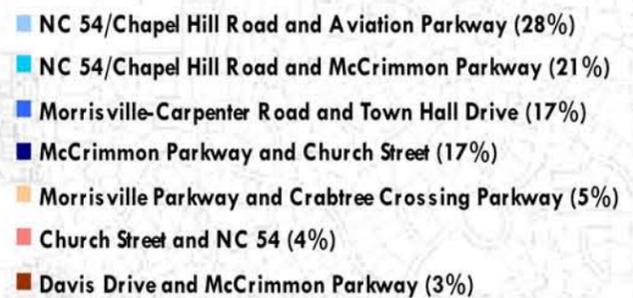
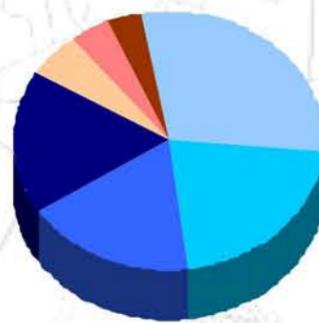
Roadways and Intersections:

- NC 54 and Morrisville-Carpenter Road were consistently ranked highly for both widening and intersection improvements. McCrimmon Parkway came in third.

What is Your Living Arrangement?

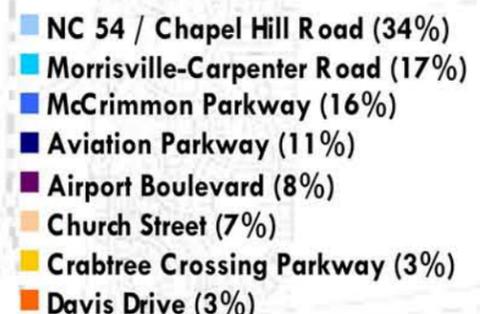
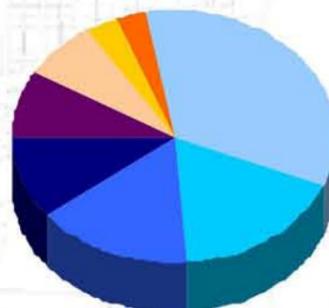


Which Intersections Should Be Improved?



(Respondents could check up to three intersections and three roadways)

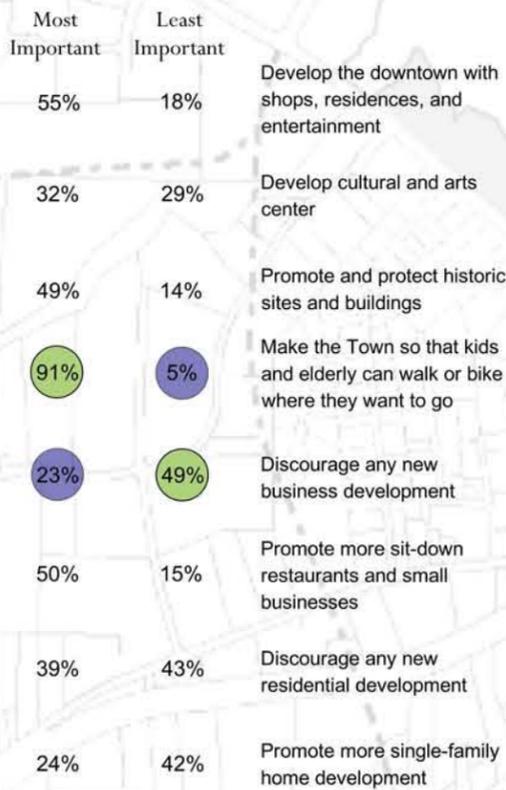
Which Streets Need to Be Widened?



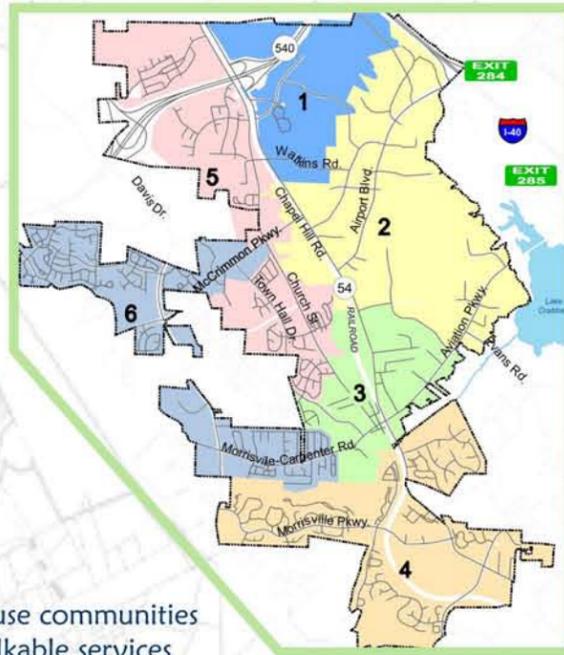
APPENDIX C. HOW THESE PLANS WERE CREATED, CONT'D

Summary of Public Survey Results, cont'd

What's Important to Our Small-Town Atmosphere?



Compare (Green is Highest; Blue is Lowest)



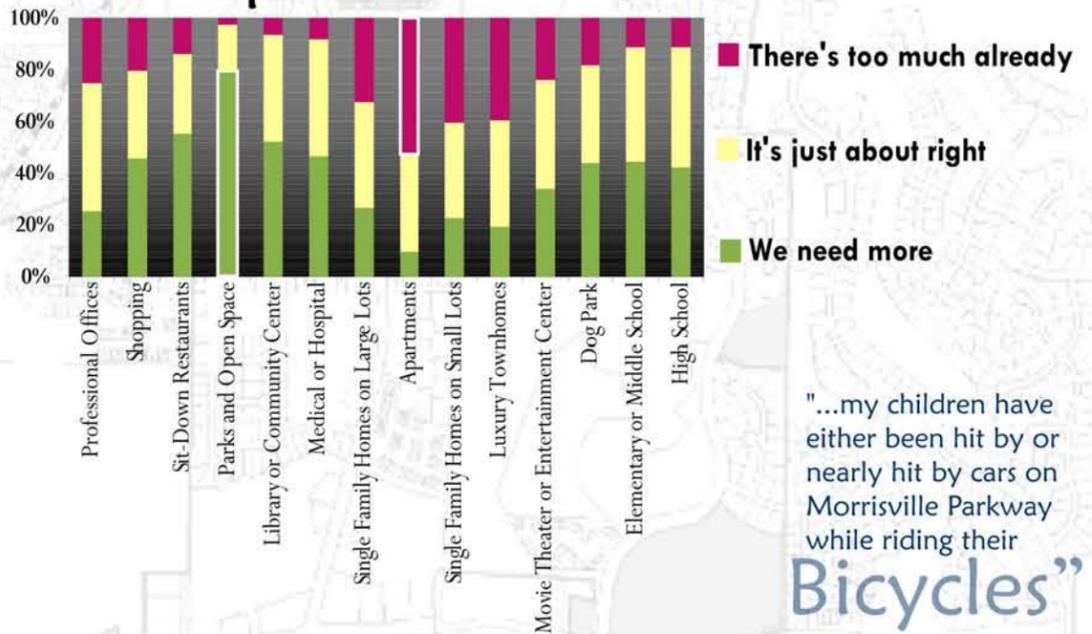
"Mixed use communities with walkable services would be Fantastic"

Development:

When we asked people if there was "too much, about enough, or more needed" for different kinds of development in the numbered areas shown on the map at left, these were some of the results:

- Generally, there were very few differences in the answers for different parts of town;
- Regardless of the part of town, people preferred fewer apartments and more parks and open space;
- Luxury townhomes and houses on large and small lots were evenly regarded;
- Sit-down restaurants, schools, and
- Professional offices were slightly more preferred in Area 1 (Northeast).

Development in Morrisville...

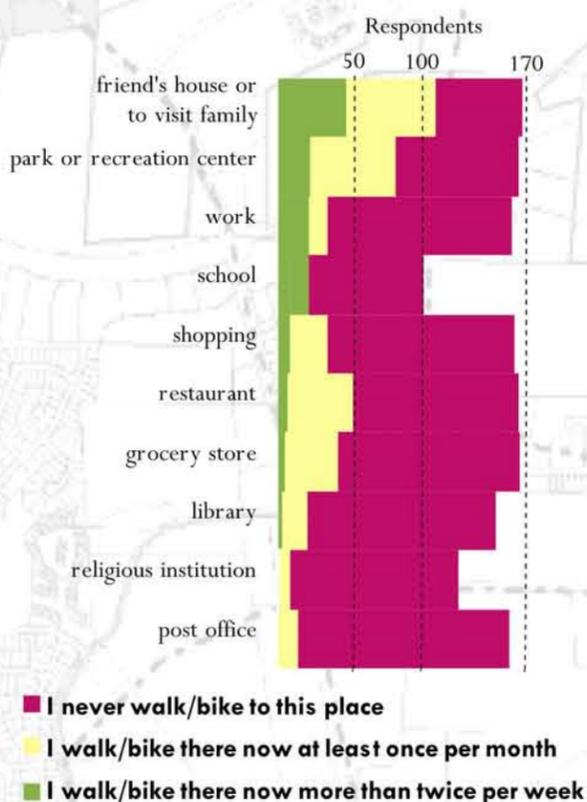


"...my children have either been hit by or nearly hit by cars on Morrisville Parkway while riding their Bicycles"

Bicycle/Pedestrian:

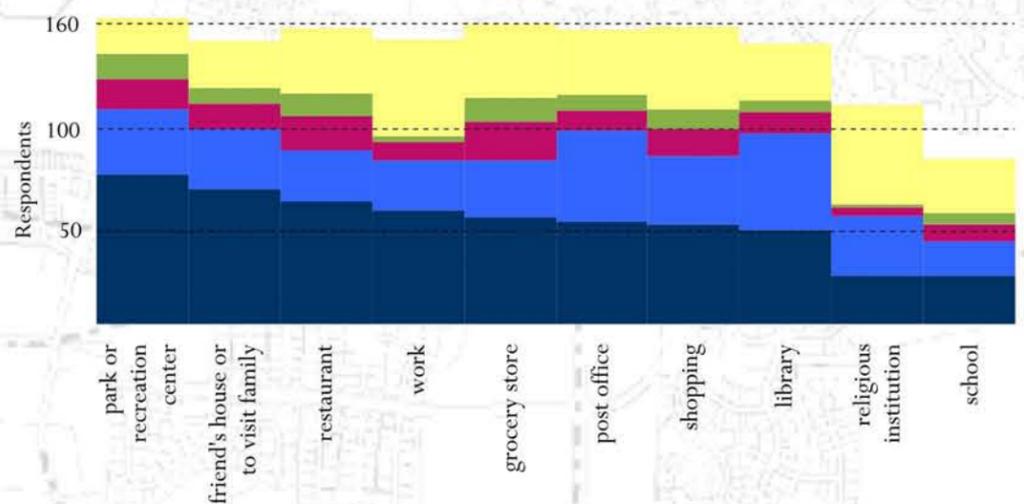
- A friend's house or a park are the places that people walk to most often now;
- Restaurants and work are also places more people would walk to if they were made safer or were closer to home; and
- Increasing sidewalks and reducing distance between land uses were cited as the best ways to improve the walkability of Morrisville.

How Often Do You Walk To...



Best Ways to Make Walking/Biking Better

- I wouldn't walk or bike there even if conditions were ideal.
- I would walk/bike there more often if there were benches, bike parking or other amenities.
- I would walk/bike there if one or more intersections were made safer to cross.
- I would walk/bike there if the location were closer.
- I would walk/bike there more often if there were more sidewalks or bike lanes.



Graphs omit respondents who said they never go to that place

APPENDIX C. HOW THESE PLANS WERE CREATED, CONT'D

Public Comment Themes

Throughout the public involvement process of workshops, focus groups, surveys, and Plan Advisory Committee meetings, there were common themes to many of the comments received. The table below describes each theme of comments and how it has been addressed in the Plans (in gray under each comment). To see the original comments received, please contact the Planning Department for a CD-ROM containing minutes and summaries of all of the public meetings.

Key to Public/PAC Comments	
●	= Light (PAC: 0-2 Members; Public: 5-10 Comments)
●	= Moderate (PAC: 3-4 Members; Public: 11-20 Comments)
●	= Heavy (PAC: 5-6 Members; Public: 21-30 Comments)
●	= Greatest (PAC: > 6 Members; Public: > 30 Comments)

General Comment	Public	PAC	Details
Bicycling Opportunities	●	●	The PAC cited this as an issue during their 10.16.2007 meeting.
<i>Numerous bicycling accommodations are suggested in the Transportation Plan, including some type of on-road facility for nearly all of the roadway improvements and prioritized greenway (off-road) projects.</i>			
Traffic Congestion (General)	●	●	The PAC cited this as an issue during their 10.16.2007 meeting.
<i>A variety of roadway capacity improvements, grade separations, and intersection improvements are proposed throughout the Town, with most major and minor thoroughfares being widened to at least four lanes of traffic (Davis Drive and NC 54).</i>			
NC 54 Traffic Congestion	●	●	The PAC cited this as an issue during their 10.16.2007 and 4.21.2008 meetings; the public identified this issue at the 1.31.2008 public workshop, through the strings-and-ribbons exercise (3.27.2008), and survey responses as the premier transportation issue in the Town.
<i>The recommendations for this roadway have been made in several segments. Sections with four lanes and planted median: North of NC 540 to boundary with Durham, McCrimmon Parkway to Sunset Avenue, Keybridge Drive to Cary Parkway. Section with four lanes and no median: Sunset Avenue to Keybridge Drive (to avoid impacts to existing buildings in the Town Center). Section with six lanes: South of Cary Parkway to boundary with Cary. The section between NC 540 and McCrimmon Parkway will initially be four lanes with a planted median but may be expanded to six lanes in the future if a Traffic Impact Analysis or NC 54 Corridor Study recommend expansion and the Town Council agrees. In addition, smaller improvements at intersections and along NC 54 will facilitate traffic flow. Grade separations are proposed at Airport Boulevard, McCrimmon Parkway, Carrington Mill Boulevard and Morrisville Parkway.</i>			
Crabtree Crossing Parkway Extension	●	●	The PAC discussed this issue at the 4.21.2008 and 5.20.2008 PAC meetings, with members of the public speaking on the project at the 5.20.2008 PAC meeting. The public also commented favorably (2 of 9 groups) on this proposed project during the 3.27.2008 Public Workshop.
<i>This roadway was initially proposed as a 2-lane roadway with bike lanes and sidewalks, along with traffic calming features to prevent cut-through traffic. In response to citizen concerns about traffic impacts to neighborhoods along Crabtree Crossing Parkway south of the proposed extension, it was removed from the 2009 Transportation Plan. See Appendix G in the Transportation Plan for more information.</i>			
Roadway Maintenance	●	●	The PAC cited this as an issue during their 10.16.2007 meeting.
<i>This issue was only lightly discussed after the first two PAC meetings, and the public rarely cited this as an issue. However, maintenance will be an ongoing issue and is important to maintain clear bicycle lanes as well as maintain traffic flow. Most streets are under the ownership of NCDOT, which uses state and federal monies to do basic maintenance activities (shoulder repair, crack sealing, resurfacing, etc).</i>			
Transportation Connectivity	●	●	The PAC cited this as an issue during their 10.16.2007 meeting; the public noted the issue at 1.31.2008 and 3.27.2008 Public Workshops.
<i>East-west connectivity and north-south capacity are significant issues that were stated several different ways. Connections between Aviation and Airport as well as across NC 54 were cited during the 3.27.2008 Public Workshop, for example, and have been recommended. Improving connectivity is one strategy to improve traffic congestion on major road, such as NC 54, which received many comments from the public.</i>			
Sustainability	●	●	The PAC cited this as an issue during their 10.16.2007 and meeting.
<i>The issue of sustainability is addressed by several recommendations for policy changes, particularly those addressing stormwater runoff and energy efficient building practices. Bicycle and pedestrian improvements, as well as creating proximate land uses that encourage alternative modes of travel in the activity centers are also important physical recommendations.</i>			

APPENDIX C. HOW THESE PLANS WERE CREATED, CONT'D

General Comment	Public	PAC	Details
Recreation / Open Space / Parks	●	●	The PAC cited this as an issue at several meetings, including their 10.16.2007 and 4.21.2008 meetings. The public asked for more greenway connections at the 3.27.2008 Public Workshop, and for more parks/recreation (9 comments) and greenways (11 comments – the largest category of comments) opportunities at the 1.31.2008 Public Workshop.
<p><i>A number of prioritized greenway connections, including specific recommendations for greenways connecting existing parks, are recommended. As far as parks and recreation areas, we are indicating the need for additional space designated in the undeveloped area between Airport Boulevard and Aviation Parkway. The Town has acquired a number of parcels recently for parks including along Church Street north of McCrimmon Parkway, along Louis Stephens Drive (Old Maynard Road) near Breckenridge and a nature park along Crabtree Creek.</i></p>			
More Low-Density Housing	●	●	The PAC cited this as an issue during several of their meetings in 2008. The public noted this issue particularly at the 1.31.2008 workshop. It was also expressed through responses to the public survey.
<p><i>This comment took two forms: requests for more low-density housing (or for any future additional housing to be lower rather than higher density), and concerns about there being too much high density housing currently in the town. For example, a majority of survey respondents felt that there were too many apartments in Morrisville. These concerns were addressed in the Land Use Plan by not increasing the land classified as high density residential in the town (it is impractical to re-designate existing high-density residential as a lower density in the future). Additional high density residential could be added in the Regional Activity Centers or Southern Activity Center if approved by the Town Council. Several additional residential areas were added to the plan and were classified as low or medium density. In addition, none of the areas designated for low-density housing in the 1999 Land Use Plan were eliminated in the 2009 Plan (though some have been built at higher densities between 1999 and 2009), and an additional 227 acres of land not designated for residential in the 1999 Plan have been designated as low or medium density (single family detached) residential use in the 2009 Plan.</i></p>			
Changes in Amount of Retail / Shopping	●	●	The PAC cited this as an issue during their 10.16.2007 meeting; the need for more shopping and restaurants was noted by many commenters at the 1.31.2008 workshop. Some PAC members (4.21.2008 meeting) asked for less mixed-use development.
<p><i>Higher-end retailers were sometimes noted as desirable by both the PAC and public commenters. The policy recommendations include restricting drive-through retailers and consolidating new retail agglomerations into a limited number of activity centers in attempt to balance the desire for more low-density development throughout the Town.</i></p>			
Aesthetics / Beautification	●	●	The PAC cited this as an issue during their 10.16.2007 meeting; numerous members of the public cited this as an issue at the 10.29.2007 workshop.
<p><i>Gateway areas (small, landscaped areas near the entranceways to Town) were recommended in a number of locations; some of the policy recommendations and street cross-sections were intentionally designed to introduce more landscaping and streetscaping into future infrastructure.</i></p>			
Need for More Public Schools	●	●	The PAC cited this as an issue and discussed the matter extensively during their 4.21.2008 meeting.
<p><i>In North Carolina, public schools and school siting are handled by county government; however, local governments can participate in locating and preserving sites that may be suitable for public schools. The criteria for school sites are discussed in the 2009 Land Use Plan, and options for school sites were discussed on several occasions during PAC meetings. The plan notes several sites meeting the criteria but does not designate any of them as school sites since Wake County Public School System is not including the Town in its current search for sites.</i></p>			
Need for More Public Transportation	●	●	The PAC discussed transit options at 3.18.2008 and 4.21.2008 meetings; the public cited this issue at the 1.31.2008 workshop.
<p><i>A variety of public transportation recommendations, both short- and longer-term, are present in the 2009 Transportation Plan, including transit service along NC 54 and Aviation Parkway, as well as a cross-town connector servicing south RTP and RDU International Airport. Longer-term recommendations will accommodate future regional rail transit stations.</i></p>			

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●	= Light (PAC: 0-2 Members; Public: 5-10 Comments)
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APPENDIX C. HOW THESE PLANS WERE CREATED, CONT'D

Coordination With Regional Partner Organizations

The Town of Morrisville staff are committed to engaging neighboring jurisdictions and regional planning groups as active participants in the planning process. Morrisville's location in the heart of the Triangle necessitates this kind of cooperation in order to plan effectively. The purpose of multi-jurisdictional coordination is to inform the other groups of the Town's intent regarding future land use and transportation changes, coordinate plans for adjacent areas and roadways that run through more than one town, receive feedback on issues of interest to the other groups, and collaborate on solutions to some of the more challenging aspects of planning in Morrisville. As such, the Town planning staff and/or consultants have met with the following groups during the planning process (October 2007 through May 2008) and made changes to the plans as described below:

- **Town of Cary.** Met several times to discuss transportation issues related to roadways that go through both jurisdictions, to ensure coordinated improvements. Resulted in changes to the cross-section for NC 54 and Davis Drive, and bicycle/pedestrian improvements on several other roadways. Discussed widening the causeway on Aviation Parkway, which is controlled by NCDOT but within Cary's jurisdiction, to provide bicycle/pedestrian access from Morrisville to Lake Crabtree Park. Also received email comments on land use issues, including the clarification of urban services areas. Representatives attended two of the public workshops.
- **Research Triangle Park (RTP).** Discussed potentially extending Little Drive through undeveloped areas of RTP to meet Mason Farm Road in Morrisville. This connection would provide an additional East-West route and connectivity. Discussions on making this connection are ongoing.
- **North Carolina Railroad Company (NCRR).** This organization controls the railroad right-of-way through Morrisville. Planners met with NCRR staff to discuss grade crossings (reducing at-grade crossings in favor of grade separations), hazardous waste transport through the area, future land use policies in the areas around the railroad, and the status of the regional rail study that is currently underway. The plans include an action item to further investigate the hazardous waste issue and manage risk to the residents of Morrisville.
- **RDU Airport Authority.** Discussed the purpose of continuing the airport noise overlay zoning in Morrisville, which prevents residential and other sensitive land uses from locating in areas with greater than 65 db of airport noise. A representative of the Airport Authority made a presentation and answered questions at a meeting of the Plan Advisory Committee (PAC) and attended a public workshop. Discussions are ongoing regarding the possibility of allowing residential development west of NC 54 even where the overlay exists.
- **Capital Area Metropolitan Planning Organization (CAMPO).** Discussed transportation priority funding through the Transportation Improvement Program (TIP). Agreed on modifications to some of the planned improvements, such as shifting the planned McCrimmon grade separation north of the existing roadway.
- **Triangle J Council of Governments (TJCOG).** Collaborated on the route for the proposed RDU-RTP circulator (curb-guided bus) to ensure that it follows a route least likely to impact existing development in Morrisville.
- **C-Tran (Cary Transit).** Discussed the possibility of having C-Tran operate bus service to and within the Town of Morrisville, with the Town's financial support. Such a provision would cost much less to Morrisville than initiating its own program. Discussed changes in planned C-Tran route along Cary Parkway, changing the route to actually come through Morrisville along NC 54, with stops within the town. Future transit routes through Morrisville (North-South along NC 54 and East-West loop around Airport Boulevard, Aviation Parkway, Morrisville-Carpenter Road and McCrimmon Parkway) were agreed upon from a preliminary standpoint. Participated as a speaker at the Transit focus group meeting.
- **Triangle Transit.** Discussed and agreed to make future plans to change the 301 bus route that currently serves the Morrisville Outlet Mall to run down NC 54 and up Airport Boulevard to the Outlet Mall. Such an altered route would provide additional access to regional transit for Morrisville residents. Participated as a speaker at the Transit focus group meeting.
- **Wake Coordinated Transit.** Discussed a short-term expansion of transit service within Morrisville in order to provide more options to Morrisville residents. Participated as a speaker at the Transit focus group meeting.
- **Wake County School Board.** Discussed new school search radii and how any potential school sites in the town's jurisdiction would be treated.
- **NCDOT.** A representative of the NCDOT Rail Division participated in the Church Street focus group meeting, making a presentation and answering questions from citizens on railroad crossing closures. The NCDOT Division Office was provided a copy of the plans and invited to the meetings. They provided no comment.
- **North Carolina Turnpike Authority.** A representative of the NCDOT Rail Division participated in the Church Street focus group meeting, making a presentation and answering questions from citizens on Triangle Parkway.
- **Regional Transportation Alliance (RTA).** Met to discuss overall goals of the transportation plan. Made suggestions regarding the importance of highlighting the Aviation Parkway and Evans/McCrimmon intersection as a "feature intersection."

The Town also invited all of these entities to all three of the public workshops held as part of the planning process, and several representatives of the groups participated in those workshops. Most of these groups received draft copies of the plans to facilitate their review. The Town has also followed the adjacent communities' updates of their plans. CAMPO, Raleigh, Cary, RTP, and Triangle Transit are all updating their plans at this time. The Town staff also meet regularly with the jurisdictions participating in the Center of the Region Enterprise (Cary, Durham City, Durham County, Raleigh, Wake County) convened by TJCOG, and with staff from all the municipalities and the county through the Wake Municipal Planners Group convened by Wake County.

APPENDIX D. SUMMARY OF POLICY FRAMEWORK AND POLICY AUDIT

The following section describes two separate documents created by the consultants during the planning process. Each document may be obtained by contacting the Town of Morrisville Planning Department.

Policy Framework

As a part of the Land Use and Transportation Plans Update Project (the "Project"), a comprehensive inventory of the past and current planning and policy work has been undertaken. In all, 14 documents, plans, agencies, or procedures that deeply influence and shape the policy environment in Morrisville were considered. The Policy Framework Summary provides a brief overview of existing documents and planning processes currently directing land use and transportation planning and policy in the Town of Morrisville. These include the following reports and agency interviews.

- Morrisville Land Use Plan
- The Town Center Master Plan
- North Morrisville-Shiloh Small Area Plan
- The Parks and Greenways Master Plan
- CORE Bicycle-Pedestrian-Green Space Plan
- Zoning Ordinance
- Subdivision Ordinance
- Morrisville Transportation Plan
- Town of Morrisville Design and Construction Ordinance
- Parks and Greenways Master Plan
- Prior and Current Comprehensive Annual Financial Reports (CAFRs)
- Capital Area MPO
- Raleigh-Durham International Airport
- Triangle Transit
- Development Procedure
- BOC Vision Statement

The purpose of this policy review is to help planning staff, Plan Advisory Committee (PAC) members, and elected and appointed officials evaluate how current policies and regulations shape development in the Town. It is also intended to help identify the elements of the Town's basic vision for future growth and development. This basic understanding of the existing policy framework and vision for the future of the Town is an important platform on which to base the update process for the Land Use and Transportation Plan Update Project that is currently underway.

In connection with the Town Council's stated goals, a few core themes have emerged from the policy analysis. These themes include those listed below.

- Ensure that Morrisville remains a small town with a high quality of life and a balance of stable residential neighborhoods and vibrant business centers that are attractively designed and compatibly located within a system of natural buffers and greenways.
- Create a vibrant, walkable gathering place at Morrisville's historic crossroads to help ensure that residents continue to enjoy the best qualities of small-town living as the community grows. Municipal bonds have been identified as a funding method.
- Encourage development in areas that are served by public utilities and facilities. Review of proposed water and sewer facilities by the Town of Cary has been integrated into the Morrisville development review process.
- Improve connectivity and manage traffic congestion with a convenient, accessible multi-modal transportation system, and safe and well-designed streets through the Town. This objective may include an aggressive approach to incorporating traffic calming and low-impact design to maintain the livability of communities.

Policy Audit

The Land Use Policy Audit takes the Policy Framework Summary a step further by providing the consultant's analysis of the key issues of conformance or lack of conformance between the Town's land use policies and regulations (specifically, the 1999 Land Use Plan, the zoning ordinance, subdivision ordinance, and other relevant plans). This analysis is organized according to the same overall themes that were identified in the Policy Framework Summary.

The purpose of the following Land Use Policy Audit is to provide planning staff, PAC members, and elected and appointed officials with the consultant's assessments of how consistently the existing policies and implementation mechanisms foster the type of growth and development that is envisioned for the future in the current Land Use Plan. The Land Use Policy Audit is intended to help identify potential disconnects between the Town's stated policies, and their implementation through zoning and other codes.

This report is organized into two sections. The first section provides a brief overview of the relationship between the thematic vision identified in the Policy Framework Summary and the 1999 Land Use Plan. The second section provides the consultant's assessments of overall consistency between the Land Use Plan, Zoning Ordinance, and other relevant documents. This basic understanding of the existing policy and implementation framework for the Town is an important platform on which to base the update process for the Land Use and Transportation Plan Update Project that is currently underway.

APPENDIX E. THE FUTURE LAND USE MAPPING PROCESS

The core of the Land Use Plan is the Future Land Use Map (Figure 5.1), which details the vision of staff and the public for what Morrisville should look like in the future. The map, together with the associated category descriptions, can guide the planning staff, Planning and Zoning Board, and Town Council in their consideration of proposed developments. This appendix presents more detail on the process used to reach that ultimate map, so that readers can better appreciate the underlying reasons for the designations. The future land use mapping process primarily involved the Plan Advisory Committee (PAC), the public through public workshops and the public survey, Town staff, and consultants.

December 4, 2007 PAC Meeting. The PAC requested to see a map dividing the town's planning jurisdiction into three categories: vacant, committed land unlikely to change, and land that is likely to redevelop. Such a map would give the PAC an idea of the amount of land that is "in-play" within the Town, which is useful since the overall amount of available land for development is dwindling. The PAC also discussed the impact of the noise overlay district, which restricts residential development in the eastern portion of the town.

January 15, 2008 PAC Meeting. Consultants presented the "3-category map" requested by the PAC at the previous meeting (see Figure E.1) and discussed the relative amounts of land in each category in restricted and unrestricted areas (Figure E.2). For the purposes of this map, the three categories are defined as follows:

Committed Land Use:

Parcels that are developed and are likely to stay in their current use for the time period covered by the Land Use Plan, or parcels that are currently undeveloped but whose use has already been determined or are undevelopable for other reasons:

- Parcels built 1996 or later

- Town, State or Federally owned developed parcels

- Parcels within subdivisions that are as-yet unbuilt and parcels designated for open space within subdivisions

- Parcels recently approved for development, even if construction has not begun

Redevelopment Potential:

Parcels that are developed but are underutilized for their location. Sufficient value exists in the location that developers may benefit from purchasing the parcel and redeveloping it for a different or more intensive use.

Parcels with older/smaller buildings that are near or adjacent to major roadways or new development (examples: 50-year-old single family home along NC 54, or 20-year-old 1-story office buildings adjacent to newer 4-story office buildings)

Vacant/Undeveloped:

Zero building tax value, verified by visual inspection of 2007 aerial photos to ensure no buildings present

Includes town-owned parcels that are undeveloped and have no currently planned/anticipated use

The majority of land in the town's planning jurisdiction (56%) is classified as "committed", with 21% classified as "redevelopment potential" and 23% classified as vacant. Slightly less than half of the land in the vacant and redevelopment potential categories is restricted, which means that noise sensitive land uses (e.g. residential, schools, etc.) are not allowed.

In addition to the three categories, there was an additional map where staff and consultants had divided the "redevelopment potential" category into low, medium and high potential for redevelopment, indicating the relative potential of each parcel to redevelop. The high, medium and low categories may also be thought of in terms of short term (5 years), mid term (10-15 years), and long term (15-20 years) redevelopment. In general, parcels closer to major transportation with older buildings that underutilize the location (such as a 1950s era single family home along NC 54) were classified with a high potential for redevelopment. Somewhat newer development or parcels farther from major transportation routes were classified with a lower potential for redevelopment.

PAC members also received maps of development restrictions, such as streams, floodplains and wetlands (similar to Figure 2.4); existing land use (Figure 3.1); and planned trans-

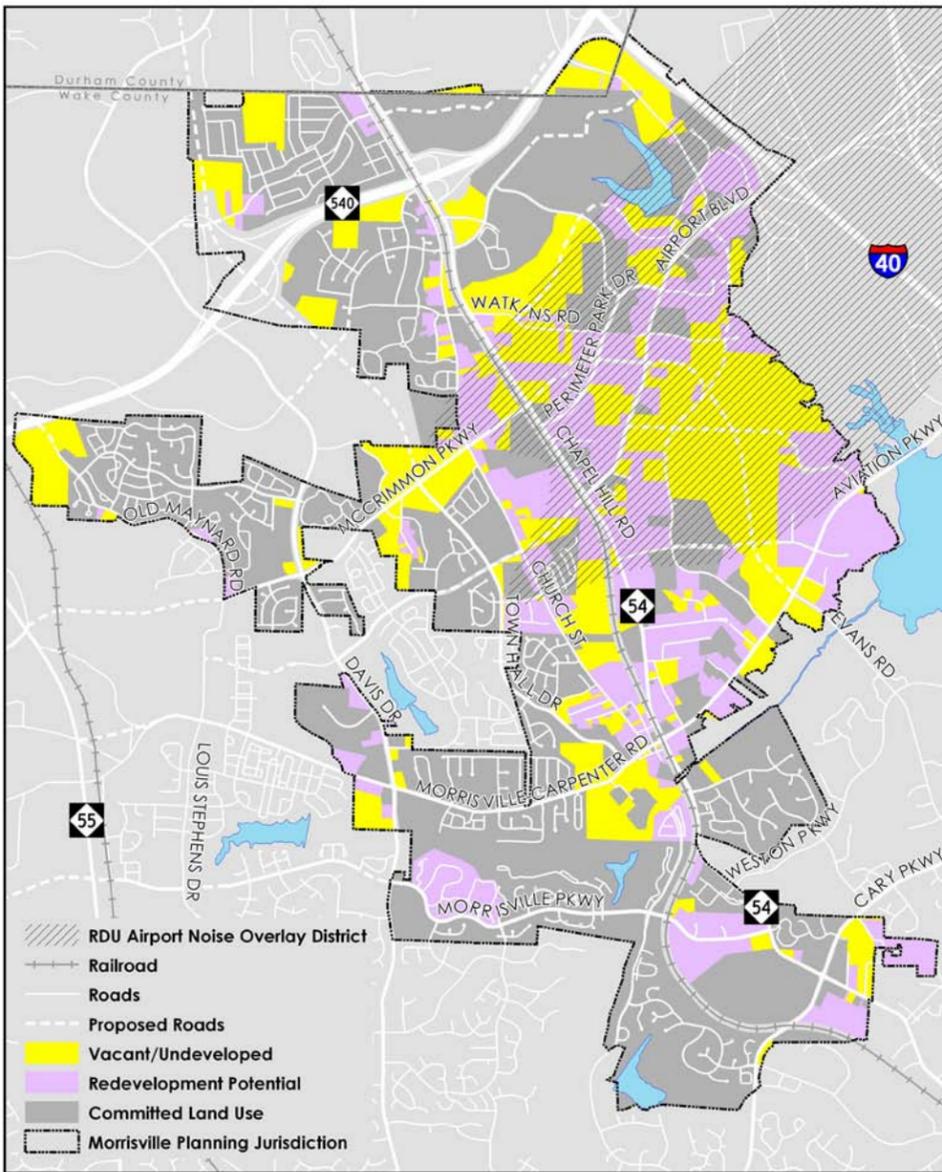


Figure E.1 Development Potential

Figure E.2 Percentage of Land in Development Categories (Restricted and Unrestricted)

Development Category	Restricted*	Unrestricted*
Committed Land Use	5%	51%
Redevelopment Potential	8%	13%
Vacant/Undeveloped	9%	14%

* Restricted category includes land in the Airport Noise Overlay District east of NC 54. Unrestricted includes land in the Airport Noise Overlay District west of NC 54 and all land outside the noise overlay.

APPENDIX E. THE FUTURE LAND USE MAPPING PROCESS, CONT'D

portation projects, including those scheduled to receive state funding through the Transportation Improvement Program (TIP). Together, these maps provide the basis for discussion of what future land uses may be appropriate for different locations. Following the initial presentation of these maps, PAC members divided into two groups to write in future land uses on large printed maps of the town.

January 31, 2008 Public Workshop. As discussed in Appendix C, the group exercise at this workshop focused on brainstorming future land uses for areas of town. Similar to the exercise done by the PAC members on January 15th, each group was given large maps of Morrisville showing the land that is vacant and has redevelopment potential, as well as transparent circles showing ¼-mile and ½-mile walking distance, colored sticky dots, markers, and a notepad. They were asked to place the circles on the map where activity “nodes” should be, write and use dots to mark desirable future land uses, and draw transportation connections that are needed to improve circulation in Morrisville. These results were compiled, along with the PAC exercise results, into one map that the staff relied upon throughout the rest of the future land use mapping process.

February 19, 2008 PAC Meeting. The focus of this meeting was to create a draft land use plan map. This was accomplished interactively, using CommunityViz software, which allows participants to compare alternative scenarios visually (maps on the screen) and numerically (number of schoolchildren, square footage of commercial space, etc.). Only parcels identified as vacant or “redevelopment potential” were considered in this exercise, and the area covered by the Town Center Plan was not included. The photo to the right shows the PAC participating in the CommunityViz exercise.

The exercise started with three initial scenarios, which were created using the input from the January PAC meeting and the January public workshop. The three scenarios were baseline (essentially the current zoning), Scenario 1 (lower density) and Scenario 2 (mixed use emphasis). When the PAC members suggested changes to these initial scenarios, they can be made in real time on the screen to see immediate results.

Graphs accompanying the scenarios estimated population, schoolchildren, vehicle trips, tax revenue and wastewater quantity generated from each development. While these graphs were a convenient way to make judgments about relative impacts between land uses, they should not be considered precise predictions. Rather, they are reasonable approximations that can assist in understanding tradeoffs in land use types. The estimated impacts are based on generalized factors.

While the exercise was generally a success, the PAC ran out of time to fully address all areas of town. In response, the PAC was given additional materials by email following the meeting to solicit input on the areas that were not covered.

March 18, 2008 PAC Meeting. At this meeting, the PAC saw the combined results of the previous future land use mapping exercise and the “homework” followup they had been given. They were still presented as two separate scenarios. These scenario maps were shown in a more simplified format, to focus on the “big picture” land use issues rather than specific parcels. The discussion at this meeting focused on these larger land use issues, trying to gain consensus on how the two scenarios could be combined as a compromise. PAC members had additional opportunities to submit their likes and dislikes on each of the two scenarios presented. These comments were then incorporated into the two scenarios.

March 27, 2008 Public Workshop. While the main focus of this workshop was transportation improvement priorities, attendees had the opportunity to view the two alternative scenario maps, as well as a “trend” map that represented the future land use map that is currently in effect, and the graphs comparing them in terms of their impacts. Handouts provided each attendee the opportunity to provide comments on the scenarios, as well as draw directly on the scenario maps to indicate the areas they liked and didn't like. Over thirty attendees at the meeting turned in the scenario handouts with their comments.

The Final Future Land Use Map. Following the third public workshop, staff and consultants gathered all of the available input on the future land uses: combined map showing ideas from the January PAC meeting and public workshop, the two scenario maps that had been updated several times through discussion with the PAC, and the public comments on the two scenarios presented at the third public workshop. Staff considered these inputs, as well as the general development restrictions (noise overlay, floodplains and wetlands) and accepted planning principles in creating the Future Land Use Map shown as Figure 5.1. Inevitably, compromise between the two earlier scenarios was necessary, and the final map incorporates some aspects of each. There was also a shift from the very specific land use types used in the early scenario exercise to more general but flexible categories. Flexibility in a future land use map is critical, since we can never accurately predict the many changes that will happen in the Town. It is important that the Future Land Use Map reflect the *kinds* of development that the staff and public feel would be compatible in specific areas, rather than very specific land uses.



Detail of land use mapping exercise at the January 31st public workshop.



PAC members participate in computerized scenario exercise at the February PAC meeting.



Attendees of the March public workshop study the two future land use scenario alternatives.



The Town of Morrisville will be an innovative crossroads where cultural heritage meets the next generation nurturing vibrant communities of thriving families and businesses while preserving small-town values.