UNIVERSITY RESEARCH PARK CHARLOTTE Area Plan

PREPARED FOR City of Charlotte

PREPARED BY University City Partners

ADOPTED BY CHARLOTTE CITY COUNCIL June 28, 2010

Acknowledgements

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URP Area Plan

ADOPTED- 06.28.2010





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EXECUTIVE SUMMARY



Just 11 miles from Center City Charlotte, the URP's over 2,000 acres lie in close proximity to airports, major highways, and regional centers and institutions.

Purpose

The University Research Park plan area has experienced great successes over the past 40+ years of development, and is well positioned to offer a tremendous amount of opportunity for development and reinvestment for Charlotte and Mecklenburg County. The plan area is approximately 2,300 acres. It includes nearly 750 acres of undeveloped land that is envisioned to become a diverse neighborhood that embraces existing businesses while promoting a development pattern suitable for future investment that will make this area a desirable place to work, live, and play. For many years this area has evolved as a business park with a predominantly single use. However in today's competitive environment, connectedness, and competition, it is important to diversify uses and provide a framework for sustainable growth and development.

The purpose of this document is to establish a vision for how this plan area can build upon years of success that have led to a great infrastructure and core business investment. It establishes a path for growth and reinvestment that will lead to a more sustainable community and development pattern by introducing better connections, a diversity of uses, amenities, and an identifying voice and brand in the market. This plan provides the policy direction that will guide future development and decision making in this plan area.

Plan Area

The University Research Park Area Plan (URPAP) is bounded generally by Mallard Creek Church Road on the north, City Boulevard on the south, Mallard Creek Road on the west, and Interstate 85 on the east. (Refer to Map 1 for plan area location and boundaries.)

The boundaries coincide with the boundaries of the recently expanded University City Municipal Service District (MSD). This expansion of the MSD in 2008 was intended to facilitate a more collaborative focus on economic development by representatives of University City Partners and University Research Park (URP). This plan will build upon the University City Area Plan (UCAP) which was completed in 2007. The UCAP covered the MSD east of Interstate 85, while the URP Area Plan covers the western side. MSDs are taxable areas which offer and fund services in addition to those that are provided by the City. The plan area lies within a Mixed Use Activity Center and part of a Wedge, as defined by the City's Centers, Corridors, and Wedges Growth Framework.

Opportunities & Constraints

The plan development process included a thorough investigation of the URP, the context, and other influences on the plan area to identify the opportunities and constraints that may affect the vision of the *University Research Park Area Plan*. The intent was to identify the unique positioning of this area, understand the challenges that exist, and determine how a new vision and policy can take advantage of future opportunities while addresing present constraints.

Opportunities:

- Location
- Building space
- Vacant land
- Open space and natural features
- Infrastructure, underground dual

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power grid

- Stable businesses and investment
- Sustainable development
- Surrounding development
- Proximity to future transit
- Proximity to UNCC-Charlotte Research Institute

Constraints:

- Parcel division and multiple owners
- Steep terrain
- Creeks and floodplains
- Transportation network
- Zoning restrictions
- Lack of Identity

Vision

Building on the successes of the URP in previous years, the URP area is envisioned to become a premier employment center in the region with a diverse mixture of uses, sophisticated infrastructure, and attractive amenities that will facilitate the evolution of the place into a vibrant destination. With opportunities for better utilization of the vacant land, improvements to the transportation network, an expanded range of uses, and better linkages – physically and economically - to its surroundings, the URP will be a more sustainable development and the preferred location in the region.

Goals and Policies Land Use

The land use policies will help diversify the uses from the existing office oriented development and do so in a more compact and urban form which will create a unique community and provide the critical support of other uses that leads to more sustainable growth. The land use goal for the plan area is to: *Encourage strategic use of undeveloped and underutilized land while incorporating a diversity of uses including residential, retail, office and recreation, while embracing current trends.* The land use policy illustrated on Map 5 can be summarized by the following:

- Maintain and enhance the role of the area as an employment center in the region
- Encourage a mixture of uses
- Allow uses that complement the existing uses in the area
- Encourage development with the intensity and mixture of uses that is supportive of major public investments, such as transit.
- Expand housing choices
- Facilitate a development pattern that leads to a more connected network of streets
- Create both physical and perceptual connections to surrounding areas
- Integrate passive and active recre-

ation opportunities into the development pattern

- Support redevelopment of sites and buildings that are inconsistent with current space demands.
- Maximize the utilization of available land, while preserving important natural features
- Preserve existing businesses
- Encourage adaptive reuse to preserve large-format corporate buildings

Community Design

The design policies will help to ensure that the new development complements the existing or desired character of the URP community. The community design goal for the plan area is to: Enhance the URP image and identity in the region by improving the quality of development and incorporating unique greenways, streetscapes, and signage. The community design policies can be summarized by the following:

- Consider varying setbacks (Refer to Map 15)
- Reinforce the URP identity through gateway features and signage (Refer to Map 14)
- Encourage design that facilitates community safety
- Encourage structured / shared parking



Vacant leasable space exists in many of the existing URP buildings.



The current street network throughout the URP is predominantly auto-oriented and not conducive to pedestrian activity.



With improvements, 1.2 mile stretch of Mallard Creek Greenway that runs through the URP has the opportunity to attract new investors.

Transportation

Transportation policies address proposed new streets and enhancements to existing streets to make them more pedestrian and bicycle friendly. The transportation goal for the plan area is: To create an interconnected transportation system that improves transportation choices, increases connectivity within the URP area and the University City area and facilitates the proposed URP land uses.

(Refer to Map 16.) These policies include:

- Support a variety of transportation • choices by creating an interconnected network of streets, accentuating the greenway trail system throughout the URP and creating new connections across I-85.
- Recognize the importance of a safe, . efficient transportation system that accommodates all users
- Support a "green street" program . that promotes environmental protection
- Provide an interconnected network • of streets that accommodates pedestrians, bicyclists and motorists equally well
- Link to existing streets .
- Enhance the quality of place with • streetscape elements
- Create a new north/south connec-• tor from Harris to Mallard Creek Church Road
- Establish a road network that sur-. rounds the proposed central park and provides uses fronting the park

Create active and passive recreation

Infrastructure and

able development pattern.

vation techniques

water management

other improvements

quality protection

These policies include:

•

•

•

•

spaces

opportunities

The infrastructure and public facili-

ties goal for the plan area is: Continue

to increase the competitiveness of the

URP through the maintenance of and

improvements to existing systems that

conceptually can support a more sustain-

Encourage the use of water conser-

Take a regional approach to storm

simultaneously with road diets and

Encourage the use of Low Impact

Bury and relocate of utilities to the

planting strip or back of sidewalk

should be sought where right-of-

Create a large, central park along

Create a connected system of open

Create active and passive recreation

Encourage a pedestrian bridge con-

nection as a safe greenway crossing

existing right-of-way allows it.

the Mallard Creek Greenway

Promote active use of parks

over WT Harris Boulevard

way is being acquired or where the

Development to facilitate water

Upgrade storm water facilities

Public Facilities

Support a green street program that pro- Preserve the existing tree canopy to the motes the quality of the natural environ- maximum extent possible. ment.

Natural Environment

The natural environment goal for the plan is: Create a conservation community with emphasis on parks and greenways that optimize the overall 'green' nature of URP and serve as a catalyst for development and an appealing destina*tion in the region.* (Refer to Map A-5) These policies include:

- Preserve the existing tree canopy to • the maximum extent possible
- Encourage a development pattern that supports the use of multiple transportation modes
- Utilize best practices of low impact design (LID)

Implementation Guide

The Implementation Guide identifies strategies to implement the policies of the Concept Plan. Because the Implementation Guide is not adopted by elected officials, it is not a commitment. The Implementation Guide also outlines a number of improvement projects. While this plan calls for a change to the RE zoning, a large number of properties in the plan area are occupied by businesses today. These uses serve important employment and economic functions within the City, and should retain their current zoning until the properties are ready for redevelopment or change. As such, no corrective rezonings are included in this plan.



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opportunities.

CONCEPT PLAN University Research Park Area Plan





CONCEPT PLAN



Approximately 750 acres of the plan area remain undeveloped.

C-1.0 PLAN CONTEXT C-1.1 Purpose

This document establishes a vision for the plan area and provides policy direction to guide future growth and development consistent with the *Centers, Corridors and Wedges Growth Framework.* Once adopted, this plan will:

- update existing plans for the area, including the Northeast District Plan;
- refine the boundaries for any portion of an Activity Center, Growth Corridor and/or Wedge included in the plan area;
- address key land use, transportation, community design and development issues identified through the planning process;
- provide guidance for future land use and infrastructure decisions; and
- function as the official streetscape plan.

C-1.2 Plan Boundaries

The University Research Park Area Plan (URPAP) encompasses approximately 2,300 acres and is bounded generally by Mallard Creek Church Road on the north, City Boulevard on the south, Mallard Creek Road on the west, and Interstate 85 on the east. (Refer to Map 1.)

The boundaries coincide with the boundaries of the recently expanded University City Municipal Service District (MSD). This expansion of the MSD in 2008 was intended to facilitate a more collaborative focus on economic development by representatives of University City Partners and University Research Park (URP). This plan will build upon the University City Area Plan (UCAP) which was completed in 2007. The UCAP covered the MSD east of Interstate 85, while the URP Area Plan covers the western side. MSDs are taxable areas which offer and fund services in addition to those that are provided by the City.

This plan area is identified in The City's *Centers, Corridors and Wedges Growth Framework* study as including both an Activity (Mixed Use) center between WT Harris Boulevard and Mallard Creek Church Road and a part of a plan area Wedge. Refer to Map 2: *Centers, Corri dors and Wedges Growth Framework.*

2

The area is bound on the east by the Northeast Growth Corridor, and surrounded on its northern, southern, and western edges by Wedges. The Wedges consist of predominantly low density residential development, while the Northeast Growth Corridor is the location of significant commercial and institutional uses: The Shoppes at University Place, Carolinas Medical Center and UNC-Charlotte.

The majority of this plan area includes the area known as the University Research Park. Over 40 years ago, a group of civic leaders, tired of seeing Charlotte lose research and development companies to Research Triangle Park near Raleigh, to Atlanta and to other southern cities, launched University Research Park in 1966. Today more than 25,000 people work at more than 100 businesses located on the 2,300acre campus. The park, in turn, has spawned an entire submarket of Charlotte called University City, with more than 130,000 residents and an annual economic contribution to the region of \$8.4 billion and 74,000 jobs. The URP is under the leadership of University City Partners (UCP) and a private board of the University Research Park.

Also within the plan area is Governor's Village. Governor's Village, now a component of the Charlotte-Mecklenburg Schools (CMS) system, was originally formed in 1997 under a public-private partnership between the Charlotte-Mecklenburg Schools (CMS) and one of the original occupants of the URP, IBM. The campus includes two elementary schools, one middle school, and one high school. One elementary school, John Motley Morehead, is a "STEM" magnet school emphasizing science, technology, environment and mathematics. The remainder of developed land within the plan area is predominantly dedicated to service retail offering nearby businesses and communities four grocery stores, dining opportunities, and other small commercial services.

A significant stretch of the Mallard Creek Greenway bisects the plan area and provides an important connection from the university area neighborhoods to University Place and the UNC-Charlotte's main campus as well as additional greenways and natural areas.

Approximately 750 acres of the plan area remain undeveloped.

C-1.3 Organization of this Document

This document is divided in to three parts as shown below. Only the first part, the Concept Plan, will become adopted City policy. Part 2, Implementation Guide, will be used to guide staff work. Part 3, Appendix, provides supporting information.

C-1.4 Planning Processes

This plan was initiated at the request of University City Partners in response to a need for a coordinated plan for the entire University City MSD. The *University Research Park Area Plan* is intended to complement the existing adopted *University City Area Plan* for the balance of the MSD. Development of the URP Area Plan occurred over a period of 11 months and included the following key public involvement opportunities:

• Public kick off meeting was held on October 9, 2009 with approximately 50 people in attendance. A survey was conducted following the meeting to gather questions, comments, and concerns from those in the community.

- A 23-member Citizen Advisory Group, or Steering Committee, met four times over the course of seven months to assist staff in developing plan recommendations.
- A three-day planning charrette was held from November 16-18, 2009.
- A final public meeting was held on April 1, 2010 with approximately 30 people in attendance. (Design charrette materials were presented at this time.)
- Additionally, the public was invited to provide input through an online civic engagement program, Wikiplanning. This tool was available for a period of 130 days (November 19, 2009 through March 29, 2010), and it included a community survey.

The Planning Committee of the Charlotte-Mecklenburg Planning Commission hears citizen comments and makes a recommendation to the Charlotte City Council. The City Council also hears citizen comments and makes the final decision concerning adoption of the plan.



Purpose

- Vision Statement
- Goals
 Delicion
- Policies

Concept Plan is adopted by City Council and will act as a policy guide for future decision making.

PART 2 IMPLEMENTATION PLAN

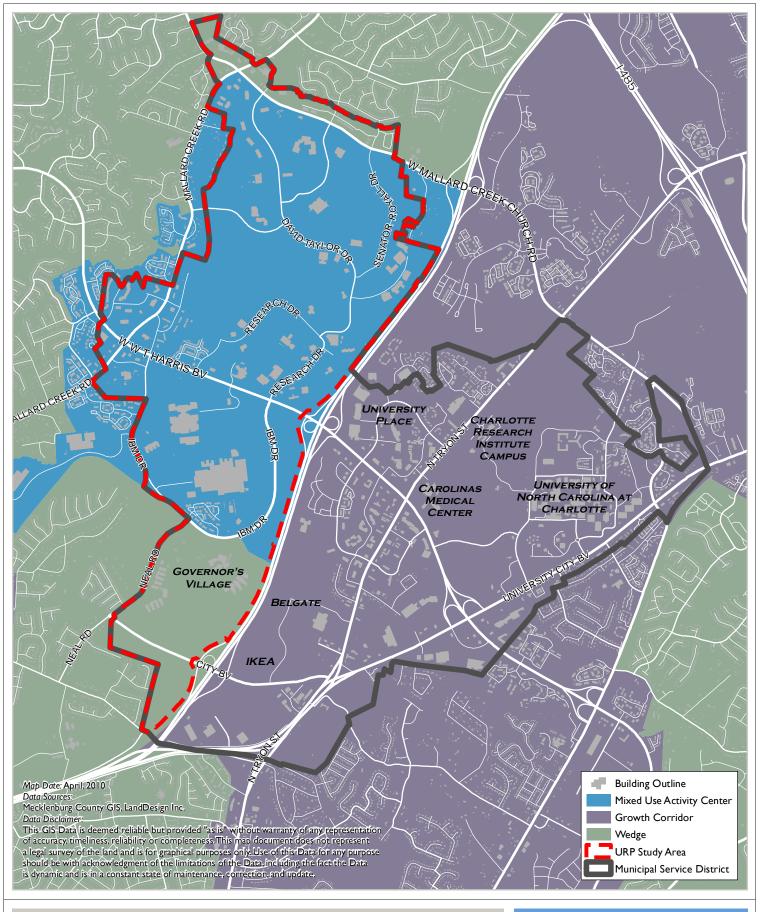
Action Steps
 Identified to Carry
 Out Plan Policies

Provides direction to staff in implementing plan policies.

PART 3 APPENDIX

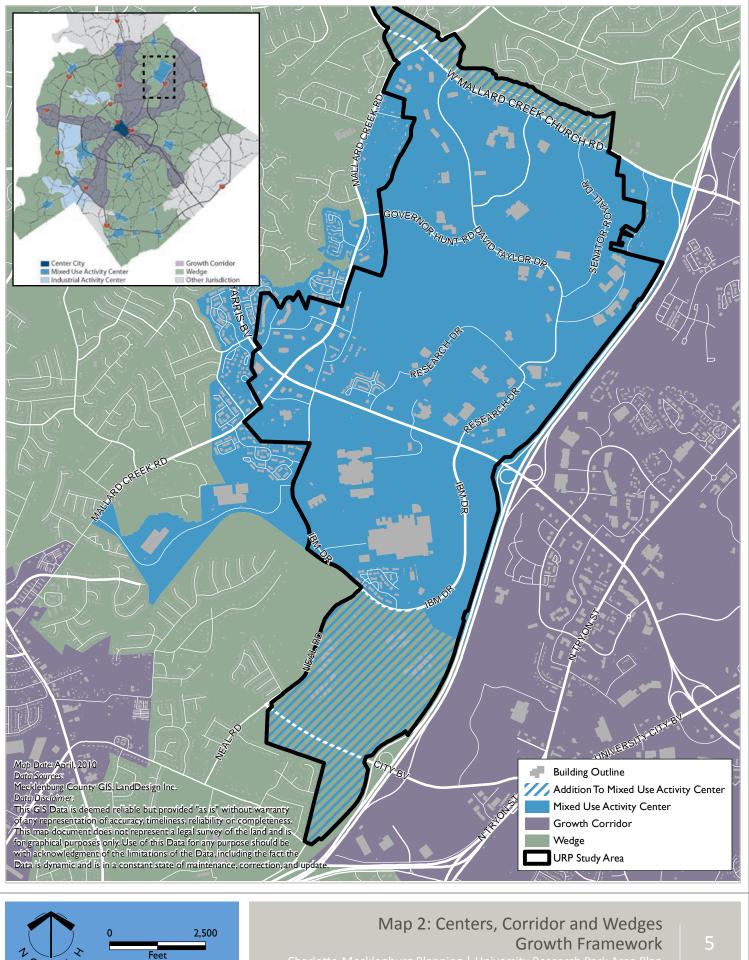
- Existing Conditions Report
- Trends & Forecasts
- Other Supporting
 Information

Provides additional supporting information









Charlotte-Mecklenburg Planning | University Research Park Area Pl

C-1.5 Policy Framework

The following key documents provided guidance and direction for this plan:

Centers, Corridors and Wedges Growth Framework

Centers, Corridors and Wedges Growth Framework establishes a vision for future growth and development. It does this by identifying three geographic land use categories for Charlotte's sphere of influence, and outlining the desired characteristics of each of these geographies:

- Activity Centers are generally appropriate for new growth, with the type and intensity of development corresponding to the Center type.
- Growth Corridors are often priority locations for new growth, especially in identified Transit Station Areas.
- Wedges will remain predominantly low density residential with limited higher density housing and neighborhood serving commercial uses.
 Much of Charlotte's future moderate to higher intensity development is expected to occur within five major Growth Corridors and in designated Activity Centers. This will help maximize existing infrastructure and services. Map 2 shows the general layout of Centers, Corridors and Wedges.

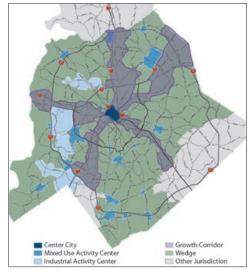
As shown on Map 1, Boundary Map, the plan area includes one Activity Center and part of a Wedge. The majority of the area lies within the designated Mixed Use Activity Center, which encourages a diversity of uses to support the existing office uses and development to occur in a compact and walkable pattern. This designation supports opportunities for integrating a multimodal transportation network and an open space framework, positioning URP as a focal point of economic activity in the City and the region.

General Development Policies

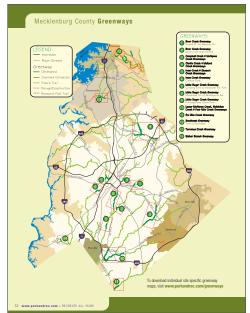
General Development Policies (GDPs) are adopted policies relevant to development and redevelopment in Charlotte-Mecklenburg. In particular, they address residential location and design, retail-oriented mixed/multi-use centers and transit supportive development. Additionally, the *General Development Policies* provide guidance to minimize the negative environmental impacts of land development and to more closely link land use and development decisions to the availability of infrastructure to support it.

The *General Development Policies* were used to guide the development of this plan, particularly in shaping the plan concept and crafting supporting recommendations pertaining to development form, design and intensity. This plan builds upon the 2007 GDP guidance for the following areas and provides more specific guidance for community design and the density and intensity of residential and non-residential development within the plan area:

- Design Guidelines for Multi-Family development and Attached Single Family Development by providing size and building standards for suggested building types.
- General Design Guidelines for Retail Oriented Mixed/Multi-Use Centers, mainly Convenience Size Centers by defining transportation / connectivity requirements and site / building design standards.
- Strategies to reduce negative environmental impacts by incorporating sustainable practices and guidelines for future development.



Centers, Corridors and Wedges Growth Framework



Mecklenburg County Greenway Master Plan

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• Guiding Principles for new and existing Infrastructure by suggesting roadway diets and improvements to existing facilities and setting standards for any new roadways.

Adopted Land Use Plans

Adopted Land Use Plans include six geographic districts which make up the City of Charlotte's planning jurisdiction: the Northeast, East, South, Southwest, Northwest and Central districts. Each of these areas have a district plan that addresses a wide range of physical development issues and provides parcel-specific land use recommendations for all properties within that district plan. This plan will update the 1996 *Northeast District Plan*.

2035 Long Range Transportation Plan

The 2035 Long Range Transportation Plan defines the policies, programs and projects to be implemented over the next twenty years, providing transportation choices in Mecklenburg and western Union County. No long-range transportation projects were identified within the University Research Park Area Plan area in the 2035 plan, but a few surrounding long-range transportation projects that play an important role in future circulation near the plan area were considered in the development of this plan. They include the connection of West Sugar Creek Road to Mallard Creek Road via an extension of Nevin Road, improvements to Mallard Creek Road between WT Harris Boulevard and West Sugar Creek Road, a City Boulevard extension that connects Neal Road to Mallard Creek Road, and the LYNX Blue Line Extension (BLE).

Transportation Action Plan

The *Transportation Action Plan* defines short and long-term policies, projects and programs for accommodating motor vehicles, transit riders, bicyclists and pedestrians together with an implementation "blueprint" for improvements. The *Transportation Action Plan's* comprehensive "toolbox" of transportation programs will help implement the policies in this plan.

2030 Transit Corridor System Plan

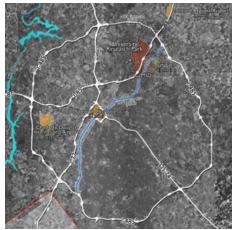
The 2030 Transit Corridor System Plan is is a long-range multi-modal transportation plan adopted by the Metropolitan Transit Commission (MTC) on November 15, 2006. The plan identifies five primary transportation corridors for rapid transit, calling for 25 miles of commuter rail, 21 miles of light rail (including the 9.6 miles of the existing LYNX Blue Line), 16 miles of streetcar, 14 miles of bus rapid transit, and an expanded network of buses and other transit services. The University Research Park Area Plan boundaries are located just west of the proposed LYNX Blue Line Extension Northeast Corridor Light Rail Project. The proximity to this proposed project, particularly to the proposed light rail stations, University City Boulevard Station, Mc-Cullough Station and JW Clay Station, were taken into consideration while developing the plan and recommendations pertaining to transportation.

Urban Street Design Guidelines

The *Urban Street Design Guidelines* offer a comprehensive approach to designing new and modified streets within the City. They are also a key component of the *Transportation Action Plan*, and were used in developing this plan to assist with street classifications and cross-sections that will guide the design and redesign of streets within the URP. The *Urban Street Design Guidelines* also address integrating land use and transportation to create synergy between the streets and the land uses adjacent to them. This plan presents street cross-sections, which were developed to guide the design of new streets and improvements to existing streets, consistent with the *Urban Street Design Guidelines*.

Greenway Master Plan Update

The *Greenway Master Plan Update* identifies an expanded greenway network and greenway trail system throughout Mecklenburg County. As land is acquired and set aside over time, the greenway system should also improve water quality by reclaiming natural floodplains, protect wildlife habitats and open space, and provide recreational and educational opportunities for residents. This plan was considered in the development of the *University Research Park Area Plan* to ensure key greenway connections were acknowledged. More importantly, it provided a basis for the proposed improvements to the Mallard Creek Greenway, which bisects the URP. It is a focal point of the plan in that it connects development west of the URP to a proposed park shown in the plan concept as well as to The Shoppes at University Place and other destinations to the east.



One of the area's greatest assets of the URP is its location in proximity to airports, major highways, and regional centers and institutions.



UNC Charlotte's, Charlotte Research Institute, is located less than 2 miles from the heart of the URP.



Charlotte Area Transit System (CATS) has plans to extend the LYNX Blue Line through University City, running parallel, just over a mile away from the URP.

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C-1.6 Key Opportunities and Constraints

An understanding of existing conditions, including feedback received from the public during the planning process, reveals opportunities to build upon and constraints to overcome. Key opportunities and constraints, highlighted below, were discussed at the first public meeting, and formed the basis for the vision statement and, ultimately, plan policies.

Opportunities

Among the many opportunities for the plan area are those related to location in the region, ample building space available, the natural environment and greenway, infrastructure and sustainable development.

Location – One of the area's greatest assets is its location. Proximity to key regional centers and institutions, such as Center City Charlotte, UNC at Charlotte (UNC-Charlotte), and UNC-Charlotte's Charlotte Research Institute (CRI), increase the opportunities for URP through possible corporate linkages to industry sectors, particularly those sectors that may also be potential linkages to research strengths of UNC-Charlotte and CRI. An accessible location, the area lies eight miles from the Concord Regional Airport and 15 miles from Charlotte / Douglas International Airport, is bound on one side by Interstate 85 and is situated just south of I-485. It is also located less than 2 miles from a future LYNX Blue Line station. The close proximity to a major transit corridor lends the opportunity for future pedestrian, bike and bus circulator routes within the URP area.

Building Space – The plan area is seen as a tremendous opportunity for investment and enhancement of existing buildings. This is evident in the recent LEED improvements to 1000 Louis Rose Place, the addition of Electrolux to the former Fifth/Third Bank building, and the future redevelopment plans for the former IBM / Meridian campus.

Open Space – With approximately 750 acres of undeveloped land, the opportunity to create a large park and park-like setting throughout the area still exists. The abundance of existing vegetation and the presence of the Mallard Creek Greenway are two features that can be part of an organized system of open space that would complement existing and future development while providing relief from the urbanization in this part of the region. The vast amount of floodplain surrounding Mallard Creek provides a signature opportunity to create approximately 125 acres of central park amenity that could work as a catalyst in attracting new investment to the area. This area lends itself to becoming an attractive destination for the community as well as an enjoyable place to work and live.

Infrastructure – A dual power grid existing within the URP is a very unique quality of the area that is vital to many businesses that exist there today, as well as perspective new tenants. This dual power grid offers a level of security and function that doesn't exist in many areas of the City.

Sustainable Development – The URP has a unique opportunity to evolve into a major economic center capitalizing on the growth of the larger area and doing so through a sustainable development approach that also achieves environmental and social objectives. Striking this balance could enhance the marketability and competitive positioning of the area. Creating a unique sustainable approach for both site development and building practices will help transform the URP into a nationally recognized business park know for innovation.

Constraints

The constraints to development and to otherwise achieving the vision present challenges that are difficult but not insurmountable. Those that have been identified as the chief constraints are parcel division and ownership, terrain, creeks and floodplain, infrastructure, land use restrictions and lack of identity. *Parcel Division and Ownership* – The current parcel division and multi-ownership aspect of the area make it difficult to take full advantage of undeveloped area. Currently over 180 property owners are represented in the area.

Terrain – With large areas of steep terrain, some portions of the plan area are not conducive to large scale uses, but may be more conducive to other uses such as residential. Accommodating large building footprints, surface parking and roads requires grading that could clear significant areas of vegetation and unnecessarily disrupt natural habitats.

Creeks and Floodplain – Multiple creeks and streams flanked by significant floodplain areas present additional development challenges. Crossing or otherwise impacting such features not only affects the environmental quality of the area, but increases development costs related to permitting and construction.

Infrastructure - Existing street networks within the area are already insufficient to serve existing development. The internal street network offers practically no ability to walk or bicycle to adjacent destinations. Lack of sidewalks and bicycle facilities, poor pedestrian connection at intersections, and the lack of connectivity across I-85 all hinder the URP as a walkable community. As development continues, improvements to the facilities existing within and surrounding the area, particularly those related to transportation to address current and future traffic issues, will be necessary.

Zoning Restrictions - Under the current Research (RE) zoning district, which most parcels in the URP have been zoned, permitted uses and design standards do not lend themselves to creating a successful mixed use environment. Given that this area is a designated Activity Center with the *Centers, Corridors, and Wedges Growth Framework,* more flexible zoning requirements are needed. Lack of Identity – The fact that the URP is more of a business park than a research hub has created some confusion for potential tenants; it has not developed in a manner that the name would imply, so the activities within the area do not reinforce the intended identity of the place. Furthermore, the lack of signage and other wayfinding features minimize the importance of this area. This, in combination with secure entrances to some sites within the URP and its surroundings, serves to create an uninviting atmosphere throughout.



Although the Mallard Creek Greenway poses as a great asset to the URP, the trails are currently in poor condition.



Lack of sidewalks and bicycle facilities, poor pedestrian connection at intersections, and the lack of connectivity across I-85 all hinder the URP as a walkable community.



The gateway at Mallard Creek Church Road and Claude Freeman Drive is currently the only monumental entrance into the URP, and is fairly understated.

C-1.7 Vision Statement

With input from numerous stakeholders, the University Research Park Area Plan Steering Committee, the City's Technical Team for the University Research Park Area Plan, property owners, and community leaders, a clear vision was established for the future of URP:

Building on the successes of the URP in previous years, the URP area is envisioned to be a premier employment center in the region with a diverse mixture of uses, sophisticated infrastructure, and attractive amenities that will facilitate the evolution of the place into a vibrant destination. With opportunities for better utilization of the vacant land, improvements to the existing transportation network, an expanded range of uses, and better linkages—physically and economically—to its surroundings, the URP will be a more sustainable development and the preferred location in the region.

C-1.8 Goals

To achieve the future envisioned for the plan area, the following goals have been identified. The goals build upon adopted plans and policies.

Overall Goal: Realize a shared vision for a mixed use, master planned, conservation community with a strong business focus that not only enhances existing businesses but offers amenities and opportunities to attract future investment consistent with the vision.

Land Use: Encourage strategic use of undeveloped and underutilized land while incorporating a diversity of uses including residential, retail, office and recreation, while embracing current trends.

Community Design: Enhance the URP image and identity in the region by improving the quality of development and incorporating unique gateways,

streetscape, and signage.

Transportation: Improve connectivity to serve a variety of transportation modes, providing people with choices that support their needs and desired safety while facilitating the integration of new land uses.

Infrastructure and Public Facilities: Continue to increase the competitiveness of the URP through the maintenance of and improvements to existing systems that, working in concept, can support a more sustainable development pattern in the region.

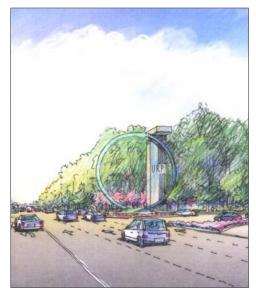
Natural Environment: Create a conservation community with emphasis on parks and greenways that optimize the overall 'green' nature of URP and serve as a catalyst for development and an appealing destination in the region.

C-1.9 Overall Plan Concept

Consistent with the vision and goals for the area, the Development Concept (Map 4) depicts a vibrant Activity Center, which includes potential uses of office, residential and retail in a much more urban and dense pattern that is flanked by complementary neighborhood-oriented development. The development concept represents a shift away from single-use business park concept.

The development trends of 40 years ago, as reflected in the original vision for the URP, can no longer be supported in this regional—and global marketplace. For employment centers, the model of a single-use business park has been replaced by a more sustainable and multi-faceted model that integrates a mixture of uses which creates a place to live, work and play.

With plenty of opportunity for future development and redevelopment, particularly in connection with employ-



New gateway and signage opportunities should be studied to help ensure a prominent identity for the URP.

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ment uses, the plan concept emphasizes the importance of developing a diverse mixture of uses that will become a "24/7" environment.

The strategy for future development cannot allow this area to simply fall into a group of business parks vying for the same tenants. Instead, as the Concept Map (Map 3) illustrates, it must be differentiated from others with distinct features that enhance competitiveness. Since it is important to no longer continue as a single use and 'one size fits all' mentality, the concept plan proposes creating eight distinct districts within the plan area.

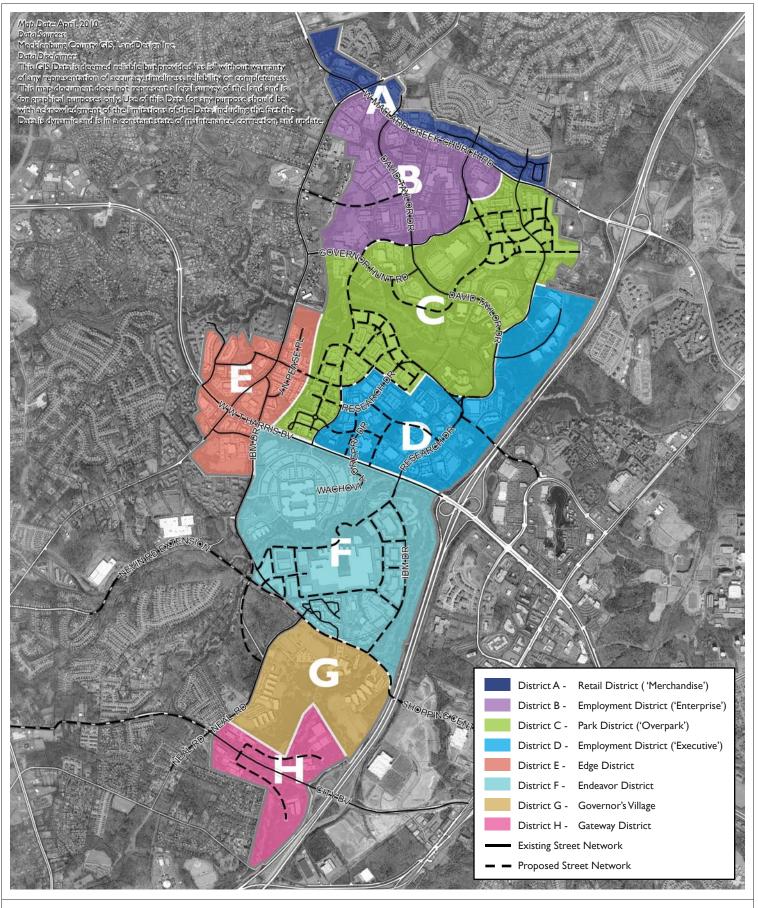
Distinct, yet complementary districts are delineated to accommodate higher densities where appropriate, and balance those more intense areas with lower densities in key locations for a more balanced development pattern enhanced by an intricate web of open space. The added benefit of the districts is the creation of a series of experiences throughout the area linked by common features that maintain the cohesiveness expected in an environment with a shared identity. While the character of each district may vary, the commonalities can reinforce a strong sense of place.

Understanding the importance of the **natural environment** within this area, this concept plan places an emphasis on the central greenway to become a unifying node. This 120+ acre park will become the centerpiece and central gathering space for existing and future tenants, residents, and visitors. In addition, this park will be the central link to the adjacent communities, UNC Charlotte, and future light rail transit. This park is envisioned to be an attractive central amenity to not only the URP but also to the region with its connection to other greenways (existing and planned) that are part of the emerging regional greenway network: the Carolina Thread Trail. This park will incorporate a variety of trails, gardens, educational components and other features to serve the area employees and residents as well as the greater University City area.

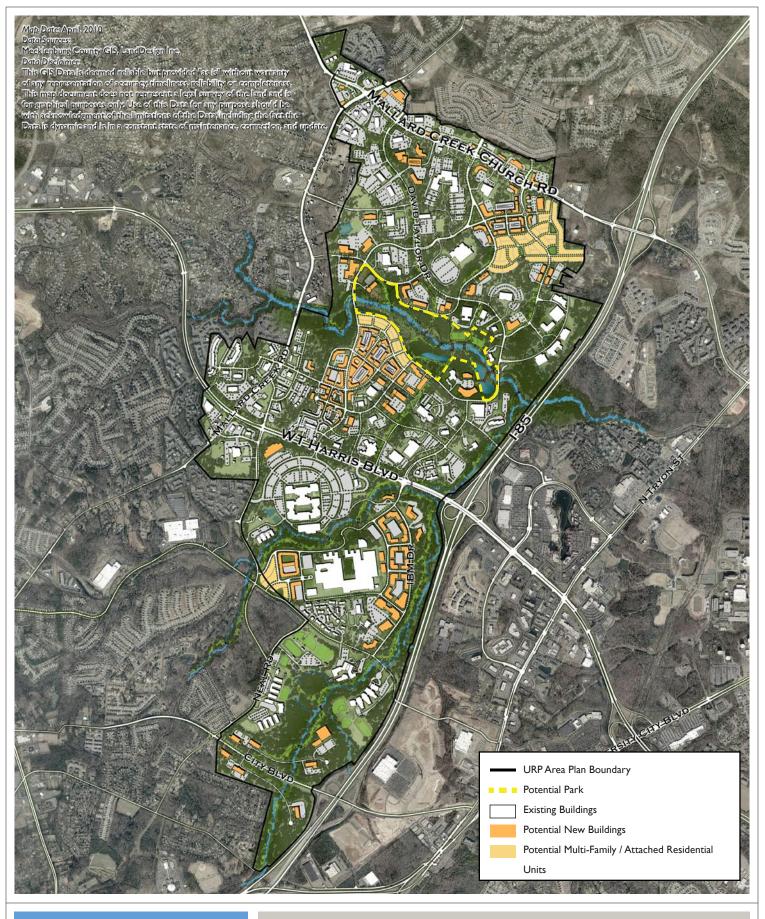
The overall vision will be dependent on a **diverse transportation network** to support the new uses. As proposed, the additional fabric will complement the existing network and, over time, transform the 'private' nature of the URP into a well connected system that will support pedestrians, bicycles, vehicles and a link to transit. A primary focus of this concept plan is to establish a hierarchy of road networks that will provide for additional choices, as well as clearly identify major linkages. Two primary north-south boulevards are proposed to link WT Harris Boulevard and Mallard Creek Church Road. The commercial collector will realign existing roads (David Taylor Drive and Research Drive), while the neighborhood boulevard will require a new roadway addition.

The proposed 120+ acre park will become the centerpiece and central gathering space for existing and future tenants, residents, and visitors.











Map 4: Development Concept

C-2.0 PLAN POLICIES

C-2.1 Overview

The following sections set forth plan policies for land use, community design, transportation, infrastructure and public facilities, the natural environment, and economic development to realize the vision and goals for the plan area. More specific goals for each topic are briefly summarized, followed by the recommended plan policies. Plan policies will guide future land use, zoning and other growth and development/redevelopment decisions.

C-2.2 Land Use

The existing land use pattern, which is predominantly a low density pattern of business uses, is consistent with the original vision for the URP. (Refer to Map A-1). However, it is neither completely developed nor is it well connected to surrounding development, and it is therefore a somewhat isolated collection of non-residential uses. In its current state, the land use pattern does little to create a sense of place for the URP or reinforce its identity.

This existing land use pattern lends itself to infill development and redevelopment that will intensify the area in a manner that is consistent with the concept of the Activity Center. It will also broaden the range of uses to transform the URP into a more desirable employment location by offering amenities to employees that do not exist today. Research parks that have remained competitive in the United States have done so by incorporating initially—or over time—a diversity of uses that contribute to the creation of a more vibrant place. For the URP to be successful in the long term, it must embrace this change. In addition the quality of the built and natural environment must have a positive impact on the surrounding areas to ensure investment in both residential

and non-residential development in the larger University City area.

Two challenges in attracting the desired land uses are transportation and a development pattern that is conducive of a business park, and not a mixed use center. The transportation network in and around the URP has discouraged investment in the URP, as it has created a perception of inaccessibility and an image of privacy and security. Through a better network and attention to design details, it is possible to entice a broader range of uses that will create a diverse place to live, work and play, therefore allowing it to become a more integral component of University City.

This section establishes future land use policies for the area and recommends appropriate land uses to realize the plan vision. In developing these policies, transportation and community design issues were also considered and incorporated as appropriate. However, separate sections for transportation and community design policies follow and build upon the policies discussed in this land use section. (Refer to Map 5 for the composite future land use plan.)

Land Use Goal:

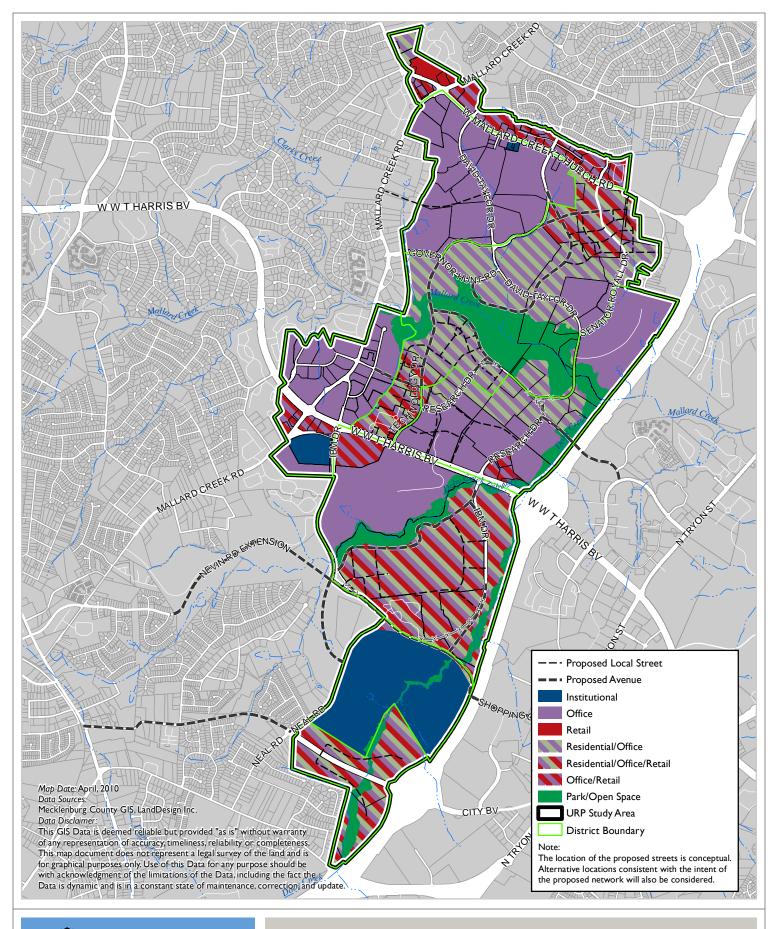
Encourage strategic use of undeveloped and underutilized land while incorporating a diversity of uses including residential, retail, office and recreation, while embracing current trends.

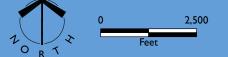
Policies 1 through 12 are general land use policies and are applicable through out the plan area.

 Maintain the role of the area as an employment center in the region.
 While the name "University Research Park" implies a concentration of research uses, the predominance of business uses has altered the intended image of URP. However, this has not precluded the opportunity for the URP to be an employment center. The resulting combination of uses, if successfully recruited, could complement the uses intended for Charlotte Research Institute (CRI) and stimulate additional investment in employment-related development and supporting uses.

- 2. Encourage a mixture of uses. The plan depicts a variety of uses that together would strengthen the appeal and vibrancy of the URP. A broader range of uses should be provided to ensure the competitive positioning of the URP. Modifications to the City's Zoning Ordinance should be considered to encourage the integration of a broader mix of uses within each new development project.
- 3. Allow uses that complement the existing uses in the plan area. The success of existing businesses should be increased, not hindered, by the introduction of more uses and additional development. A positive relationship between uses should be achieved without undue encroachment of new uses into existing properties, if such proximity would result in barriers to the continued success of key anchors. A development review process that simultaneously expedites approvals while creating opportunities to work with developers to explore ways to better achieve the plan goals should be considered.
- 4. Encourage development with intensity and mixture of uses that is supportive of major public investments. Transit, for example is most successful when the surrounding development meets or exceeds certain density thresholds that achieve optimal ridership levels. In close proximity to transit stops (i.e., within a comfortable walking or biking distance), transit is a convenient transportation option.

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Map 5: Recommended Future Land Use

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The proposed LYNX Blue Line Extension would benefit from additional development in the URP, especially if such development is linked to the proposed light rail station by improved pedestrian, bicycle and bus routes. The Development Concept (Map 4) illustrates such connections, which are further depicted in the future transportation network (Map 8).

5. Expand housing choices. The range of housing choices within and around the plan area could be enhanced by new options, especially those that increase the attractive-ness of the area for potential

employers seeking locations where employees can enjoy a live-workplay environment if they choose. Currently, single family housing and student housing are the predominant types in the area, and those options do not meet the expectations of many who work in the area. Cabarrus County has been the recipient of a lot of residential growth in response to demand for more choices that could not be found in the plan area or its immediate surroundings. Owner-occupied, high density residential is needed to help accommodate these needs.

TABLE 1: Existing vs Recommended Land Use (Mecklenburg County GIS, 2010) Note: When combined, the total uses do not add up to the 2,300 acres due to the exclusion of transportation right-of-ways. (Map 5)

LAND USE	EXISTING TOTAL AREA	EXISTING % OF URPAP	RECOMMENDED TOTAL AREA	RECOMMENDED % OF URPAP
Single Family	2.7 AC	0.1%		
Multi-Family	41.0 AC	1.8%		
Retail	117.8 AC	5.1%	12.7 AC	.01%
Institutional	221.6 AC	9.6%	219.2 AC	9.5%
Office	984.2 AC	42.8%	763.8 AC	33%
Parks / Open Space	5.6 AC	0.2%	(241 AC Overlay)	Overlay
Parking	44.8 AC	1.9%		
Vacant	745.5 AC	32.4%		
Residential / Office Mix			482.6 AC	21.0%
Residential / Retail / Office Mix			578.78 AC	25.2%
Office / Retail Mix			114.1 AC	5.0%

- 6. Facilitate a development pattern that leads to a more intricate network of streets. In sharp contrast to the isolated uses served by limited set of state roads and private drives, the plan indicates a need for a connected, modified grid network linking land use in a manner that enhances the vibrancy of the area. New development and redevelopment should establish a development pattern or transform the existing pattern to include—and in some areas expand—a connected street network with blocks sized appropriately to comfortably accommodate pedestrians. Both new and improvements to existing connections across I-85 serve as essential backbones to linking the surrounding community and assisting in a true multi-modal network.
- 7. Create both physical and perceptual connections to surrounding areas. New development should complement surrounding development in a manner that it blends sensitively at the edges. Such transitions should create the sense that development around the URP, while less intense, is a fluid extension of the URP development pattern.
- 8. Integrate passive and active recreation into the development pattern. Relief from the built environment, especially in the form of recreational space of various types, is an important feature of development today. The plan concept illustrates many opportunities for the creation of accessible, usable open space, including a large park and a trail network that builds on the county's greenway plans, for the enjoyment of residents, workers and visitors.
- 9. Support redevelopment of sites and buildings that are inconsistent with current space demands. Several vacant or partially vacant

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buildings offer space that could be utilized easily by future tenants. However, some spaces and sites are too large or customized to be adapted for most users. Transitioning such properties over time to accommodate new tenants and simultaneously maximize the available land would be consistent with the plan concept and strengthen the area as an Activity Center.

- 10. Maximize the utilization of the available land while preserving important natural features. The integration of uses in highly developable areas should be accomplished through both vertical and horizontal mixing of uses, which enhances the connected nature of a mixed use environment and expands options for more efficient utilization of land. Higher density, as specified herein, today would facilitate the creation of the Activity Center as envisioned in the Centers, Corridors and Wedges Growth Framework.
- 11. Preserve existing businesses, particularly those that are anchors in the area, and support opportunities for such businesses to grow and expand over time. The addition of new uses should complement, not encroach upon, existing businesses. This is particularly important in Activity Centers where an intensification of development is expected and encouraged to the benefit of existing development. The plan depicts infill development that achieves this purpose, but the plan also suggests that infill can be done in a manner that is sensitive to existing tenants, such as TIAA-CREF whose property is specifically designed to provide a distinct work environment that the original concept for the URP supports. Infill opportunities should conform to the minimum 100 foot setback of preserved area along David Taylor

Drive and Research Drive within this district.

12. Encourage adaptive reuse to preserve large-format corporate tenant buildings as space demands change. Building re-use and adaptation is encouraged as space demands change.

While the general land use policies above apply to the entire plan area, the following policies provide more detailed guidance for specific areas. These more detailed policies are also illustrated on Maps 5-13.

Activity Center

Activity Centers are focal points of economic activity typically planned for concentrations of compact development. They are appropriate locations for significant new growth along with enhancements to the supporting infrastructure. There are three types of Activity Centers: Center City, Mixed Use and Industrial. This plan area is a designated Mixed Use Activity Center.

Activity Center – District A

Retail District ("Merchandise District") Refer to Map 6.

Description

District 'A' is generally bounded by Mallard Creek Church Road and the northern suburban boundary of the plan area. Fountain Grove II, a single family residential community, and Tradition at Mallard Creek, a multi-family apartment community, border the area's northern edge. District 'A' is approximately 106 acres.

<u>Context</u>

Current land uses within District 'A' are predominantly retail with some office uses. This area is used by many surrounding residents and employees for their grocery, dining, and service retail needs.

Intent

With the area's high visibility and easy access from the highly traveled Mallard Creek Church Road, it lends itself to convenience retail, office and service uses. Lying strategically between many residential communities and the URP, the area should continue to grow to serve the surrounding community. Gateway and signage opportunities should be taken advantage of at intersections, but mainly at the intersection with Senator Royall Road. This is the first glimpse into the URP for travelers exiting off Interstate-85 and a primary entrance into the URP.

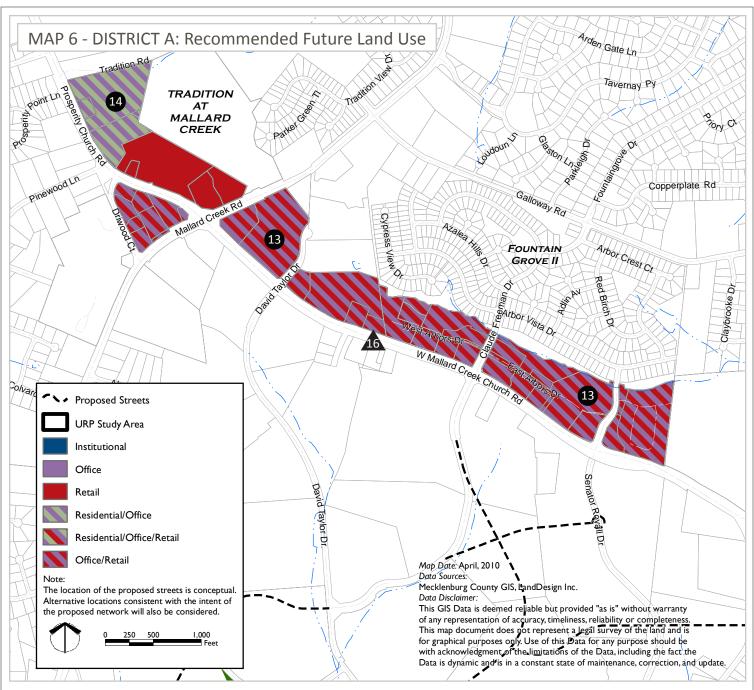
Land Use Policies

(Policy 15 applies throughout District B, therefore is not illustrated on Map 6.)

- 13. Maintain convenience retail, office, and other mixed uses that comprise this area. Additional small scale office uses should not exceed four stories. Retail should be limited to what already exists or has been approved.
- 14. Transition to residential and office mixed use to the western edge of the area. This introduction of residential at a density of up to 22 DUA will allow for a multi-family extension of the existing Tradition at Mallard Creek community and will offer a transition in density to the single family developments further down Prosperity Church Road.
- **15. Include District 'A' in the Activity Center instead of the Wedge.** The *Centers, Corridors, and Wedges Growth Framework* should be modified to include District 'A' in the Activity Center within which the URP lies.

Supporting Street Network

16. Continue bicycle facilities and sidewalks along Mallard Creek Church Road. Bike lanes and sidewalks already exist along the majority of Mallard Creek Church Road.



Any missing gaps in sidewalks should be filled in as development occurs exclusively along the west bound lanes. Existing bike lanes should also be extended to streets within the area plan.

Activity Center – District B

Employment District ("Enterprise District") Refer to Map 7.

Description

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District 'B' is generally bounded by Mallard Creek Church Road, Claude Freeman Drive, Governor Hunt Boulevard, and Mallard Creek Road. District 'B' is approximately 263 acres. **Context**

Current land uses within District 'B' are predominantly office uses accommodated in multi-tenant, Class A and large corporate office space. The majority of the office buildings have a consistent footprint and architectural look. Current vacancies in these buildings present an opportunity to expand the number and types of tenants in the URP, thereby meeting any current or near-future demand for office space in the area. Intent

This area is intended to remain a predominantly office district. As market conditions create more demand for multi-tenant office space, this area

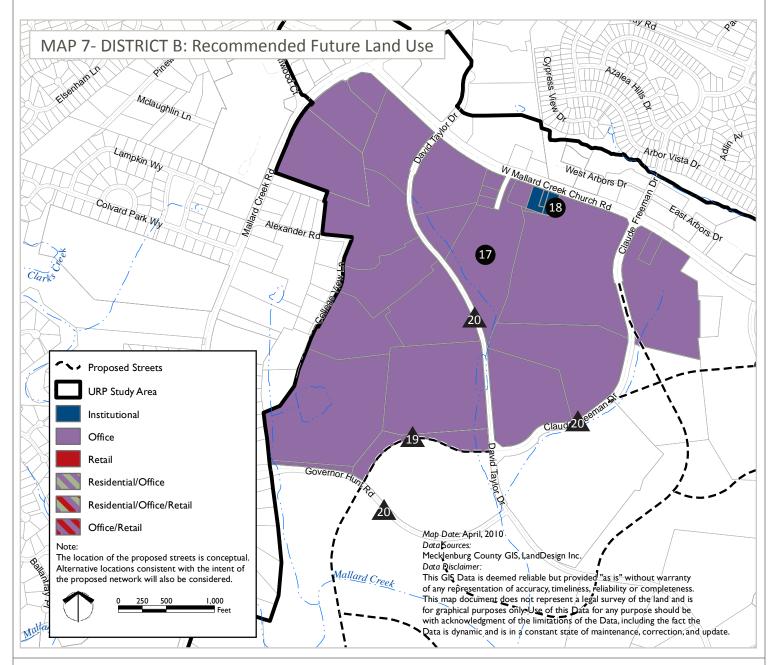
should first be considered for those uses. Reuse of existing buildings is encouraged, and eventually infill opportunities should accommodate additional space needs.

Land Use Policies

17. Retain office use. Complement existing office uses with infill office development. Additional buildings up to five stories in height in combination with existing office building space should meet the demands of various users. Opportunities should be provided to increase density with parking decks should market conditions support additional development. The plan depicts infill development that achieves this purpose done in a manner that is sensitive to existing tenants. Infill opportunities should conform to the minimum 100 foot setback of preserved area along David Taylor Drive and Claude Freeman Drive within this district. 18. Recognize the Charlotte Fire Department station as an existing institutional use.

Supporting Street Network

19. Extend Claude Freeman Drive across David Taylor Drive. This extension is essential as part of a new connector from Mallard Creek Church Road to WT Harris Boulevard that will serve as a spine street supporting future mixed use development.



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20. Implement 'road diet' recommendations by reducing travel lane widths and providing bike lanes and sidewalks within the existing street trees on David Taylor Drive, Claude Freeman Drive, and Governor Hunt Boulevard. (Refer to Table 4 for streetscape improvements and Figures 3 for the recommended cross sections.)

Activity Center - District C

Park District ("Overpark District") Refer to Map 8.

Description

District 'C' stretches from Mallard Creek Church Road to WT Harris Boulevard and contains the majority of undeveloped land within the URP. District 'C' is approximately 567 acres.

<u>Context</u>

Current land uses within District 'C' are a mixture of residential and office (including large-format office) uses, but the majority of the land still remains undeveloped. The northern and southern portions of this area are fairly disconnected due to Mallard Creek bisecting the area. Though acting as a barrier today, Mallard Creek (and the land that flanks it) lends itself as a significant amenity to the URP and a unifying element in an otherwise divided area. An existing portion of the Mallard Creek Greenway cuts through this district but is unmaintained and not consistent with Charlotte-Mecklenburg Parks and Recreation standards for greenways.

Intent

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The Park District has the opportunity to become the heart of the URP by developing into a vibrant, mixed use district. The amount of available land in this district will provide for a significant amount of development and offer the most potential for future residential uses on steeper topography. New development should maximize the utilization of the available land while preserving important natural features (tree canopy and Mallard Creek floodplain). The integration of uses in highly developable areas should be accomplished through both vertical and horizontal mixing of uses, which enhances the connected nature of the mixed use environment and expands options for more efficient utilization of land. The plan calls for this district to support the highest densities in a more compact, urban and pedestrian friendly pattern. Building upon the existing greenway system and preserving a significant amount of land for a community park, the proposed park will serve as an important catalyst for attracting new businesses to the URP. The approximately +/-120-acre park, flanked by a high intensity mix of residential and office uses, should lead to 24/7 activation of the URP.

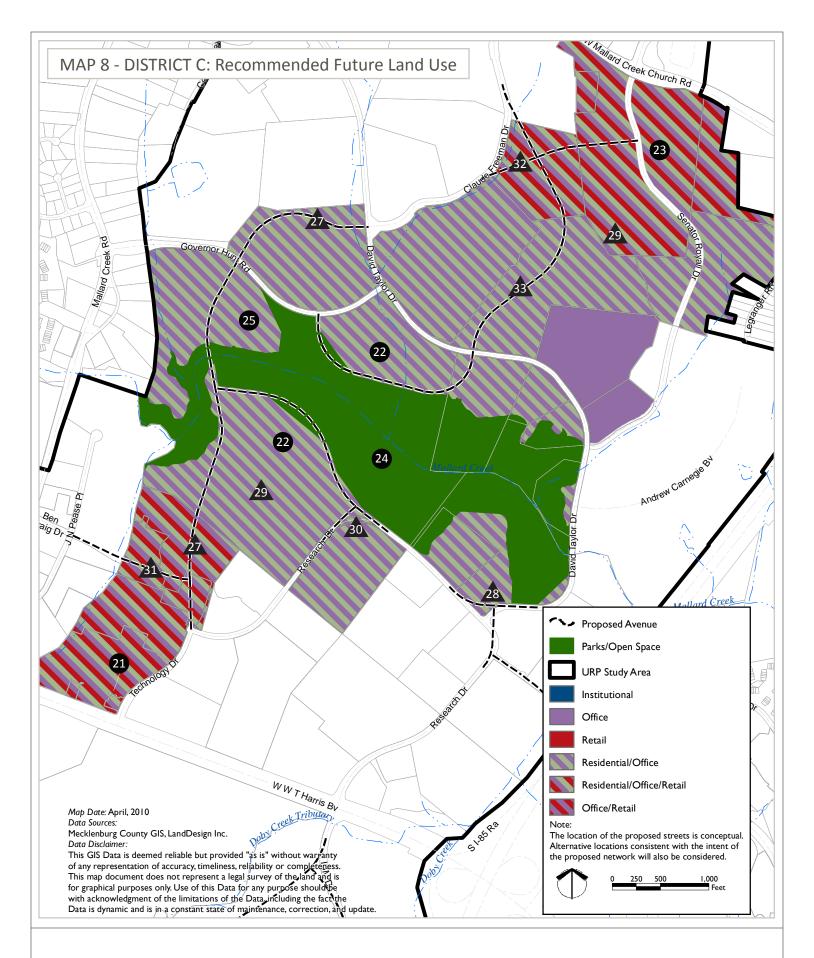
Land Use Policies

(Policies 26 & 29 apply throughout the district and therefore are not illustrated on Map 8)

- 21. Enhance the mixture of office, retail and residential uses in the area closest to WT Harris Boulevard and Technology Drive. The current mixed use area at the URP entrance on WT Harris Boulevard should be maintained and expanded to the north toward Mallard Creek, taking advantage of the opportunity to integrate the variety of uses into an area easily accessed by the northern portion of the URP. New development should not exceed eight stories. A density of 22+ DUA is appropriate for residential uses. However, lower densities may suffice and will be determined on a project by project basis. (Additional retail not to exceed 250,000 sf. total within District C).
- 22. Indicate a mix of office and residential uses on the portions of District 'C' that lie north and south of Mallard Creek. This combination of uses can overlook the park, and are appropriate uses

in the area shown as the proposed +/-120-acre park. The plan calls for new roads that frame the park. Uses should front the park to create a safer and more accessible public amenity for all. Buildings should not exceed an 8-story maximum. A density of 22+ DUA is appropriate for residential uses. Development opportunities should conform to the minimum 100 foot setback of preserved area along David Taylor Drive, Governor Hunt Boulevard and Claude Freeman Drive within this district. Any newly constructed or modified street should follow setback requirements displayed on Map 14.

- 23. Indicate a mixture of office, retail and residential uses in the area closest to Mallard Creek Church Road. The area surrounding the URP entrance at Senator Royall Drive along Mallard Creek Church Road should be developed with a mixture of uses, taking advantage of the opportunity to integrate the variety of uses into an area easily accessed by the southern portion of the URP. Buildings should not exceed eight stories. A density of 22+ DUA is appropriate for residential uses. However, lower densities may suffice and will be determined on a project by project basis. (Additional retail not to exceed 250,000 sf. total within District C).
- 24. Preserve +/- 120 acres of undeveloped land flanking Mallard Creek for the creation of a new community park and improved greenway. This park is envisioned to be an attractive central amenity that would include trails, passive recreation, potential future conference center, art walk, and numerous gathering and child play areas for residents, visitors, and park employees. The plan envisions a community park amenity that will connect



the URP to adjacent properties, as well as the surrounding community. See potential park location on Map 8. (Also see the policies in the Parks and Recreation portion under the Infrastructure and Public Facilities section.)

- 25. Facilitate the creation of a conference/recreation/wellness center within the park. The facility should anchor the park on a highly visible site. The facility should be constructed through environmentally friendly practices and have little impact on the adjacent Mallard Creek.
- 26. Include urban open spaces within new development. Open spaces should be provided with new development. Greenway or park improvements / investment throughout the URP plan area should be considered appropriate towards meeting open space requirements.

Supporting Street Network

27. Develop a new north-south connection from Mallard Creek Church Road to WT Harris Boulevard. Extend Technology Drive and bridge over Mallard Creek to continue the alignment so that the new road connects to Claude Freeman Drive, which then will connect to an additional new road in turn intersecting with Senator Royall Drive. Here Senator Royall Drive will provide the connection back to Mallard Creek Church Road. The plan envisions this new road linking the mixed use nodes at both WT Harris Boulevard and Mallard Creek Church Road. This will be a critical connection that not only provides for an additional north-south link. but it gives residents a clearly identified entrance within the URP. This extension should be accomplished through private development with possible City participation, if necessary.

- 28. Realign David Taylor Drive at eastern portion of Research Drive. Create a public edge to the park enhanced by urban plazas and streetscape.
- **29. Develop an internal, interconnected network of local streets** throughout the area to support higher intensity land uses and enhanced pedestrian and bicycle mobility.
- **30. Reconfigure western portion of Research Drive** to intersect with and be perpendicular to the new David Taylor extension.
- **31. Extend Ben Craig Drive to the proposed "spine" road** (extension of Technology Drive).
- **32. Create a connection from Claude Freeman Drive to Senator Royall Drive.** A gateway traffic circle should be considered at the Senator Royall intersection as the center of the new mixed use node.
- **33. Create a connection from Claude Freeman Drive between existing Electrolux and Duke Energy facilities** crossing David Taylor Drive and connecting back to Governor Hunt Boulevard. This road would create a public edge along the northern side of the new park.

Activity Center - District D

Employment District ("Executive District") Refer to Map 9.

Description

District 'D' is generally bounded by Interstate 85, WT Harris Boulevard, Technology Drive, David Taylor Drive and Senator Royall Drive. Most tenants enjoy the feeling of privacy behind the large tree buffers and setbacks. District 'D' is approximately 333 acres. **Context**

Current land uses within District 'D'are predominantly large corporate, single tenant campuses, but there is a small hotel / lodging business and restaurant present along WT Harris Boulevard. Office uses are mainly large corporate campuses with tenants such as TIAA-CREF, SPEED and EPRI. District 'D' is also home to the first LEED renovation project within the URP (Environmental Way Building). The TIAA-CREF campus occupies a significantly large site, but through vertical (multi-story) construction and parking enclosed completely within parking decks, the site has a substantial amount of land preserved for open space for the employees' enjoyment.

Intent

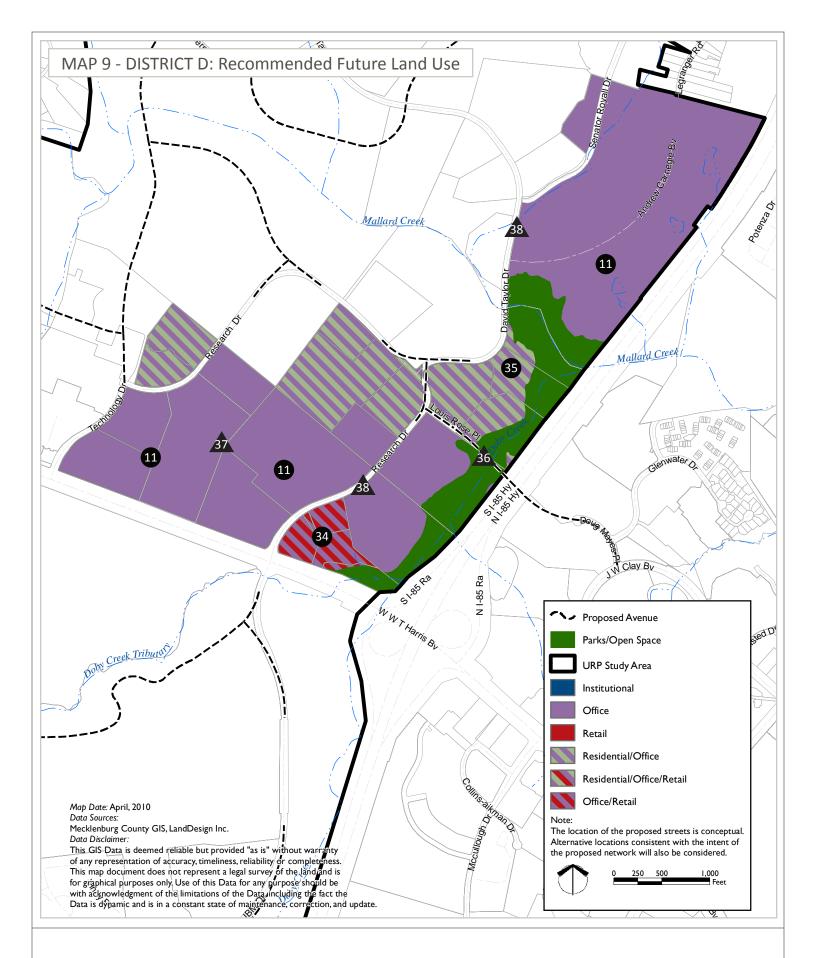
This area will continue to be the location for large format, single tenant corporate campuses. Many existing sites have opportunities to expand or develop new uses.

Land Use Policies

- **34. Retain a mix of office and retail uses along WT Harris Boulevard.** Retail should be limited to what already has been approved.
- **35. Encourage a mix of office and residential at the eastern end of the proposed park.** Buildings should not exceed four stories. A density of 22+ DUA is appropriate for residential uses. A similar mix of office and residential is appropriate in the area shown as the proposed +/-120-acre park in the Development Concept, if the park is not created. The same height and density guidelines would apply.

Supporting Street Network

- 36. Create a bridge connection from Louis Rose Place bridging over I-85 to University Place. This connection will improve connectivity from University Place, the future LYNX light rail station at JW Clay Boulevard, CRI and UNC Charlotte to the URP area. It will also help the success of retail within University Place.
- 37. Create an interconnecting local road network between existing



office uses and infill development.

38. Implement 'road diet' recommendations by reducing travel lane widths and providing bike lanes and sidewalks within the existing street trees on David Taylor Drive and Research Drive. (Refer to Table 4 for streetscape improvements and Figures 3 for the recommended cross sections.)

Activity Center – District E Edge District (Refer to Map 10)

Description

District 'E' is generally bounded by JN Pease Place, Medical Plaza Drive, and several surrounding multi-family developments. District 'E' is approximately 205 acres.

<u>Context</u>

Current land uses within District 'E' are predominantly medical and small office, but include some convenience retail and institutional uses along WT Harris Boulevard. The University City branch of YMCA is located in the southern portion of District 'E' along with a few grocery, restaurant, and service retail uses. The northern portion of the district is comprised of multi-tenant office and medical offices.

<u>Intent</u>

The uses in this district are meeting the needs of the area residents and businesses. In close proximity to the majority of the URP, these uses are expected to complement the future uses of the URP and expand the range of choices for restaurants and convenience retail.

Land Use Policies

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- **39. Indicate a mixture of office and retail uses on the south side of WT Harris Boulevard.** A mix of office and retail uses long WT Harris Boulevard should be retained. Retail should be limited to the amount already existing.
- **40. Preserve and enhance the YMCA presence.** The recently renovated University City YMCA currently

serves the surrounding University City community. As the URP area grows, the YMCA should expand to fit the needs of the growing community and employment centers while taking advantage of the improved greenway and road network for area fitness events.

41. Indicate office uses for the parcels on the north side of WT Harris Boulevard. Small office and medical office uses should be retained. Any additional buildings should not exceed four stories.

Supporting Street Network

- 42. Extend Ben Craig Drive to the proposed "spine" road (extension of Technology Drive). The Ben Craig Drive extension would enhance accessibility to the CATS park-n-ride for all of the URP by shortening the distance for pedestrians, bicyclists and automobile trips. It would also disperse traffic from W.T. Harris Boulevard.
- **43. Implement roadway improvements on Mallard Creek Road** A new traffic signal on Mallard Creek Road at Ben Craig Drive creates safe pedestrian and vehicle access across Mallard Creek Road. Along with this, adding bicycle accommodation on Mallard Creek Road will also increase the regional mobility. (See Table 4 for streetscape improvements.)
- 44. Implement roadway improvements on WT Harris Boulevard.
 Pedestrian access across WT Harris Boulevard increases access between land uses on both sides of this expansive road. Implementation of a multi-use path along the west bound lanes of WT Harris Boulevard will also increase the regional mobility. (See Table 4 for streetscape improvements.)

Activity Center – District F

Endeavor District (Refer to Map 11) Description

District 'F' is generally bounded by WT Harris Boulevard, Interstate 85, and IBM Drive. Portions of Doby Creek flow along the eastern portion of this district and a Doby Creek tributary runs through the center of the district. District 'F' is approximately 490 acres. **Context**

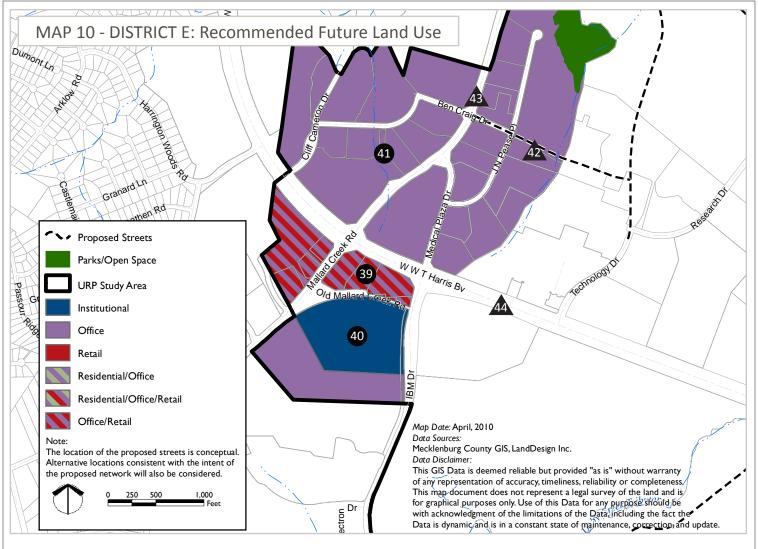
Current land uses within District 'F' are predominantly large office and corporate campus, but one multi-family apartment community, Windsor at the Vinoy, lies at its southern end. Wells Fargo, formally Wachovia, has a 2.1-million-square-foot facility on 155 acres along WT Harris Boulevard. Within the IBM Drive loop lies the former IBM campus, now the Meridian Corporate Center. This campus was converted to a multi-tenant office and warehouse space. Today, Meridian Corporate Center houses about 2,000 IBM employees as well as such diverse tenants as Strayer University, Solectron, Enterprise Rent-A-Car, Areva and Wainwright Industries, which services automotive, aerospace and consumer-products manufacturers. Intent

This area is intended to include large format corporate office tenants. However, there are opportunities for this area to be transformed over time to include more uses and more tenants in a mixed use environment. It is anticipated that the Meridian campus may redevelop into a mixed use development.

Land Use Policies

(Policies 48 & 54 apply throughout District F, therefore are not illustrated on Map 11.)

45. Indicate a mixture of office, retail and residential uses in this district east of Doby Creek Tributary including the current Meridian site. Any new retail development should be concentrated around the IBM Drive entrance off of WT



Harris Boulevard where it will be most visible to passing traffic. The vision for the redevelopment of the Meridian campus includes a mixture of residential, office and retail uses. Office uses, large and small, should be incorporated in combination with these uses in a complimentary manner and should be constructed to a height of not more than eight stories. A density of 22+ DUA is appropriate for residential uses. However, lower densities may suffice and will be determined on a project by project basis. Redevelopment opportunities should conform to the minimum 100 foot setback of preserved area along IBM Drive within this district. (Retail should

not exceed 150,000 sf. in total within District F).

- **46. Indicate office use for the portion of the district that lies west of Doby Creek Tributary.** The large office use should be retained. Any additional buildings should not exceed four stories
- **47. Indicate a mixture of office and retail uses near the intersection of WT Harris Boulevard and IBM Drive (western intersection).** Retail in this area would serve the passing WT Harris traffic and would transition well to other retail within District D. (Retail should not to exceed 150,000 sf. in total within District F.)

48. Include urban open spaces within

new development. Open spaces should be provided with new development. Greenway or park improvements / investment throughout the URP plan area should be considered appropriate towards meeting open space requirements.

Supporting Street Network

49. Implement bicycle/pedestrian improvements on WT Harris Boulevard and portions of IBM Drive. Accommodations for bicycles along WT Harris Boulevard have regional significance. Extending access into and around the URP is essential in supporting mobility options. Pedestrian accommodations throughout URP in conjunction with crossing WT Harris Boulevard create a fully mobile community. (See Table 4 for roadway improvements.)

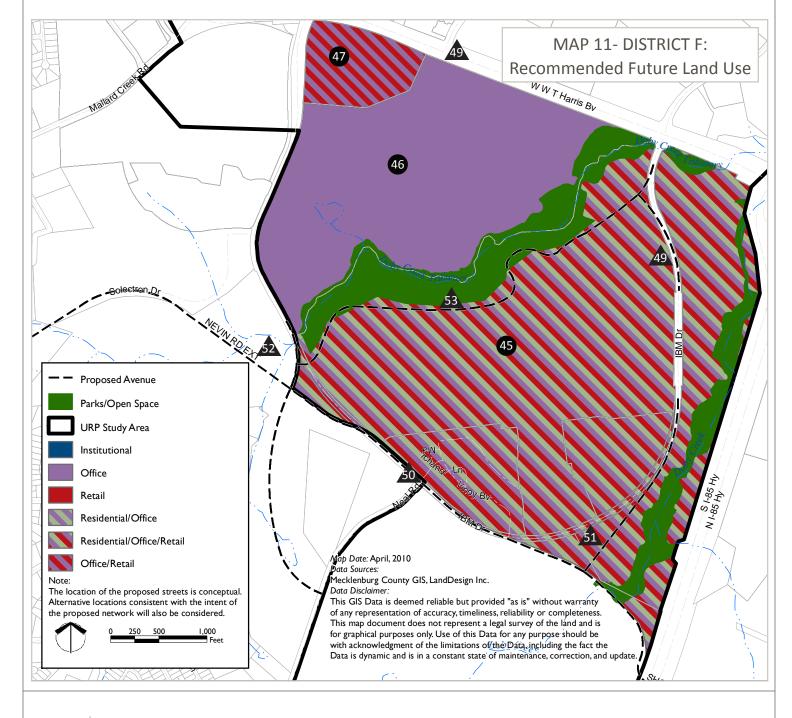
- **50. Connect Shopping Center Drive to Nevin Road extension.** Connect to the City's planned extension of Nevin Road with the proposed Shopping Center Drive. (Refer to map 16.)
- 51.Realign IBM Drive (East-closest to I-85) to intersect with and be

perpendicular to Shopping Center Drive. A connected street network will help to dissipate the traffic and redirect the primary traffic movements for more efficient traffic flow.

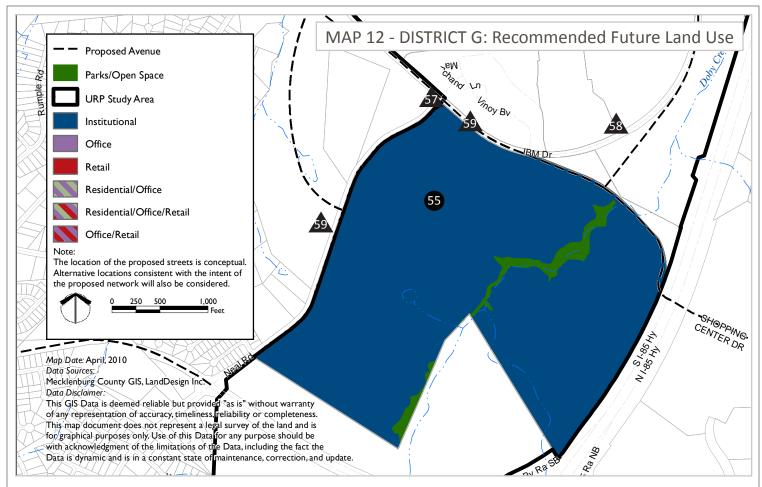
- 52. Realign IBM Drive (West) to intersect with the Nevin Road extension.
- 53. Create a greenway frontage road that will connect WT Harris Blvd with the western portion of IBM

Drive. The eastern portion of IBM Drive should be rerouted to tie in to this new street with a perpendicular connection near the WT Harris intersection.

54 .Develop an internal, interconnected network of local streets throughout the area to support increased land use intensities. A connected street network creates walkable and bikable distances for



26



maximum mobility throughout this area.

Activity Center - District G

Governor's Village (Refer to Map 12) **Description**

District 'G' is generally bounded by IBM Drive, Interstate 85, and Neal Road. A portion of Doby Creek bisects the district. District 'G' is approximately 195 acres.

Context

The current land use within District 'G' is institutional. Governor's Village contains one high school, one middle school, and two elementary schools on approximately 200 acres. The campus opened in 1997 with Vance High School and was originally supported by technology grants and a volunteer program from IBM. The schools originally drew most of their children from the neighborhoods of University City. Now, many students come from areas closer to Center City Charlotte.

<u>Intent</u>

This school complex is intended to remain to meet the educational needs of area students. While CMS has full responsibility for the four schools that comprise the Governors Village, the proximity of the URP businesses creates an opportunity for mentoring and professional development. "Investment" of this kind will benefit the school system, which in turn will advance economic development initiatives.

Land Use Policies

(Policy 56 applies throughout District G, therefore is not illustrated on Map 12.) **55. Retain existing institutional uses**

(schools). Any new development should not exceed four stories.

 56. Include District 'G' in the Activity Center instead of the Wedge. The Centers, Corridors, and Wedges *Growth Framework* should be modified to include District 'G' in the Activity Center within which the URP lies.

Supporting Street Network

- **57. Connect Shopping Center Drive to Nevin Road.** Connect to the City's planned extension of Nevin Road with the proposed Shopping Center Drive. Refer to Map 16.
- 58. Realign IBM Drive (West) to intersect with the Nevin Road extension.
- **59. Implement bicycle/pedestrian improvements on Neal Road and IBM Drive.** Modifying the sections to accommodate pedestrian and bicycle use is integral for creating multi-modal circulation through the URP. (See Table 4 for streetscape improvements)

Activity Center – District H

Gateway District (Refer to Map 13) **Description**

District 'H' is generally bounded by Interstate 85, Governor's Village, and multiple single family residential communities. It is bisected by City Boulevard. District 'B' is approximately 140 acres.

Context

District 'H' is currently undeveloped. Development is challenging in the majority of this area, which has rolling and steep terrain particularly along Doby Creek.

Intent

Acting as the southern most point of

the URP plan area and its proximity to the Belgate Development, this area is intended to act as a primary gateway to the URP, providing a mixture of uses. Land Use Policies

(Policies 61 & 26 apply throughout District G, therefore are not illustrated on Map 12.)

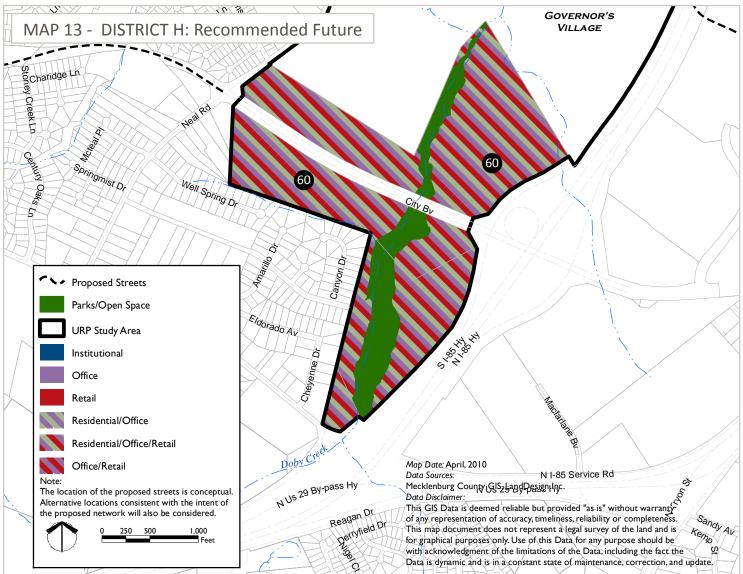
60. Indicate a mix of retail, office, and residential uses. In this relatively undeveloped area, there is an opportunity to create a cohesive development pattern that takes advantage of the proximity to I-85. Development should be limited to eight stories. A density of 22+ DUA is appropriate for residential uses. However, lower densities may suffice and will be determined on a project by project basis.(Retail should not to exceed a total of 50,000 sf. within District H.)

61. Include District 'H' in the Activity Center instead of the Wedge. The Centers, Corridors, and Wedges Growth Framework should be modified to include District 'H' in the Activity Center within which the URP lies.

Supporting Street Network

62. Create a local road network. A

local road network for accessing development in this district. Narrower



28

streets are easier to build in this topographically challenging area.

C-2.3 Community Design

Community design policies help ensure that new development complements the existing or desired character of the URP community. While design policies alone do not dictate land use or zoning, they are used to strengthen how various land uses fit together. These policies consider not only the built environment in conjunction with the natural environment, but also consider how people move through those spaces as pedestrians, bicyclists or automobile drivers.

The overall Development Concept for the plan area is for development that responds to the land. In general, the design of the URP area should utilize both natural and man-made elements to create a cohesive environment. Taking advantage of the natural features that exist in the area today, the URP should maintain a park-like setting, which is in keeping with the notion of creating a more sustainable, "green" development pattern. Emphasis should be placed on the preservation of existing vegetation, avoidance of steep slopes, smaller building footprints in more topographically challenging areas, and utilization of floodplains and creek corridors for open space that simultaneously serves as an amenity and improves water quality. Designing future development in this manner is respectful of the natural environment and will help to achieve environmental objectives while enhancing the aesthetic quality of development.

Community Design Goal:

Enhance the URP image and identity in the region by improving the quality of development and incorporating unique gateways, streetscape, and signage.

General Policies

- 63. Consider varying setback requirements per district to assist in creating the intended development pattern. Setbacks should vary per district to ensure unique streetscape characteristics. Refer to Map 14.
- 64. Reinforce the URP's identity through gateway features and signage. Refer to Map 15 for gateway hierarchy. In planning, the following should be considered:
- A prominent gateway feature at WT Harris, Research Drive, and IBM Drive should be implemented.
- Secondary Gateway monumentation should be implemented at designated intersections.
- Proposed bridge at Louis Rose crossing Interstate 85 should be utilized for a signage / gateway opportunity.
- o Utilize Shopping Center Drive Bridge crossing Interstate 85 as a signage / gateway opportunity.
- Once a strong identity is developed for the URP, signage should embrace said identity throughout the park. Most importantly signage should be implemented at park entrances, street intersections, greenway trail heads / neighborhood entrances, and transit stations.
- **65. Encourage design that facilitates community safety as well as access for emergency purposes.** Public safety provided through police and fire protection services is critical to the creation of a safe, secure environment for occupants and visitors alike.
- 66.Encourage structured / shared parking.



As shown above in Piedmont Town Center (Charlotte), structured / shared parking is encouraged throughout the URP plan area.

Residential Design Policies

Building Architecture and Site Design

SINGLE FAMILY ATTACHED AND MULTI-FAMILY

S.F. ATTACHED & M.F.

30

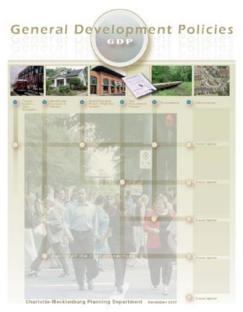
Close attention to building design serves to enhance the community. Design policies do not result in conformity of design, but provide direction for both new and infill development.

- X Preserve historically or architecturally significant structures.
- X Avoid blank walls along pedestrian circulation areas.
- X Orient building towards street (unless a thoroughfare) or common open space and provide pedestrian access to the street.
- Orient buildings so that they are facing the proposed park surrounding Mallard
 Creek. The streets circling the park shall be single-loaded so that the buildings frame the park.
- X Blend scale and setbacks of buildings with existing structures

Natural Environment

These policies provide direction to accommodate growth and change while protecting the natural environment on which we depend, including the quality of our air, water and land.

- X Provide a meaningful amount of usable and accessible open space. In residential development, this should be common open space.
- X Incorporate functional, unique, natural, and/or historical elements into the open space.



Adopted by City Council, the *General Development Policies (GDP)* provide guidance for the location, intensity and form of future development and redevelopment throughout the community. Many of the residential and mixed/ multi-use center policies for the plan area are based upon these adopted GDP policies. Plan policies within Table 2 are based upon those previously adopted GDP policies.



The interactive fountain at Birkdale Village is a great example of common open space within a residential / mixed use setting.

Preserve steep slopes along streams or adjacent to significant natural land- scape features. Preserve at least 10% of the site as "tree save area" consistent with residential tree ordinance. Pedestrian and Vehicular Networks Providing a safe, accessible and comfortable network of streets, sidewalks and pathways for all modes of transportation is an important step in establishing a livable community. The policies below provide guidance for achieving mobility and connectivity for pedestrians, bicyclists, and automobile drivers.
tree ordinance. Pedestrian and Vehicular Networks Providing a safe, accessible and comfortable network of streets, sidewalks and pathways for all modes of transportation is an important step in establishing a livable community. The policies below provide guidance for achieving mobility and connectivity for pedestrians, bicyclists, and automobile drivers. Provide pedestrian amenities, such as street furniture and pedestrian scale
Providing a safe, accessible and comfortable network of streets, sidewalks and pathways for all modes of transportation is an important step in establishing a livable community. The policies below provide guidance for achieving mobility and connectivity for pedestrians, bicyclists, and automobile drivers.
1151111115.
Provide bicycle parking in appropriate common areas (for example, near the park-n-ride and greenway trail heads).
Provide pedestrian/bicycle connections to parks, greenways, bikeways and trails.
Provide direct pedestrian and bicycle connections between abutting or adja- cent developments and transit stops.
Design streets with pedestrian safety and comfort in mind.
Encourage shared alleys and other forms of access.
Design street system to calm traffic.
Align collectors at thoroughfare intersections to promote safe crossings for pedestrians, cyclists, and automobile drivers.
Provide on-street parking to reduce the size of surface parking lots.
Provide multiple vehicular entry points.
 Design an internal street system with spine road; including: Parallel parking, street trees, and sidewalks. Driveways or secondary streets to connect parking lots and primary street. Sidewalks on secondary streets.



Steep slopes along Mallard Creek and Doby Creek should be protected, restored and improved where needed.



Provide direct pedestrian and bicycle connections between abutting or adjacent developments and transit stops.



Design streets with pedestrian safety and comfort in mind.

Non-Residential Design Policies

Building Architecture and Site Design

Architecture and landscape design define streets and public spaces as areas of shared use. Streets lined by buildings and trees rather than OFFICE vast expanses of parking lots provide a visually rich and physically safe RETAIL environment. Design buildings with transparent openings, ornamentation, and archi-Х Х Х tectural character. Establish entrances with pedestrian interest. Х Х X Orient buildings towards street and provide pedestrian access. Х Х Х Orient buildings so that they are facing the proposed park surrounding Mallard Creek. The streets circling the park should be single-loaded so Х Х Х that the buildings frame the park. Х Arrange buildings in an orderly block pattern. Х Х Х Х Discourage tearing down historic or architecturally significant structures. Х Design buildings with human scale and visual interest in mind. X Х Х Х Х Minimize impacts of drive-thru development. X Х Design for pedestrian safety. Х Х Locate dumpsters and service areas away from residential areas Х Х X **Natural Environment** Site development should respect the natural environment. OFFICE Mixed RETAIL Use a bridge rather than a culvert at existing creeks, where possible. Х Х Х Avoid piping creeks and minimize channelization. Preserve steep slopes along stream beds or adjacent to significant natu-Х Х Х ral landscape features. Provide a meaningful amount of usable and accessible common open Х Х X space and integrate the tree canopy into it. Х Consider pervious pavement for overflow parking. X Х



Orient buildings so that they are facing the proposed park surrounding Mallard Creek. The streets circling the park should be single-loaded so that the buildings frame the park.



Provide a meaningful amount of usable and accessible common open space and integrate the tree canopy into it.



Consider pervious pavement for overflow parking.

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х	х	Х	Retain existing landscaping, including the tree canopy, where possible.
RETAIL	OFFICE	Mixed use	Pedestrian and Vehicular Networks Circulation in and through the site should be comfortable, safe, secure and efficient for pedestrians, bicyclists and automobile drivers.
х	х	Х	Create an interconnected sidewalk system.
х	х	х	Design short blocks with an organized street pattern.
х	х	Х	Provide pedestrian/bicycle connections to nearby parks, greenways, bikeways and trails.
х	х	Х	Design streets with pedestrian safety and comfort in mind.
х	х	Х	Provide ample sidewalk width to accommodate pedestrian circulation, congregation, outdoor dining, and amenities such as street furnishings, trash receptacles, art work and trees.
х	х	Х	Establish clear "way-finding" signage for pedestrians and automobile drivers.
х	х	Х	Provide safe pedestrian circulation throughout the development, includ ing through parking lots and decks.
х	х	Х	Provide bicycle parking and storage areas.
х	х	Х	Provide safe and secure transit waiting facilities.
х	х	Х	Establish a central vehicular access into the site from the more auto- oriented street and provide secondary access options from the minor streets.
х	х	Х	Design parking lots on a street/block pattern to enable easier vehicular and pedestrian movement and to facilitate future redevelopment.
х	х	Х	Minimize large surface parking lots with smaller pods and extensive landscaping.
х	х	Х	Encourage commercial or residential uses in parking decks fronting pe- destrian circulation areas.
х	х	Х	Provide structured parking where feasible to conserve land and mini- mize surface parking.
х	х	Х	Integrate landscaping with seating along facades when possible and, when practical, work to integrate the existing tree canopy into the site design.



Establish clear "way-finding" signage for pedestrians and automobile drivers.



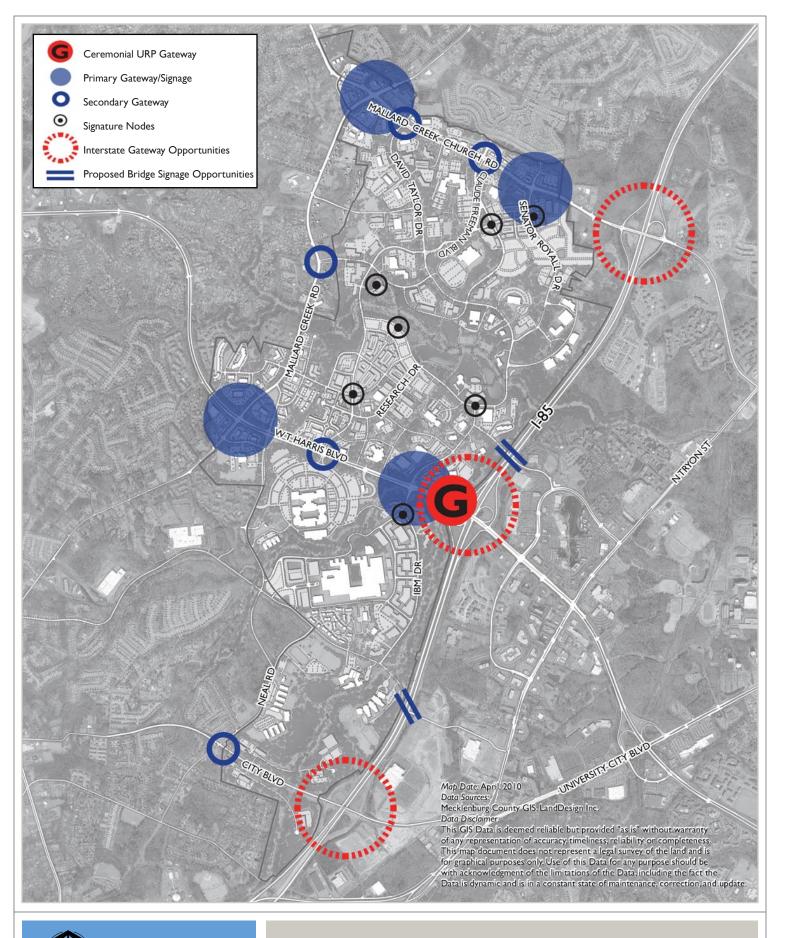
Provide bicycle parking and storage areas.



Provide safe pedestrian circulation throughout the development, including through parking lots and decks.

x	х	х	Encourage shared driveways and alleys within the development.	
x	х	х	Encourage design that facilitates adequate policing of the area as well as access for emergency purposes. Public safety provided through police and fire protection services is critical to the creation of a safe, secure environment for occupants and visitors alike	
RETAIL	OFFICE	Mixed use	Freestanding Single Tenant Buildings (Out Parcels) Freestanding single tenant buildings (outparcels), which are part of a retail-oriented center, can be classified as either independent or interconnected. Independent buildings function separate from the surrounding complex while interconnected buildings share parking and site amenities with other buildings in the same complex. The design of these buildings should be sensitive to the surrounding neighborhood, both built and natural environments.	
x	х	х	Design buildings so that they relate to the overall scale, height and configuration of the center. If drive-through windows and services are included in the interconnected freestanding buildings, they must not compromise pedestrian circulation.	
x	х	х	Design to encourage (and facilitate) pedestrians to walk to the free- standing building from other buildings within the center. The con- nections should be directly accessible without creating conflicts with automobiles by providing safe pedestrian pathways and crossings.	
х	х	х	Design the site so that dumpsters, service areas or auxiliary storage do not interfere with, and are not visible from, the pedestrian circulation area and do not negatively impact surrounding residential areas	Provide pedestrian/bicycle connections to nearby parks, greenways, bike- ways and trails. Below is a conceptual
x	х	х	The site layout should be clustered in a village arrangement around shared amenities.	pedestrian bridge connecting Mallard and Doby Creek Greenways across the expansive WT Harris Boulevard.
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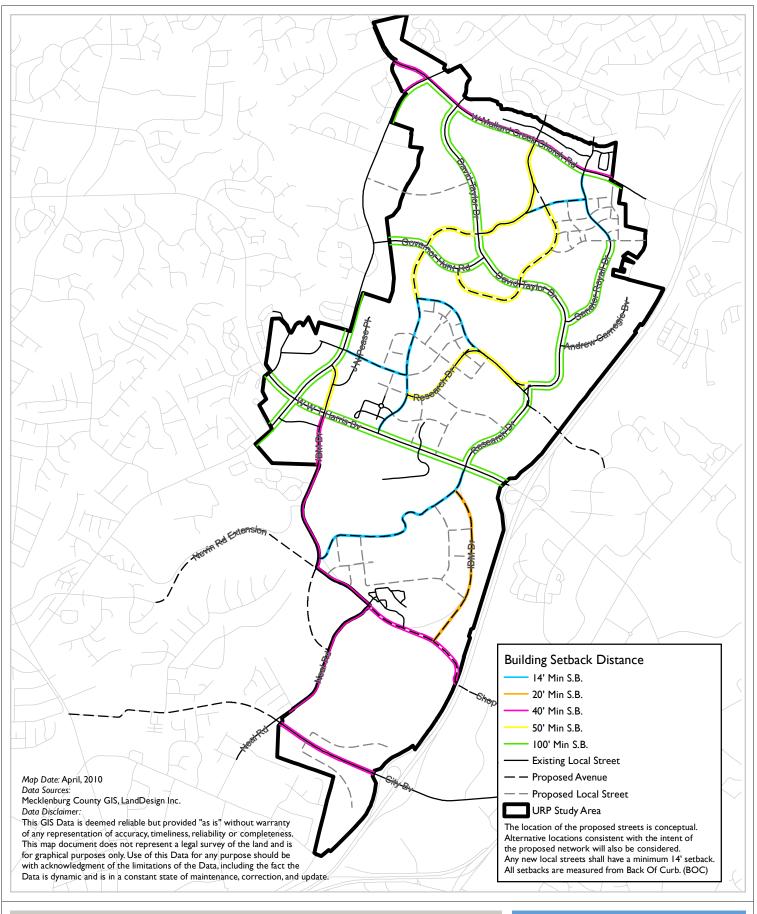
Map 14: Recommended Gateway/Signage Hierarchy

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Map 15: Recommended Building Setback

Charlotte-Mecklenburg Planning | University Research Park Area Plan



C-2.4 Transportation

Streets connect people to places and often set the image of a place due to the fact that everyone entering and leaving the area will experience the street network and view the area from vantage points all along those streets. Also, the resulting street network has a direct impact on the community's quality of life. If the design of the street network is efficient, the community can benefit from a range of travel choices, route options, emergency access, a mix of land uses, and pedestrian and bicycle options. The following policies provide guidance for creating a well-connected system of streets and improving the overall transportation system in the plan area.

Transportation Goal:

To create an interconnected transportation system that improves transportation choices, increases connectivity within the URP area and the University City area and facilitates the proposed URP land uses.

67. Support a variety of transporta-

tion choices by creating an interconnected network of streets, accentuating the greenway trail system throughout the URP and creating new connections across I-85. A range of transportation options are necessary to meet the needs of current and future occupants of the area and to attract investors that expect a level of connectivity and accessibility that is not present today. The plan illustrates an improved street network that includes pedestrian and bicycle facilities and provides more direct access to transit. Examples of such facilities represented in the plan include sidewalks, bike lanes, trails for pedestrians and bikes, realigned streets, new streets, and potential routes for a circulator that would transport people to transit stops. (Refer to Maps 16 & 17.)

- 68. Recognize the importance of a safe, efficient transportation system that accommodates all users (motorists, bicyclists, pedestrians and transit users). Accessibility, especially along safe routes, is key to encouraging investment that is consistent with the vision for the area.
- 69. Support a "green street" program that promotes environmental protection. This may mean alternative cross-sections or routes for environmental protection, incorporation of bio-retention within street sections for stormwater treatment, or alternative landscaping approaches that facilitate preservation of the existing environment.

Street Design Policies

The quality of the streets in the plan area not only contributes to accessibility, they affect the experience of the occupants and visitors alike. Streets are an important component of the public realm and set the tone for the rest of the area. In some instances, they can be utilized as linear parks, if designed accordingly. Therefore, the design of these public spaces must take into account the details that extend well beyond the function of the facility and incorporate elements that portray the image of the area.

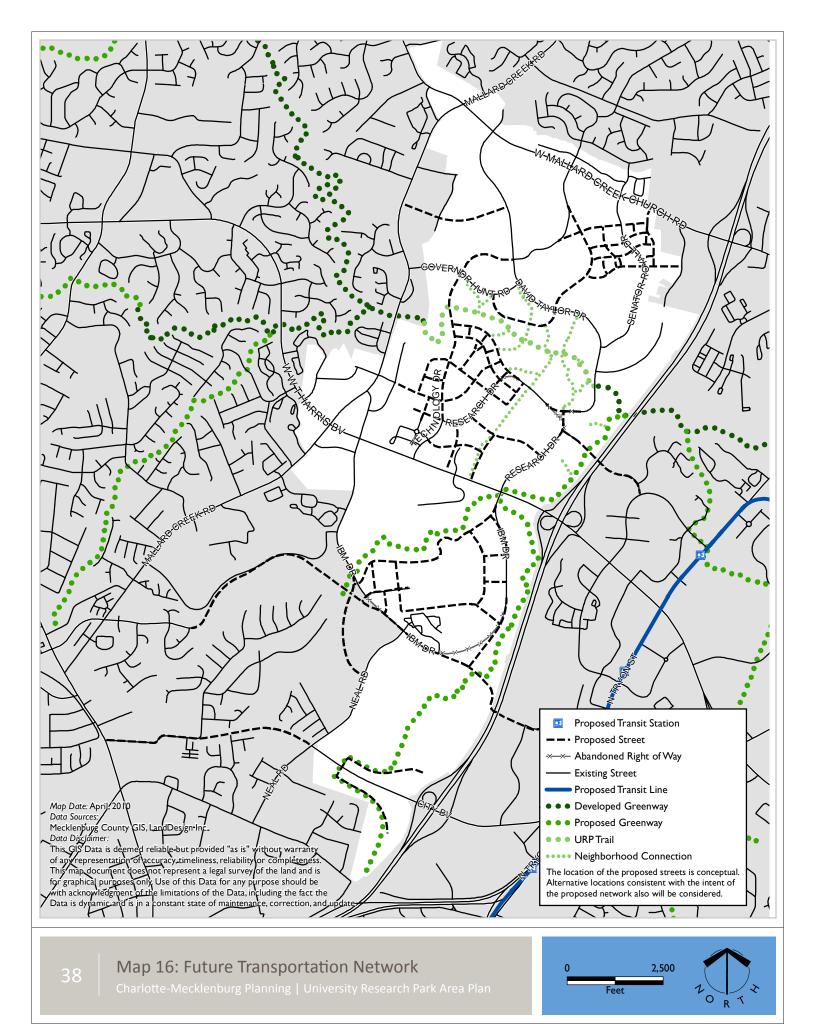
70. Provide an interconnected network of streets that accommodate pedestrians, bicyclists and motorists equally well. The plan establishes a hierarchy of streets that clarify the function of each street in the network. The plan recognizes opportunities to narrow lane widths and modify the typical sections ("road diets") in turn reallocating space to accommodate pedestrian and bicycle facilities within existing rights-of-way and outside of existing wooded areas at the road's edge. (Refer to Table 4 for recommended streetscape improvements and Figure3 for recommended cross sections.)

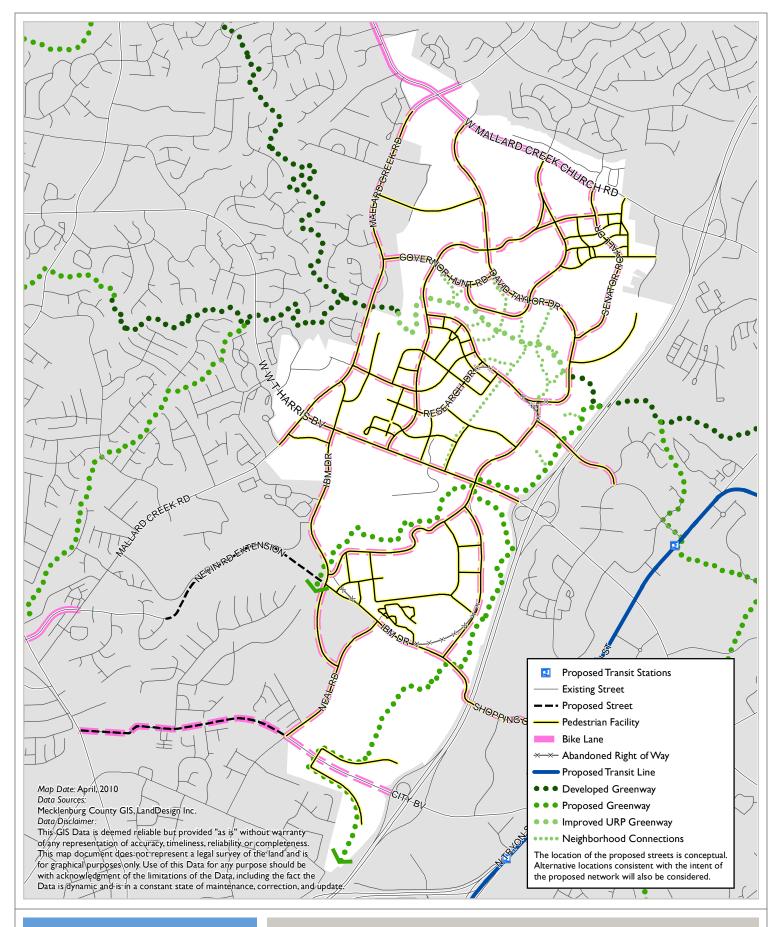






Support a "green street" program that promotes a quality of environmental protection.





2,500

Map 17: Future Bicycle, Pedestrian & Transit Facilities

- 71. Link to existing streets to improve accessibility throughout the area and minimize traffic congestion resulting from additional development. New streets and improved streets, some of which may be realigned for better connectivity and more developable areas, should disperse traffic in a manner that reduces the potential for congestion in the plan area, and connect to streets immediately outside the planning area. Connectivity significantly reduces travel distance which makes alternative modal choices viable and will greatly improve the overall transportation network, and correct congestion issues. (Refer to Map 16.)
- 72. Enhance the quality of the place with streetscape elements that unify the various areas, reinforce pedestrian scale and mitigate the impacts of the built environment. The plan not only envisions a network of streets that facilitate the circulation of multiple modes, but indicates a desire for green streets that take advantage of trees in existing building setbacks as a way to distinguish the various districts from each other and establish a character for the district. Transformation of the existing roadways to accommodate pedestrians and bicyclists is key in the success of realizing the vision of the plan. The parkway style of the existing tree-lined streets makes for an attractive network for making trips within University Research

Park. Proposed narrowing of existing street widths (road diets), are shown with a desire to retain the character while opening the section to include pedestrian and bicycle use.

- 73 Create a new north-south connection from Mallard Creek Church Road to WT Harris Boulevard. (Refer to Land Use Section for more detail: Policy 27 & Map 8.)
- 74. Establish a street network which surrounds the proposed 120 acre park. (Refer to Land Use Section for more detail: Policy 24 & Map 8.)

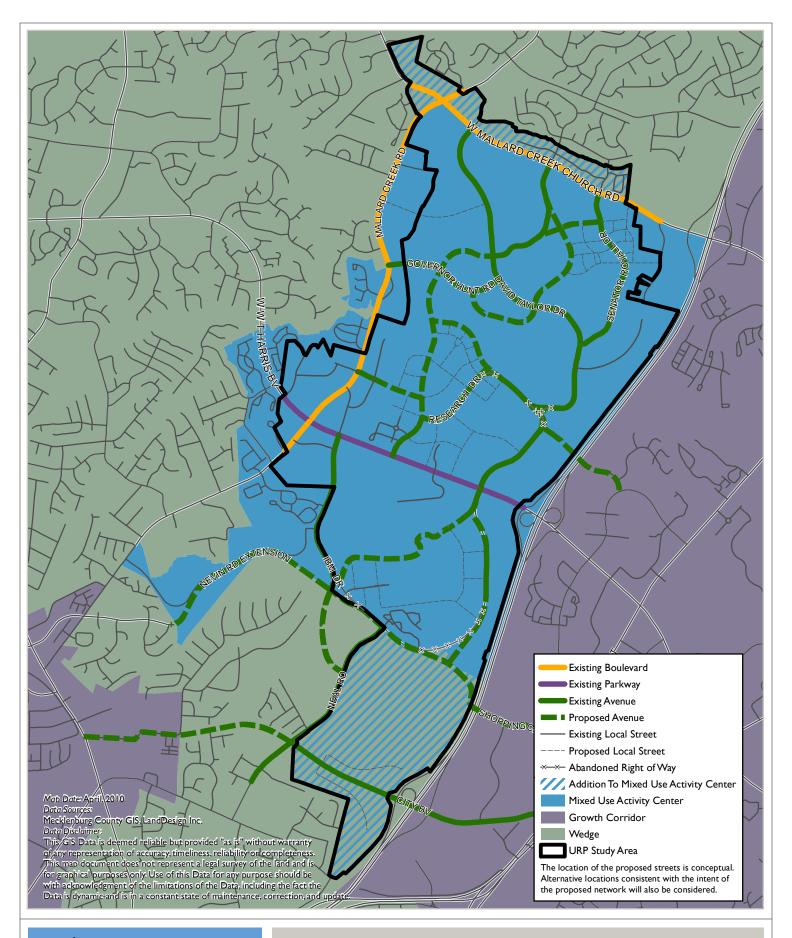
Proposed Street Classification Any new streets and street extensions planned for the URP plan area should be designed according to guidelines outlined in this plan and the *Urban Street Design Guidelines* (2007). The

TABLE 3: Description of Street Types

(A complete description of street types are provided in the Urban Street Design Guidelines)

STREET TYPE	DESCRIPTION / FUNCTION	URPAP PROPOSED STREET CLASSIFICATION
AVENUE	The most common (non-local) street providing access from neighborhoods to commercial areas. Designed to provide a balance of service for all modes of transporta- tion, including accessibility for transit, pedestrians and bicyclists in addition to carrying significant automobile traffic.	Claude Freeman Drive, David Taylor Drive, Senator Royall Drive, Governor Hunt Blvd, Technology Drive, Research Drive, Ben Craig Drive (new extension), IBM Drive, Nevin Road, Shopping Center Drive, Neal Road, City Blvd.
BOULEVARD	Boulevards are intended to move large numbers of ve- hicles, often as "through traffic", from one part of the city to another and to the lower level streets in the network.	Mallard Creek Church Road, Mallard Creek Road
PARKWAY	The most auto-oriented of the street types primarily designed to move motor vehicles efficiently from one part of the larger metropolitan area to another and to provide access to major destinations.	WT Harris Blvd.
EOCAL	Local streets provide access to residential, industrial, com- mercial or mixed use districts. The majority of Charlotte's streets are classified as local streets and are typically built through the land development process.	Lois Rose Place, JN Pease Place, Medical Plaza Drive, Willam Flicklen Drive, Cliff Cameron Drive, Old Mallard Creek Road, (new internal access roads)

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 L_{O_R} T_{X} F_{eet} Map

Map 18: Future Street Classifications /Cross-section Key

Guidelines are intended to ensure that the needs of pedestrians,

cyclists and motorists, as well as the effects on adjacent land uses are complementary when planning and designing streets.

Providing easy access via foot, bicycle, transit and/or motor vehicles is essential for the successful implementation of the land use and transportation vision for the URP plan area.

As proposed, the transportation network, shown on Map 18 (Future Street Classification Map), will provide improved connectivity throughout the plan area. Table 4 below shows proposed street classifications for streets within the entire plan area.

Recommended Street Cross Sections

The avenue and local street cross sections below should be utilized with the development of new streets throughout the URP.



New streets built within the plan area should be designed to accommodate pedestrians and bicylists.

FIGURE 1 & 2: Recommended Street cross-sections

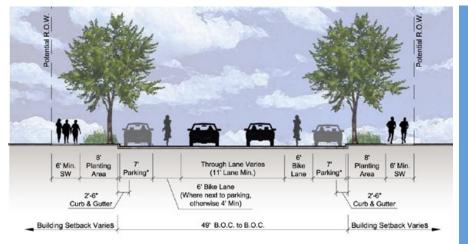


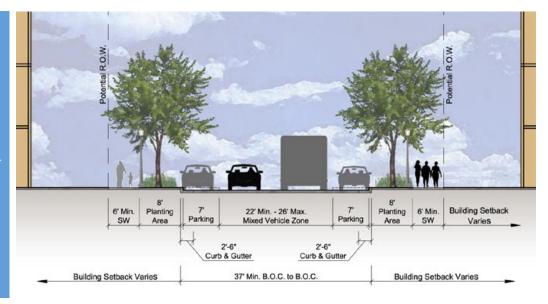
Figure 1: Avenue

- 49-foot **Back of Curb to Back of Curb** Min. 77-foot **right-of-way**
- **6-foot Sidewalk:** Improved pedestrian realm, compliant with ADA (Americans with Disabilities Act)
- **Bike Lane:** 4-foot Min, 6-foot where on street parking is present - safer bicyclists realm, improved truck turning radius, additional buffer for pedestrians
- Planting area: Buffer for pedestrians; beautification
- **On street parking:** additional buffer for pedestrians, shared parking, active streetscape

Figure 2: Local Street-Mixed use

- 37-foot Back of Curb to Back of Curb
- Min. 65-foot **right-of-way**
- **6-foot Sidewalk:** Improved pedestrian realm, compliant with ADA
- **Planting area:** Buffer for pedestrians; beautification
- **On street parking:** additional buffer for pedestrians, shared parking, active streetscape

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Streetscape Improvements / Road Dieting

A large portion of the the URP's streets are already lined with mature street trees, but excessive pavement width lends opportunities opportunities to narrow lane widths and modify the typical sections ("road diets") in turn reallocating space to accommodate pedestrian and bicycle facilities within existing rights-of-way and outside of existing wooded areas at the road's edge. In order to achieve a more pedestrian friendly environment and offer safe means for bicyclists, modifications to the existing facilities are recommended.



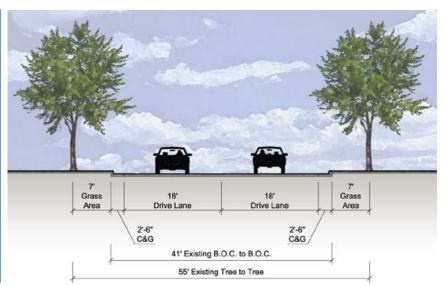
TABLE 4: Recommended Streetscape Improvements / Road Conversions The below table should be used along with Figures 3, 4 & 5 (pg. 52) in studying road diet opportunities. Existing streets contain beautiful street trees, but are overpaved and do not promote a walkable community.

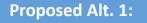
David Taylor Drive Research Drive Technology Drive 141' (2, 18' Lanes) 35' / 27' (2, 11' Lanes) 2, 4' 1 Side, 6' Claude Freeman Drive 53' (4, 12' Lanes) 44' (3, 11' Lanes) 2, 4' 1 Side, 6' optional Senator Royall Drive 41' (3, 12' Lanes) 2, 11' 2, 4' 2 Sides, 6' optional IBM Drive Varies (2, 4, 11' Lanes) 2, 11' 2, 4' 2 Sides, 6' optional IBM Drive Varies (2, 4, 11' Lanes) Varies 2, 4' 1 Side, 6' optional IBM Drive Varies (2, 4, 11' Lanes) Varies 2, 4' 1 Side, 6' optional Mallard Creek Church Road 38' (3, 11' Lanes) *1 Side, 6' Mallard Creek Church Road 78' (5, 12' Lanes) (Where not existing) *1 Side, 6' Mallard Creek Church Road (5, 12' Lanes) 75' (5, 12' Lanes) 2, 5' 2 Sides, 5'			EXISTING BOC-BOC (LANES)	PROPOSED BOC-BOC (LANES)	PROPOSED BIKE FACILITIES	PROPOSED SIDEWALK	PROPOSED ON-STREET PARKING
Claude Freeman Drive53' (4, 12' Lanes)46' (3, 11' Lanes)(6' where on-street parking)2 Sides, 6'optionalPENSenator Royall Drive41' (3, 12' Lanes)2, 11' $2, 4'$ (6' where on-street parking)2 Sides, 6'optionalPENSenator Royall Drive $41'$ (3, 12' Lanes)2, 11' $2, 4'$ (6' where on-street parking)2 Sides, 6'optionalPENIBM Drive $Varies$ (2.4, 11' Lanes)VariesVaries $2, 4'$ (6' where on-street parking) 1 Side, 6'optionalPENWT Harris Boulevard $38'$ (3, 11' Lanes) $46'$ (3, 11' Lanes) $2, 4'$ 1 Side, 8' (Majority complete) $$ PENMallard Creek Church Road $78'$ (3, 12' Lanes, Bike Lanes, 15' Median) $$ $2, 5'$ (Where not existing) 2 Sides, 5' $$		Governor Hunt Road Research Drive			2, 4'	* 1 Side, 6'	
IBM DriveVaries (2-4, 11' Lanes)Varies2, 4' (6' where on-street 		Claude Freeman Drive			(6' where on-street	2 Sides, 6'	optional
IBM DriveVaries (2-4, 11' Lanes)Varies(6' where on-street parking)* 1 Side, 6'optionalVariesNeal Road38' 	AVENUE	Senator Royall Drive		2, 11'	(6' where on-street	2 Sides, 6'	optional
Neal Road38 (3, 11' Lanes)46 (3, 11' Lanes)2, 4'(Majority complete)Yeal Road38 		IBM Drive		Varies	(6' where on-street	* 1 Side, 6'	optional
Wit Harris Boulevard7, 12' Lanes, 15' Median)* 1 Side, 8 Multi-useMallard Creek Church Road78' 		Neal Road			2, 4'	(Majority	
Mallard Creek Church Road (4, 12' Lanes, Bike Lanes, 15' Median) (Where not existing) * 1 Side, 6' Mallard 65' 75' 2, 5' 2 Sides, 5' Mallard 65' 75' 2, 5' 2 Sides, 5'	PARK- WAY		7, 12' Lanes,				
Mallard 65' 75' 2, 5' 2 Sides, 5' Creek Road (5, 12' Lanes) (5, 12' Lanes)	ILVD	Mallard Creek Church Road	(4, 12' Lanes, Bike		(Where not	* 1 Side, 6'	
* One side required for public retrofits, but two are allowed; private development may require both sides.					2, 5'	2 Sides, 5'	
	* One s	side required for public retrofits	, but two are allowed; p	private developmer	nt may require bot	h sides.	

FIGURE 3: Recommended Streetscape Improvements / Road Diets

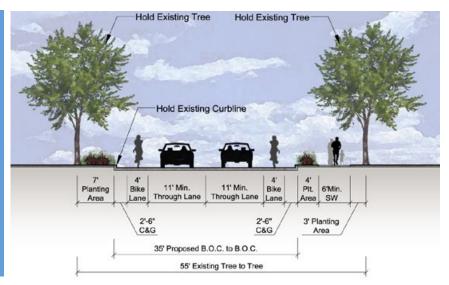
Existing:

- Excessive pavement width for 2 lanes of traffic (41 feet BOC-BOC)
- Mature street trees at approximately 55 feet on center
- Not pedestrian friendly
- Roads that fall under this cross-section are:
 - David Taylor Drive
 - Governor Hunt Boulevard
 - Research Drive
 - Technology Drive



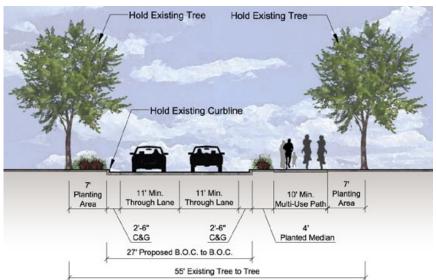


- Save existing street trees
- Hold curbline on one side of street
- Reduce BOC-BOC from 41 feet to 35 feet
- Stripe 4' bike lanes both sides of road
- On modified curb side, implement a minimum six foot sidewalk, leaving at least a three feet clearance of existing street trees.
- Design details TBD during the design phase.



Proposed Alt. 2:

- Save existing street trees
- Hold curbline on one side of street
- Reduce BOC-BOC from 41' feet to 27'
- Stripe 4' bike lanes both sides of road
- On modified curb side, implement a minimum four foot planted median and 10' multi-use trail, leaving a seven foot clearance of existing street trees.
- Design details TBD during the design phase.



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C-2.5 Infrastructure and Public Facilities

Public facilities and services addressed in the plan include public water and sewer, storm water, parks and recreation and schools. As Charlotte-Mecklenburg continues to grow and develop, timely planning for these services is essential to maintain the high quality of life residents have come to expect. Other public facilities, including libraries, medical and social services are not addressed in this land use plan.

The area is already well served by a variety of infrastructure and public facilities, mostly due to a concerted effort by public and private entities over several decades to support economic development objectives. As a result, water and sewer capacity is adequate to serve anticipated development, several schools exist within the area, a duplicate power grid system is in place, and the parks and recreation system provides several options for outdoor enthusiasts.

However, as development continues, maintaining facilities and making upgrades as needed to ensure the area remains competitive is important to long term success of the URP and continued investment in the area. Therefore, the following policies are focused more on providing a high level of service and equipping systems with state-of-the-art technology rather than addressing gaps in services. In addition, with an emphasis on sustainability, the approaches to development and redevelopment should create opportunities for infrastructure improvements and facilities that exceed local standards with respect to the environmental, economic and social aspects of development.

The Infrastructure and Public Facilities Goal:

for the plan area is as follows: Continue to enhance the value of the URP through the maintenance of and improvements to existing systems that, working in concert, can support a more sustainable development pattern in the region.

Water and Sewer

- 75. Maintain a level of service that is equal to or better than current services to support the intensity of development anticipated. As development occurs over time, periodic reviews of water and sewer service may be needed to confirm that such service meets the demands. This includes adequate water pressure for fire protection, an important consideration in nodes of concentrated development.
- 76. Encourage the use of water conservation techniques to avoid unnecessary use of water supply. In keeping with sustainability goals, reduced water usage should be accomplished through the use of native landscaping, building materials, infrastructure, and site design. In connection with site plan review, the use of such techniques in new development and redevelopment should be encouraged.

Storm Water

77. Take a "regional" approach to storm water management. To maximize the utilization of the land most suitable for future development, storm water best management practices (BMP) facilities should be designed and located to avoid unnecessary interruptions in the development pattern while providing cost-effective and environmentally responsible solutions. This approach will not only help to create amenities within the park, but will also make developable land more attractive and affordable to industries if they can participate in a regional approach, versus using highly developable land. If located in parks, BMPs should be treated and landscaped to serve as amenities.

- 78. Upgrades to storm water management facilities should be designed and constructed simultaneously as improvements are made to the existing street network, to minimize costs or disruption of circulation.
- 79. Encourage the use of low impact design (LID) or similar measures to facilitate better water quality protection. If used appropriately, LID has the ability to minimize the overall required storm water infrastructure for the development as well as decrease the impacts to storm water quality and quantity. For example, when developing the site plan, care should be taken to minimize clearing of existing natural area, minimize grading by working with the natural topography, and providing adequate buffers from existing streams.

Overhead Utilities

80. Utilities should be moved to the planting strip or at the back of sidewalk where right-of-way is being acquired or where the existing right-of-way allows it. Utility poles should not be located in the sidewalk. The overhead utility line running east-west within the southern portion of District C are recommended to be relocated underground to improve the developability of the area and allow for the intensity proposed within mixed use node. As additional sites are developed, it is recommended to bury the utilities so as to not visually detract

from the redeveloped URP park-like character.

Parks and Recreation

- 81. Create a large, central park along the Mallard Creek Greenway. A focal point of the concept is the proposed +/-120-acre park. This park is envisioned to be an attractive central amenity to not only the URP but also to the region with its connection to other greenways (existing and planned) that are part of the emerging regional greenway network: the Carolina Thread Trail. A conceptual plan should be developed to determine the appropriate configuration and design to support the uses, activities and programming envisioned for the park (i.e., gardens, play areas, ponds and lakes, art walks, natural areas, picnic areas with shelters, wellness center, etc.). Coordination with land owners will be necessary to delineate the exact boundaries of the park and to acquire the land through dedication prior to or in conjunction with development occurring on the affected parcels. (Refer to the Land Use section for more information about the proposed park and recreation area locations.)
- 82. Create a connected system of open space by improving the **Mallard Creek and Doby Creek Greenways and connecting other** more local greenways (existing and planned) to it. The linear linkages, complete with trails, should reinforce the connections between neighborhoods, schools, office uses and local retail establishments, as envisioned in the plan. Such connections should extend into the Activity Center from the Wedges to destinations outside of the plan area to create a more seamless development pattern and offer nature and

educational experiences to the community. Along with improvements to the Mallard Creek Greenway, greenway extensions are encouraged along the Doby Creek corridor and along the Doby Creek Tributary which flows behind the existing Wells Fargo property. Development plans for individual sites and plans generated by the Mecklenburg County Parks and Recreation Department for parks and greenways should be coordinated to ensure such linkages are made as development occurs. (Refer to Map 19, Open Space Development Concept Plan, for connection recommendations.)

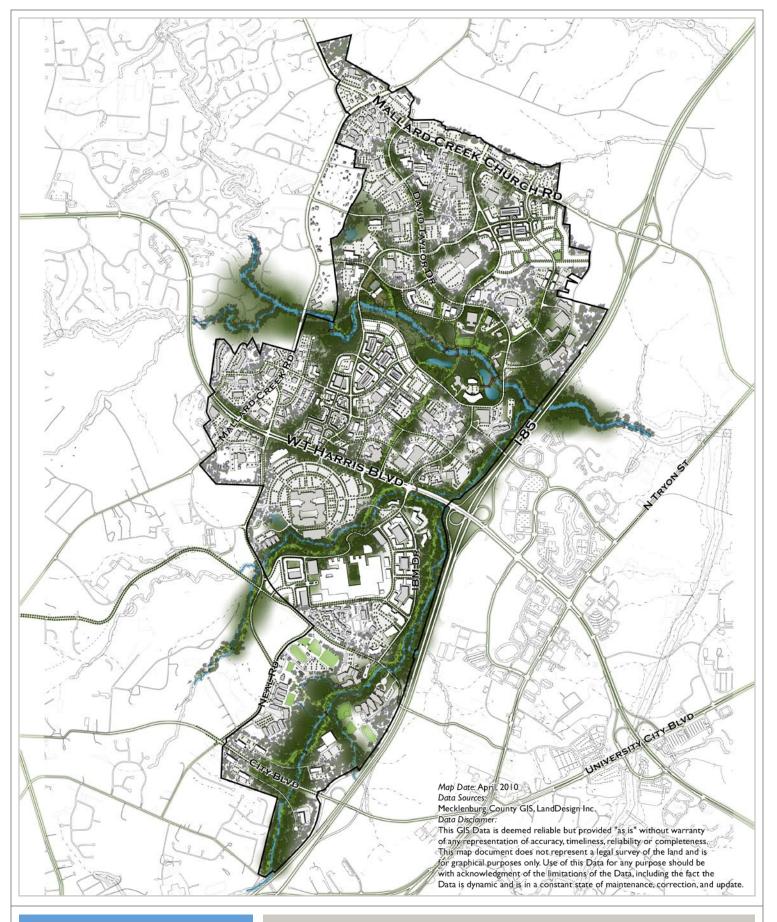
- **83. Enrich the connection to University Place and the UNC Charlotte community.** Improvements to the Mallard Creek Greenway underpass under I-85 is recommended for safety purposes.
- 84. Integrate an array of spaces into development that meets passive and active recreation needs. From outdoor gathering places to natural areas, the variety of spaces that can be part of the overall system of parks will enhance development when such development can be physically or visually connected. New development and redevelopment should be required to set aside open space in the form of natural and/or improved areas and situate development around such areas in a manner that they become a prominent component—and amenity—of each site.
- **85.Promote active use of the parks and other types of open space.** Programming some of the spaces that comprise the system will encourage a sense of community and attract visitors from the larger region to participate in activities. This will add to the vibrancy of the place and foster a sense of ownership of and pride in the area.

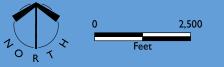
- 86. Encourage a pedestrian bridge connection as a safe greenway crossing over WT Harris Boulevard. This bridge connection will not only provide a safe route for pedestrians and cyclists and advertise the extensive greenway system, but it will create a strong gateway to the URP and bring an identity along with it.
- 87. Strengthen academic and athletic facilities. As the URP grows, improvements should be made to existing school facilities in order to help attract new residents to live in the area. This can be accomplished by avoiding overflow into portables, improving athletic facilities, enhancing landscape, and encouraging student / URP employee mentor programs.



A pedestrian bridge should be provided as a safe greenway connection over the expansive WT Harris Boulevard.

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Map 19: Open Space Concept Plan

Charlotte-Mecklenburg Planning | University Research Park Area Plan

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C-1.2 Natural Environment

A good land use plan balances preservation of the area's natural resources with the demand for new development. This is possible with careful planning and adherence to policies and regulations. The specific environmental policies contained in this plan are based on the more general principles and policies in the General Development Policies, 2007.

Located in the Yadkin-Southeast Catawba watershed, the URP boasts an ecologically rich natural environment, which is one of its best assets. An unusually expansive tree canopy, a broad floodplain area along Mallard Creek and an abundance of creeks and streams offer ample opportunities to make elements of the natural environment featured components of the development pattern. For large-scale development that typically involves large building footprints, such elements present difficult challenges. However, with an opportunity to incorporate a wider variety of uses and to provide office space in a different form in response to more modern corporate space design (part of a mixed use environment instead of isolated in a campus setting), accommodating uses in buildings with smaller footprints may be more feasible than in prior years. The following polices are aimed at protecting the natural environment while utilizing the available land in an efficient, sustainable manner.

Natural Environment goal: Create a conservation community with emphasis on parks and greenways that optimize the overall 'green' nature of URP and serve as a catalyst for development and an appealing destination in the region.

Land Quality

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The Development Concept promotes the protection of vital environmental resources, avoiding areas where development could have a significantly negative impact. The primary amenity of the area, the proposed +/-120-acre park, encompasses an area that contains several features. The preservation of open space, as depicted in the Development Concept, ensures the ability of the environmentally important features to perform their intended functions with long term resource protection as an end result.

88. Minimize development in the

floodplains. While some floodplain areas may be suitable for recreation purposes, most development should be discouraged to ensure floodplain has the capacity to function as needed during flood events. The Development Concept indicates open space in such areas to take advantage of them as amenities and minimize impacts to development in close proximity to the floodplain.

89. Protect environmentally sensitive features, such as wetlands and steep slopes, that, if disrupted, would jeopardize the environmental quality of the area. Much of this should be accomplished with the preservation of open space and the creation of parks and recreation areas. The +/-120-acre park proposed along the improved Mallard Creek Greenway (refer to Parks and Recreation under the Infrastructure and Facilities section for specific policies) is one example of an opportunity to take advantage of the natural features to create an amenity while achieving multiple environmental objectives. The proposed park is depicted in the Development Concept as occupying one of the more environmentally significant portions of the URP and a focal point of proposed future development. Open space, with or without greenway trails, along stream and creek corridors as depicted in the Development Concept would simultaneously

weave natural areas into the built environment, preserve natural features, maintain existing vegetation and improve water quality.

90. Preserve the existing tree canopy to the maximum extent practicable. In addition to the aesthetic quality that it affords, existing vegetation serves to stabilize slopes, minimize erosion of soil, support wildlife habitats, improve air quality and reduce energy costs through the cooling effects of shade. The existing canopy should be preserved through open space preservation and sensitive site design and construction techniques employed during development.



Environmentally sensitive site design and construction techniques employed during development.

Air Quality

Trees help to improve the air quality, and the Development Concept indicates preservation of much of the canopy within the plan area as development occurs to maintain or improve air quality. The plan also indicates a connected set of multimodal streets that would support various transportation choices. This, too, would minimize impacts to air quality.

- **91.** Preserve the existing tree canopy. The benefits of preserving existing trees are many. With large setbacks throughout the URP, many of the tree covered areas are located along streets where vehicular emissions are high. Trees in these locations help to improve air quality at or near the source of many pollutants. (See the preceding Land Quality section for the policy pertaining to tree canopy preservation.)
- 92. Encourage a development pattern, as recommended in the Land Use section, that supports the use of multiple transportation modes. A reduction in vehicular trips due to the availability of other equally feasible options such as walking, biking or taking transit, will aid in the reduction of emissions that affect air quality. (Refer to Transportation section for more specific policies pertaining to the creation of a multimodal transportation network.)

Water Quality

93. Utilize best practices of low impact design (LID), SWIM buffers and regional storm water ponds to maintain or improve water quality. The URP is located in the Yadkin-Southeast Catawba watershed, and includes Mallard Creek, Doby Creek, and a Doby

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Creek Tributary. These waterways fall on the North Carolina 303 (d) list for impaired streams primarily due to turbidity and poor aquatic life. Therefore, future development must be sensitive to the potential impacts to these waterways that result from development such as soil erosion and polluted storm water runoff from impervious areas. The Development Concept supports the efforts of Mecklenburg County in improving water quality through the preservation of environmentally valuable attributes and the use of storm water best management practices (BMP). Establishing and maintaining SWIM buffers as well as utilizing regional storm water BMPs in key locations are among the steps that should be taken to minimize the impacts of future development on water quality. Specific policies regarding storm water are noted in the Storm Water section under the Infrastructure and Public Facilities section above.

Heritage Sites

Three large portions of the URP plan area are designated Natural Heritage Sites by the Division of Nature Preserves and Natural Resources, an affiliation with Mecklenburg County Parks and Recreation Department. Several species of mammals, birds and amphibians were recorded during the site assessments. Conservation and environmentally sensitive development is encouraged in these areas. See Map A-5 for Natural Heritage Site designations.

C-3.0 CONCLUSION

As Charlotte continues to attract new residents and businesses, pressures for new development and redevelopment will likely intensify. The ability to successfully accommodate growth, while maintaining a high quality of life, is not likely without planning. To that end, this document sets the stage for managing future growth and development consistent with the *Centers, Corridors and Wedges Growth Framework* and the community's vision for the future. With adoption of Part I, Concept Plan, by City Council, this document updates previously adopted plans for the community.



Preserve the existing tree canopy to the maximum extent practicable.





Introduction Implementation Strategies Supporting Maps



UNIVERSITY RESEARCH PARK CHARLOTTE

2 IMPLEMENTATION GUIDE



The addition of sidewalks and pedestrian crossings at intersections are vital aspects to improving connectivity within the URP.

I-1.0 IMPLEMENTATION GUIDE I-1.1 Introduction

Achieving the vision articulated in this plan will occur incrementally over time through the combined efforts of local government, private property owners, residents, developers and many others. This Implementation Guide is primarily a staff document that outlines specific steps that can be taken by various public and private bodies so that the desired future envisioned in this plan may be realized. These strategies are listed in the table below; the lead responsible agency and tentative time frame is also included. The strategies are numbered sequentially and correspond to the policies discussed in Part One. This allows staff to track progress of the plan's policies over time.

Some strategies are physical such as the addition of sidewalks and pedestrian crossings at intersections, the design and implementation of gateway and signage features, and relocation and underground burial of overhead utilities. Other recommended strategies are organizational, such as organizing new marketing strategies, acquiring land for a substantial new park, and protecting the natural environment. Some will even require changes to existing City policies, regulations and/or practices.

These strategies do not imply a public or private sector commitment. The Charlotte City Council will not be asked to adopt this Implementation Guide; however, many of the strategies in this section will require future action by elected officials and will be presented to them for approval as needed on a caseby-case basis.

Finally, since conditions change over time, staff will update this Implementation Guide to reflect changes and progress.

I-1.2 Implementation Strategies See continuing table...

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ACTION ITEM	PROJECT TYPE	LEAD AGENCY	PRIORITY	RELATED POLICY NUMBER
<i>Continue to market the URP as an employment center</i>	Marketing	Neighborhood and Business Services, UCP	Ongoing	1
<i>Modify the RE-1, RE-2 and RE-3 districts</i> such that the RE-3 district allows for a broader range of uses, a higher floor area ratio, taller building heights, reduced buffer requirements*, and encourages more of a mixed use environment. RE-1, RE-2 should be revised to lessen the permitted uses and encourage rezoning to RE-3 which will allow for the desired development pattern. All districts should also be modified to reflect varying setback requirements per district outlined in this document and limit development in floodplains.	Zoning	Planning Department	Short (0-5 years)	2, 3, 4, 5, 7*, 10, 26, 48, 63, 72, 88
<i>Use land use recommendations</i> to guide and evaluate development proposals.	Land Use	Planning Department	As development occurs	2, 3, 9, 11, 13, 14, 17, 18, 21, 22, 23, 34, 35, 39, 40, 41, 45, 46, 47, 55, 60, 92
Ensure that site plans for future development contribute to an intricate network of streets.	Street Network	CDOT, Planning Department	Ongoing	6
<i>Use the design policies</i> outlined in this plan while reviewing development proposals. (See Residential and Non-Residential Design Policies)	Design Policies	UCP, Planning Department	Ongoing	6, Table 2
Connect, or seek connection through private development, streets within the URP to exterior streets.	Street Network	CDOT	Ongoing	7
Ensure that future development proposals include appropriately scaled open spaces.	Land Use	Planning Department	As development occurs	8, 26, 48, 81, 84
Develop an open space master plan for the URP that addresses all types, potential locations for each, design standards for those not located in the plan. The plan should recognize the inventory and identify opportunities for creating a connected system of natural and improved open space that serves multiple purposes (i.e., recreation, wildlife habitat preservation, water quality protection, etc.).	Parks & Open Space	Parks & Recreation, UCP	Short Term (0-1 Year)	8, 26, 48, 81, 82, 83, 84

ACTION ITEM	PROJECT TYPE	LEAD AGENCY	PRIORITY	RELATED POLICY NUMBER
Consider providing incentives to developers for implementing sustainable practices including building re-use / redevelopment, and building private streets which utilize rain gardens, bio-retention, pervious paving, etc.	Sustainable Practices	UCP	Ongoing	9, 12, 69, 76, 93
Update the Centers, Corridors and Wedges Growth Framework boundaries to show the entire plan area as an activity center.	CCW	Planning Department	Short (0-1 years)	15, 56, 61
 Add Pedestrian Crossings of Major Streets at: Claude Freeman Drive @ Mallard Creek Church Road David Taylor Drive @ Mallard Creek Church Road Governor Hurt Road @ Mallard Creek Road Ben Craig Drive @ Mallard Creek Road WT Harris Boulevard @ Mallard Creek Road Medical Plaza Drive @ WT Harris Boulevard Technology Drive @ WT Harris Boulevard Research Drive @ WT Harris Boulevard Neal Road @ IBM Drive 	Street Network	NCDOT & CDOT	Ongoing	16, 43, 44, 65, 74
Right-of-Way (R.O.W.) Protection/Street Development: Use the rezoning and subdivision processes, as well as other development opportunities, to protect the ROW necessary for and/or to build/improve streets, when required, that are part of the proposed internal street network for the URP.	Street Network	CDOT & Planning Department	Ongoing	19, 27, 28, 30, 31, 32, 33, 36, 42, 50, 51, 52, 54, 57, 58, 71, 73, 74
<i>Mechanisms for Building Local Streets:</i> Explore possible mechanisms for local government's participation in developing segments of the local road network that will not be constructed through the development process and for preserving right- of-way. Establishing a local road building fund for the URP plan area should be one of the mechanisms considered. The City's participation in filling in the gaps in the local road network will be critical to ensure connectivity exists throughout the URP.	Street Network	CDOT, Neighborhood & Business Services, Planning Department, &UCP	Ongoing	19, 27, 29, 30, 31, 32, 33, 36, 37, 42, 50, 51, 52, 53, 54, 57, 58, 62, 70, 73, 74
<i>Street Cross-sections:</i> Ensure that all new and improved streets within the URP plan area are built in accordance with the specific street cross-sections identified in the concept plan.	Street Network	NCDOT, CDOT, Planning Department, & UCP	Ongoing	20, 29, 37, 53, 62, 68, 70
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ACTION ITEM	PROJECT TYPE	LEAD AGENCY	PRIORITY	RELATED POLICY NUMBER
Consider recommended 'road diets' or street improvements based on the streetscape improvements table for the following roads: O David Taylor Drive O Governor Hunt Road O Research Drive O Technology Drive O Claude Freeman Drive O Claude Freeman Drive O Senator Royall Drive O IBM Drive O Neal Road O WT Harris Boulevard O Mallard Creek Road	Street Network	CDOT	Ongoing	20, 38, 43, 44, 49, 59, 65, 68
Seek land dedication for the proposed 120-acre park.	Parks	Parks & Recreation, Planning Department	Short Term (0-5 Years)	24, 81
Develop a park master plan that defines the potential boundaries of the +/-120-acre park, the alignment of the Mallard Creek Greenway through the park, and the location and configuration of a variety of spaces and structures.	Parks	Parks & Recreation, UCP	Short Term (0-1 Year)	24, 81
Public Art: Art walks should be incorporated throughout the proposed 120-acre park. Coordinate with art entities (Arts & Science Council) and private companies within the URP for funding contributions.	Programs	UCP	Medium Term (5-10 years)	24
<i>Coordinate with Parks & Recreation or UCP</i> <i>on establishing a recreation / wellness center</i> within, or adjacent to, the 120-acre park.	Parks	UCP, Parks & Recreation	Short Term (0-5 Years)	25
Development Standards for Small Urban Parks: Update the Mecklenburg County Parks Master Plan to include development and design standards for small urban parks.	Parks	Mecklenburg County Parks and Recreation Department and Planning Department	Short Term (0-5 years)	26, 48
<i>Study bridge designs</i> to develop concepts for integrating URP signage & gateway features at the proposed Louis Rose Place / University Place connection and the Shopping Center Drive bridge.	Signage	UCP, Planning Department, and CDOT	Short Term (0-5 years)	36, 64

ACTION ITEM	PROJECT TYPE	LEAD AGENCY	PRIORITY	RELATED POLICY NUMBER
<i>Establish safe and efficient connections to the future LYNX Blue Line stations:</i> Build the bridge over I-85 connecting URP to University City.	Street Network	CDOT, UCP, CATS	Long Term (5-10 Years)	36, 67
Assist, along with the University City YMCA, in programming of events and activities for URP employees and the surrounding community	Programs	YMCA & UCP	Ongoing	40, 85
Consider adding traffic signals at the following intersections: o David Taylor Drive & Mallard Creek Church Road o Ben Craig Drive & Mallard Creek Road	Street Network	CDOT & NCDOT	Ongoing	42, 65
<i>Amend Thoroughfare Plan</i> to reflect alignment and classification changes to IBM Drive, Nevin Road, Neal Road, and Shopping Center Drive.	Street Network	MUMPO, CDOT	Short Term (0-5 Years)	50
Prepare preliminary and final designs for gateway and signage features. Use the recommended Gateway Hierarchy (Map 14) for initial gateway and signage locations.	Signage	UCP	Short Term (0-5 years)	64
Create Design Guidelines to replace URP Covenants & Restrictions specific to the URP. These guidelines, in addition to design policies outlined in this plan, are to cover the entire URP plan area. They should cover architectural, open space, streetscape, water quality, BMP, and signage standards.	Design Guidelines	UCP	Short (0-1 years)	Table 2, 65, 68, 72
Bicycle Parking and other Accommodations: Provide support for bicyclists at modal transfer points such as park-n-ride, greenway trail heads and at building "doorways."	Street Network	CDOT, NCDOT, Parks & Recreation & private sector		65, 74
Parking: Encourage on street parking and shared parking during plan review to allow for a higher density mixed use center.	Parking	CDOT & Planning Department	Ongoing	66
Ensure a strong linkage to transit options in the area: In the short term, maintain the Park & Ride. Incorporate the design and development of a future LYNX blue line transit circulator which will circulate between URP and transit stations.	Transit	CATS & UCP	Ongoing	67
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ACTION ITEM	PROJECT TYPE	LEAD AGENCY	PRIORITY	RELATED POLICY
Develop a conceptual storm water management plan. Coordinate with Mecklenburg County Parks and Recreation Department to prepare a storm water management plan that identifies "regional" solutions, delineates areas where storm water management facilities can be incorporated into park sites to construct "regional" facilities that serves two or more	Storm Water	Charlotte- Mecklenburg Storm Water Services, Parks and Recreation	Short Term (0-1 Year)	NUMBER 69, 77, 78, 79, 93
sites, and maximizes usable land within the plan area. Conduct a study of existing water and sewer facilities to determine any needs—or issues to address—to better serve existing and future development.	Water & Sewer	Charlotte Mecklenburg Utilities	Short Term (0-1 Year)	75, 77, 78
<i>Encourage the employment of techniques to reduce water usage</i> during site plan review.	Water & Sewer	Charlotte Mecklenburg Utilities, Planning	Ongoing	76, 79
Relocation & Underground Burial: Work with local utility companies to identify possible strategies for minimizing overhead utilities within the URP.	Overhead Utilities	UCP	As development occurs	80
Doby Creek Greenway: Design and construct a Doby Creek Greenway extension along the I-85 corridor.	Greenways	Parks & Recreation	Long Term (5-10 Years)	82
Coordinate with developers as development occurs on individual sites to ensure greenway connections are made in accordance with the adopted and updated Mecklenburg County Parks Master Plan.	Greenways	Parks & Recreation	As development occurs	82, 83
Mallard Creek Greenway: Implement greenway improvements to the stretch of Mallard Creek Greenway which runs through the URP.	Greenways	Parks & Recreation	Short Term (0-5 years)	83
Evaluate current open space requirements within Districts B, C, D, & F and modify as needed to ensure natural and improved spaces are well integrated into new development and redevelopment.	Zoning	Planning Department	As development occurs	84
Design and construct a pedestrian bridge for a safe greenway connection crossing WT Harris Boulevard	Greenways	Parks & Recreation, CDOT, UCP & NCDOT	Long Term (5-10 Years)	86
Charlotte-Mecklenburg Planning Department			LEMENTATION G y Research Park Are	5/

ACTION ITEM	PROJECT TYPE	LEAD AGENCY	PRIORITY	RELATED POLICY NUMBER
<i>Establish a partnership with CMS</i> to develop and implement a strategic pan for enhancing schools within the URP.	Schools	CMS & UCP	Short Term (0-5 Years)	87
Protect the natural environment: Develop an inventory of natural features and "environmental assets" to be preserved or enhanced as development and redevelopment take place.	Environmental Preservation	Parks & Recreation, UCP, Planning Department	Short Term (0-1 Year)	89, 90, 91
<i>Establish guidelines for open space and tree</i> <i>save delineation to help protect significant</i> <i>environmental features.</i> These areas should delineate areas of improvement and management, especially within private development.	Environmental Preservation	Parks & Recreation, UCP	Short Term (0-1 Year)	89, 90, 91

7* Reduce the need for buffers that separate development by encouraging complementary uses that create a positive transition. For example: If the remaining land that lies between David Taylor Drive, Claude Freeman Drive, and Mallard Creek Church Road were developed as complementary uses to the existing properties, buffers should be reduced or eliminated to create a more cohesive campus environment, and encourage shared parking structures.



URP UNIVERSITY RESEARCH PARK CHARLOTTE

3 APPENDIX



The URP is a major employment center for the City of Charlotte with potential for further development.

A-1.0 EXISTING CONDITIONS REPORT

The information contained in this appendix was gathered throughout the planning process and was used to produce the plan.

Existing Conditions, Trends and Forecasts

A thorough review and understanding of existing conditions – physical, economic and social –was needed to identify the opportunities and constraints facing the plan area, and to develop the plan vision, goals and policies. The following discussion highlights the existing conditions, trends and forecasts most significant to the plan area.

A-1.1 URP Plan Area

The University Research Park (URP) Plan area is approximately 2,300 acres of land to the west of I-85 and east of Mallard Creek Road. The plan area was incorporated into the UCP municipal service district's (MSD) eastern portion in 2008. The northern edge of the plan area is generally Mallard Creek Church Road and to the south is IBM Drive. Within the plan, the University Research Park began in 1966 and has grown over the last 40+ years to include many significant tenants and development accomplishments. It is a major employment center for the City of Charlotte with potential for further development. The URP is under the leadership of University City Partners and a private board of the University Research Park.

Also within the plan area is Governor's Village, a compilation of now CMS schools. It was originally formed in 1997 under a public / private partnership with The City and companies within the URP. The campus includes two elementary, one middle, and one high school.

The remainder of land within the plan area is predominately dedicated to service retail which offers near by businesses and residents shopping and dining opportunities. (Refer to Map 1 for the URPAP Boundary Map).

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A-1.2 Demographics

Within the eastern portion of the MSD, there are a total of three single family residential units and 641 apartment units (rental). The Worthington at WT Harris Boulevard and Research Drive has a total of 282 units for rent and the Windsor at Vinoy apartments along IBM drive consist of 360 units for rent. While the plan area is surrounded by residential development at a variety of densities, the Worthington and Windsor provide the only current opportunities for residence inside the URP plan area. The Worthington site is entitled for a second phase of apartments to be built in the future directly adjacent to the existing 282 units.

In terms of employment, it is estimated that more than 25,000 people are employed by over 100 businesses within the URP plan area. The URP plan area contains over 10.5 million square feet of office, research and industrial space. While there are retail, restaurant and hospitality employers within the plan area, a large portion of the jobs are with office tenants, such as Wachovia/ Wells Fargo, TIAA-CREF, Meridian, and many other businesses in the URP. The four schools within Governor's Village have over 5,000 students and employ around 200 faculty on their campus.

A-1.3 Environmental

Natural Features

The URP plan area consists of 2,300 acres of land that maintains very large existing stands of mature trees, which provide a great canopy and feeling of privacy for many tenants. Because of the character and scale of the research and office tenants, many of the developed parcels are designed to take advantage of these large tree buffers. Much of the URP employs buffers along the public roads to create a wooded streetscape throughout the plan area. There are some areas with significantly steep slopes along the undeveloped portions of Mallard Creek, Doby Creek and throughout the northern portion of the site that may limit development opportunities. The URP plan area lies in the Yadkin-Southeast Catawba watershed district.

(Refer to Map A-5 for natural features).

Greenways

A large stretch of Mallard Creek Greenway bisects the URP running east west and connecting the neighborhoods on the west to the URP and providing a potential connection to the east and to UNC Charlotte by way of an existing underpass at I-85. The current 1.8 mile greenway section through the URP consists of natural paths that are used for walking, running and biking. This portion of Mallard Creek greenway contains large existing tree stands, SWIM buffers, and floodplain areas. It is also a very important connection in the Carolina Thread Trail future planned greenway system. Doby Creek and its tributaries also contain SWIM buffers and floodplains that connect to Mallard Creek, and extend to the south, under Harris Boulevard and through the IBM and Wachovia/Wells Fargo tracts of land, and along I-85. Great Blue Herons, gray foxes, white tailed deer, beavers, muskrats, and a wide variety of birds can be found within this greenway system so the protection of natural habitats is an important consideration during further greenway development. (Refer to Map A-5 for Creek and Greenway Connection Locations).



A 1.8 mile stretch of the Mallard Creek Greenway bisects the URP.



The URP portion of Mallard Creek Greenway is not currently up to Park & Recreation standards.

LAND USE	TOTAL AREA	% OF URPAP
Single Family	2.7 AC	0.1%
Multi-Family	41.0 AC	1.8%
Retail	117.8 AC	5.1%
Institutional	221.6 AC	9.6%
Office	984.2 AC	42.8%
Recreation	5.6 AC	0.2%
Parking	44.8 AC	1.9%
Vacant	745.5 AC	32.4%

TABLE 5: Existing Land Use

When combined, the total uses do not add up to the 2,300 acres due to the exclusion of transportation right-ofways. (Map A-1) Source: Mecklenburg, County, NC GIS Dept. (2010)



Multiple existing facilities, like the above Resource Square Building, contain vacant / leaseable space.

A-1.4 Land Use and Zoning

Existing Land Use

Of the developed portion of the URP plan area, the majority of the existing land use is dominated by office uses with nearly one thousand acres. There are pockets of retail development along WT Harris Boulevard and Mallard Creek Church Road that are primarily shopping, hotel and restaurant uses. Two multi-family residential developments residing at IBM Drive and W.T. Harris Boulevard make up the only current residential opportunities beyond three single family lots at Mallard Creek Church Road.

The University City YMCA, an area fire station, and Governors Village's campus make up the existing institutional land uses within the plan area.

Forming nearly 750 acres, large amounts of vacant parcels which lend themselves to future development are scattered throughout the plan area. LNR, IBM, and Crescent Resources currently hold the largest amounts of undeveloped land. (Refer to Map A-6 for undeveloped parcel designations).

Land Use Character

The general land use character of the URP plan area is a mix of Class A office space, private corporate facilities (Wachovia/Wells Fargo, TIAA-CREF, IBM/Meridian, etc.), small single tenant offices, retail uses, four schools, and a small amount of multifamily units. Most development is located behind large setbacks from the public road. These setbacks typically consist of large tree growth preservations. In addition to these large preserved setbacks, many uses take advantage of operating their facilities on large acreages of land that also allows for larger tree preservation, but creates a sense of 'privacy'. The development that has occurred in the plan area began in the 1970's, therefore,

there are some buildings that are well over 30 years old and may be redevelopment opportunities.

Adopted Future Land Use

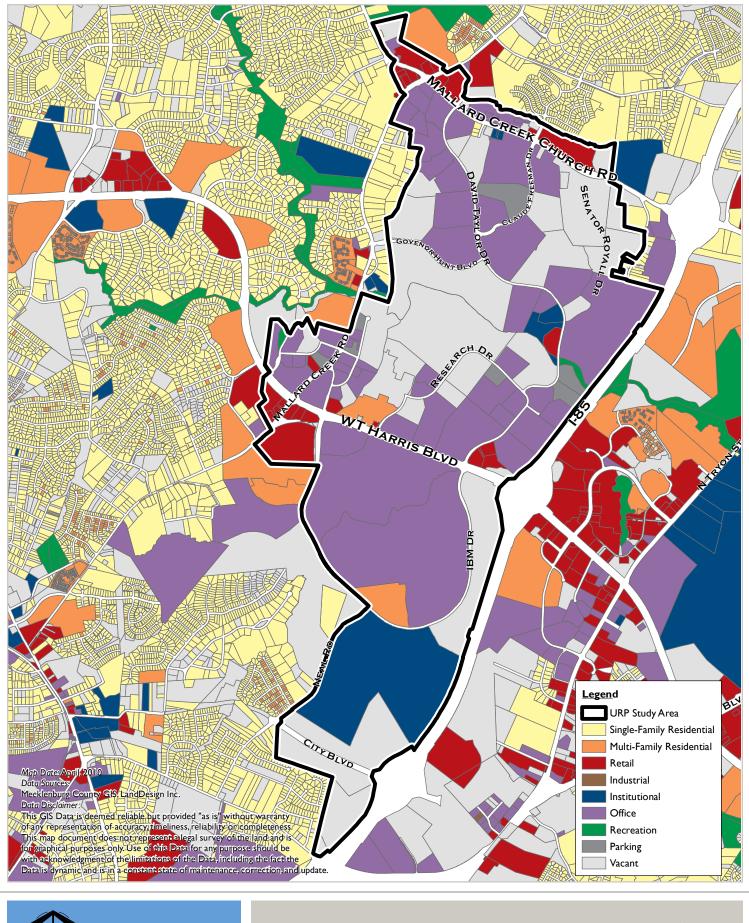
The Northeast District Plan (Map A-4), adopted in 1996, and the Northeast Area Plan, adopted in 2000, are the land use policy documents for the plan area. These plans recommend Research uses with a small amount of mixed use, office, retail, and multi-family residential uses along Mallard Creek Church Road, Harris Boulevard and IBM Drive, and most of these parcels are currently developed with such uses. In addition is the existing large institutional use at Governor's Village. The majority of the undeveloped land is proposed as future Research use.

Greenway uses are proposed for most of Mallard Creek alignment that runs east-west through the plan area & north - south along Doby Creek.



TIAA-CREF's private campus provides an example of how to limit fields of surface parking and create great amenities for employees.

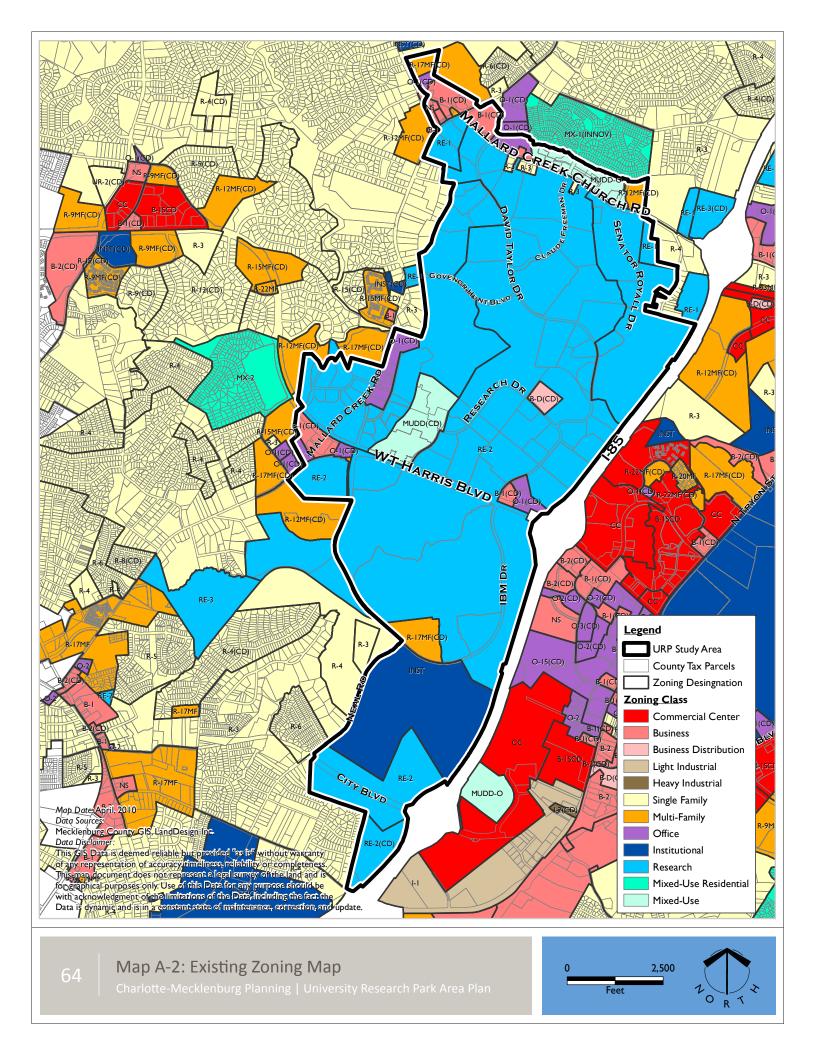
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Map A-1: Existing Land Use Map

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ZONING DISTRICT	TOTAL AREA	PERCENTAGE OF URPAP
B-1(CD) Neighborhood Business	40.64 AC	1.8%
BD(CD) Distributive Business (Conditional)	8.79 AC	0.4%
INST Institutional	205.6 AC	8.9%
MUDD-O Mixed Use Development District (Optional)	37.79 AC	1.6%
MUDD(CD) Mixed Use Development District (Conditional)	53.67 AC	2.3%
NS Neighborhood Service District (Max. FAR = 2.0)	3.60 AC	0.1%
O-1(CD) Office District (Max. FAR = 0.60)	45.77 AC	2.0%
O-15(CD) Office (Conditional - Min. Lot Size = 15,000 SF)	3.12AC	0.1%
R-12MF Multi-family (Conditional - 12 units per acre)	0.2 AC	0.0%
R-12MF(CD) Multi-family (Conditional - 12 units per acre)	1.13 AC	0.04%
R-17MF(CD) Multi-family (Conditional - 17 units per acre)	32.66 AC	1.4%
R-3 Single Family (3 units per acre)	5.32 AC	0.2%
RE-1 Research District (Min. Lot = 2 acres)	478.29 AC	20.8%
RE-2 Research District (Min. Lot = 4 acres)	1,209.58 AC	52.9%
RE-2(CD) Research District (Conditional - Min. Lot = 4 acres)	36.55 AC	1.6%

Existing Zoning

Most of the land within the plan area is zoned RE-1 and RE-2. North of Mallard Creek Church Road there is a small amount of land that is zoned as B1, MUDD-O, R-12, R-17 and O1. There is O1, B1 and MUDD-CD zoning located along Harris Boulevard. A large area zoned INST lies to the south side of IBM Drive. (Refer to Map A-2 for existing zoning designations).



The Worthington Luxury Apartments provide one of the two residential opportunities within the URP Area Plan's limits.



Vance High School, along with a middle school and two elementary schools lie within Governor's Village (the 205 acre institutional use on the southern end the URPAP)

TABLE 6 : Existing Zoning Breakdown When combined, the total zoning designations do not add up to the 2,300 acres due to the exclusion of transportation right-of-ways. (Map A-2) Source: Mecklenburg, County, NC GIS Dept. (2010)

A-1.5 Transportation & Connectivity

Much of the design of the URP plan area consists of large office uses which front major and minor collector type streets. A majority of the streets within the URP are maintained by North Carolina Department of Transportation (NCDOT).

David Taylor Drive currently provides the only connection through the plan area that crosses Mallard Creek and connects Harris to Mallard Creek Church Road. The URP's connectivity ratio (CR) scores a 1.20. This score is notably similar to that of Cotswold, but significantly less connected than the Dilworth neighborhood's highly connected network. (Refer to Figure 1 for connectivity comparison and Map A-3 for the URP existing street network).

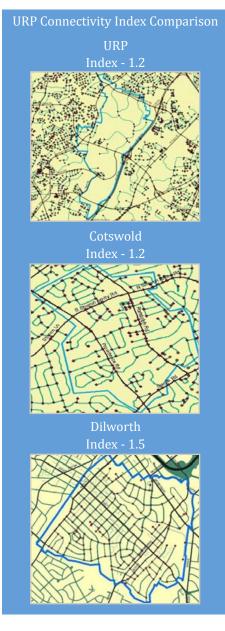
Many of the streets within the URP plan area do not have bike lanes or sidewalks, however there are some pockets of sidewalks among newer developments such as Worthington. (Refer to Map A-3 for existing pedestrian facilities).

Most streets are lined with mature trees. Many of the office uses are controlled by security and not open to the public, such as TIAA-CREF, Wachovia/Wells, and others. Pedestrian connectivity among the public streets is sporadic with some sidewalks in some areas, but poorly connected overall. There is a variety of architectural styles that exist throughout the plan area and is reflective of the evolution of over 40 years of development.

A-1.6 Public Transportation

Public transportation services are provided by Charlotte Area Transit Service (CATS). CATS currently provides the following services within the URP Area plan boundaries: local bus route 22, cross-town bus 29, as well as express bus routes 54x and 81x. There are also two existing park and ride facilities located off of Harris Boulevard and Mallard Creek Road. In 2009, the routes serving the URP community carried an average of 68,679 passengers per month. (Refer to Map A-3 for existing public transportation facilities).

Future CATS plans propose to extend the existing LYNX Blue line light rail service from Center City Charlotte to I-485, near the Mecklenburg-Cabarrus County lines. Although the proposed LYNX Blue Line Extension project would be located east of the URP Area plan study boundaries, along North Tryon Street/US-29, it is likely to shape future development within the proposed station areas.





Many of the streets within the URP plan area do not have bike lanes or sidewalks.

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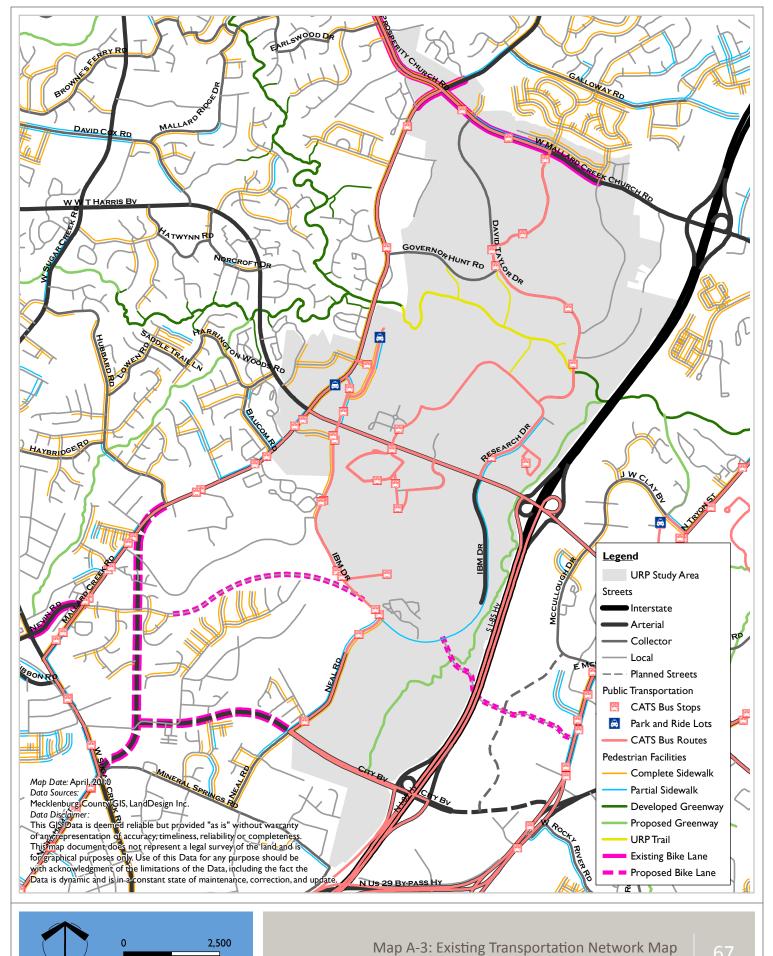


Pedestrian facilities at The Worthington are among the few existing in the plan area today.



Current transit facilities are not accommodating to pedestrians, as shown at the corner of Neal Road and IBM Drive.

APPENDIX University Research Park Area Plan



Feet

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A-1.7 Public Utilities

Water/Sewer

The water distribution and sanitary sewer systems within the plan area consist of water and sewer mains of varying sizes. Charlotte Mecklenburg Utilities (CMU) does not anticipate water and sewer capacity issues based on existing development and similar future land uses. The existing water and sewer systems are sufficient for the uses in and around the URP area, including any existing schools, fire stations, libraries, and parks.

CMU performs programmatic water and sewer system rehabilitation on portions of the system that are identified as candidate areas. Most of the water and sewer within the URP area is less than 30 years old. Typically portions of CMU's system that need rehabilitation work are 50 years or older. As changes occur and densities potentially increase, CMU will evaluate their system models to monitor any additional needs.

CMU currently has plans for a water transmission main that will extend out Mallard Creek Road and tie in to the elevated tank at I-85 and Mallard Creek Church Road. This is estimated to be a 36" line, approximately 28,000LF, and is identified to design and construction sometime in the 2018-2020 timeframe. This project will reinforce CMU's transmission capability to the region and allow the elevated tank to operate more effectively. At this point the exact alignment and schedule are not known.

Stormwater

Hydrology features within the plan area include existing streams, creeks and floodplain areas. Major tributaries include Mallard Creek. Most of this existing stream corridor is undeveloped and consist of large tree canopies and mature growth. Future development will be subject to stormwater regulations within Mecklenburg County.



Mallard Creek bisects the plan area.

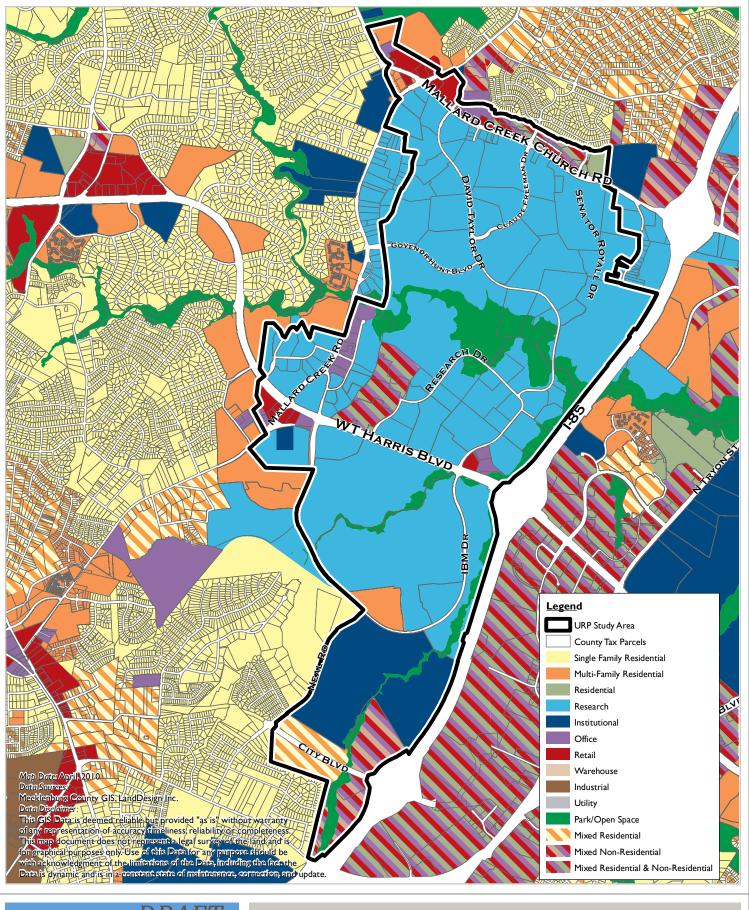
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Most of the existing Mallard Creek Corridor remains undeveloped and consists of large tree canopy.



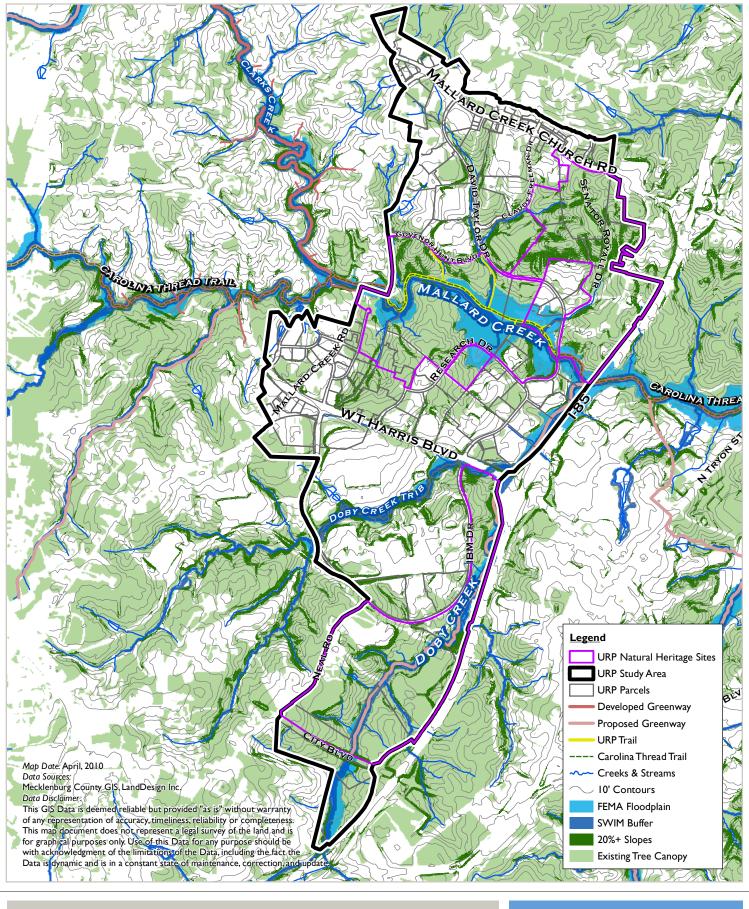
Natural, peaceful aesthetic of the Mallard Creek Corridor.



DRAFT 2,500 Feet

Map A-4: Previously Adopted Future Land Use Map (Northeast District Plan)

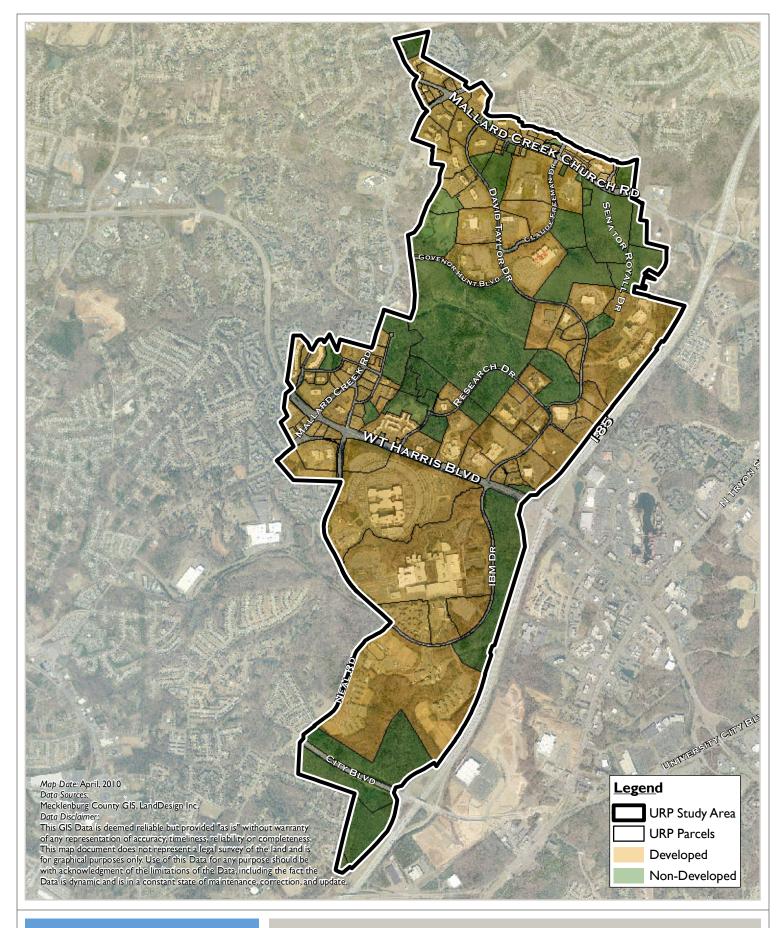
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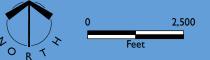


Map A-5: Environmental Conditions Map

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Map A-6: Developed vs Undeveloped Parcels

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