

# General Development Policies

GDP



Transit Station Area Principles

Residential Location & Design

Retail-Oriented Mixed / Multi-Use Centers

Plan Amendment Process

Environment

Infrastructure



Future Update

Future Update

Future Update

Future Update

Future Update

*making all the right connections*

# General Development Policies

The Planning Department staff has worked with stakeholder groups, representing neighborhoods and the development community, to update Charlotte-Mecklenburg's *General Development Policies*.

The update process began with four priority areas. City Council adopted one policy area (Transit Station Area Principles) in November, 2001, and three others in November, 2003 (Residential Location and Design, Retail-Oriented Mixed/Multi-Use Centers, and the Plan Amendment Process).

Two new policy areas (Environment and Infrastructure) were adopted in November, 2007. More policy areas are likely to be addressed in future updates.

This document compiles the six updates that have been adopted, and references other policy areas to be addressed in the future.

Charlotte-Mecklenburg Planning Department

Adopted by Charlotte City Council

## GENERAL DEVELOPMENT POLICIES

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# Introduction

## to the GENERAL DEVELOPMENT POLICIES

### I. Scope and Purpose of the GDP

Mecklenburg County includes many unique geographic areas with their own specific planning issues that need to be addressed. However, many issues apply more generally throughout the community. This *General Development Policies* (GDP) document highlights the *community-wide* issues, goals, objectives, policies and strategies. More specifically,

- ▶ these GDP seek to provide guidance for the location, intensity and form of future development and redevelopment throughout the community.

These general policies will be used to provide direction in developing future land use plans as well as in making rezoning decisions. They will also give direction in updating zoning and subdivision ordinances, and for integrating land use planning with capital facilities planning, particularly transportation planning. In addition, they will guide future efforts to further integrate transportation and land use, particularly in developing an integrated, long-range plan.

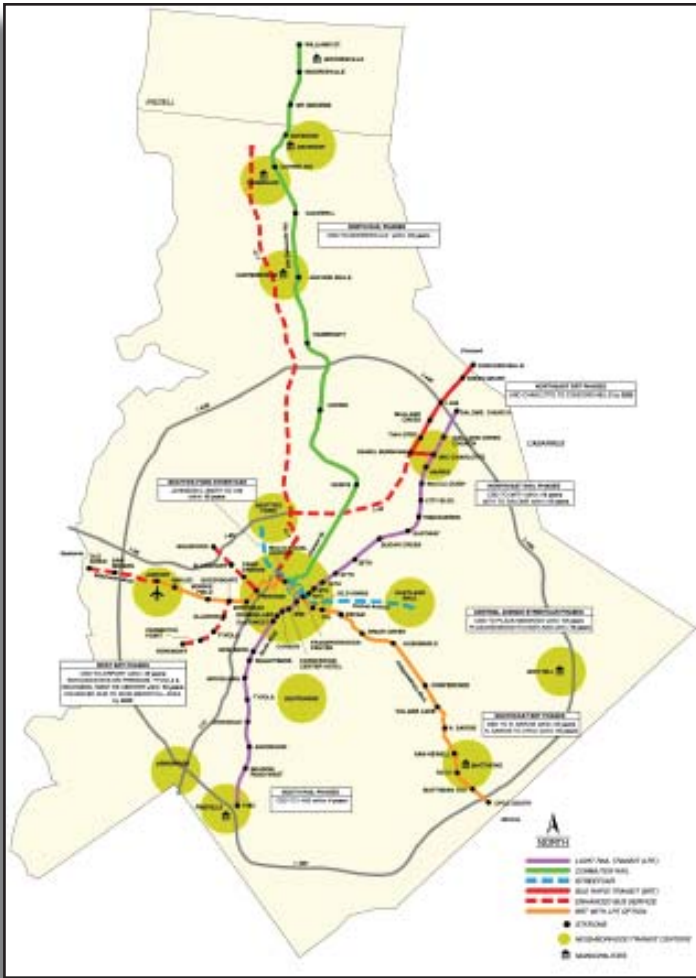
#### Updating the GDP

The original GDP were adopted in 1990. At the time, they represented a benchmark of local development policy. Much happened in the ensuing decade. Growth and change continued to raise new issues. In response, important new public policies were developed, among them:

- ◆ In 1994, the Charlotte City Council and Mecklenburg County Board of Commissioners adopted the *Centers and Corridors* policy that has become the defining future land use vision for the region. (An update is currently underway and scheduled for review in 2008.)
- ◆ In 1997, the *2015 Plan* articulated comprehensive goals based on the view of a fully urbanizing community.
- ◆ In 1998, the *2025 Integrated Transit and Land Use Plan* linked the Centers and Corridors vision to a rapid transit system – and county voters passed a referendum supporting a half-cent sales tax to move forward with transit.
- ◆ In 2001, City Council adopted a set of *Smart Growth Principles* to help assure a livable community in the future.







*Transit system corridors are illustrated here. Although much future growth will be directed to corridors and hubs, a significant amount of new development will also take place in "wedges."*

The GDP should be updated and applied to this evolving community vision. These and other initiatives have charted the course. The goals for future land use emphasize the need to create economically viable, mixed-use communities supportive of plans for future rapid transit.

But if the goals are clear, what are the means by which they are achieved? What, exactly, is involved in "integrating transportation and land use?" What policies can give detailed guidance as area plans are formulated and rezoning decisions are made? What implementation tools are needed to make the vision a reality?

Updating the GDP is a key step in answering those questions. It is, however, just one step. At the same time as the GDP's broad policies are updated, other activities need to occur.

For example, we will analyze projected growth patterns and the effects of different land use and transportation scenarios. We will continue to refine our community's definition of "transportation adequacy" and develop better tools to evaluate it on a regional and on a site-specific basis.

Then we will be able to update area plans to better integrate transportation and land uses. The starting point for these activities is the view that we are looking at how to move people, not just cars, and as a result we look not only at road capacity but alternative modes — transit, walking, bicycling — that give people a choice in mobility.

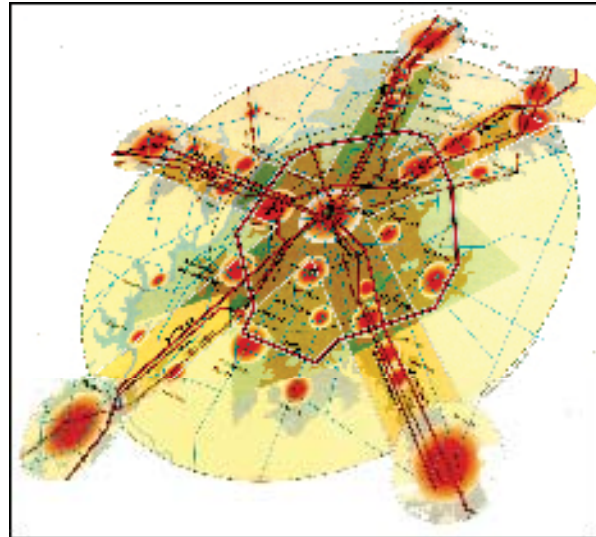
The GDP update builds on the adopted *Centers and Corridors* framework that is the defining transportation and land use vision for this community. The updated GDP will help guide officials, staff and citizens in implementing this vision in the day-to-day work of developing area plans, reviewing rezoning petitions, and so on. Furthermore, it can also help set the stage for an eventual, new comprehensive, long-range plan that integrates land use and transportation. This long-range, integrated plan will provide the broader context for making site-specific land use and transportation decisions.

## II. Future Land Use Vision

Charlotte-Mecklenburg's existing land use pattern is characterized by low-density, dispersed development, with a preponderance of segregated, disconnected uses. This pattern, while generally consistent with earlier land use plans, does little to further current community goals that emphasize the need to create economically viable, mixed-use, people-oriented communities supportive of plans for future rapid transit.

However, even with this dispersed development pattern, Charlotte-Mecklenburg has an underlying organizing framework that can be described as a *centers and corridors* structure.

- **Centers** are hubs of commercial, institutional or transportation activity and can vary in size, from small neighborhood-centered hubs to large mixed-use areas. Some centers, like SouthPark and University City, eventually grow to become entire edge cities.
- **Corridors** were originally defined as the primary transportation arteries where rail lines, major streets and interstate highways run roughly parallel. In recent transit planning initiatives, the corridors concept has been refined as illustrated on the map above. The corridors are now defined by their proposed rapid transit alignment and are depicted as the South/Northeast, Southeast/West and North. Between the corridors are the "wedges" or "quadrants" which are typically lower density residential areas and smaller commercial areas.



*The Centers and Corridors structure provides a framework for future growth and development.*

*The centers and corridors structure of the Charlotte region offers tremendous potential for directing future development.* It also provides an ideal framework for the area's economic development. Because much of the office space, shopping centers, hotels, educational, entertainment and health facilities are located within existing centers and corridors, public policy that encourages future development within these centers and corridors will ensure maximum efficiency. This growth strategy will help to reduce the long-term costs of transportation and infrastructure improvements by making the best use of existing facilities and reducing the demand for extensive new facilities and infrastructure.



### Goals of the GDP

The intent of the land use policies discussed in this document is to achieve certain key goals by enabling appropriate, quality development in the rapid transit corridors (South/Northeast, Southeast/West and North) and at major activity centers/transit hubs.

Additionally, the policies provide guidance to ensure that development outside of the corridors is equally appropriate, well-designed and consistent with the long-term goals of the entire community. The GDP help guide development to achieve these important community goals:

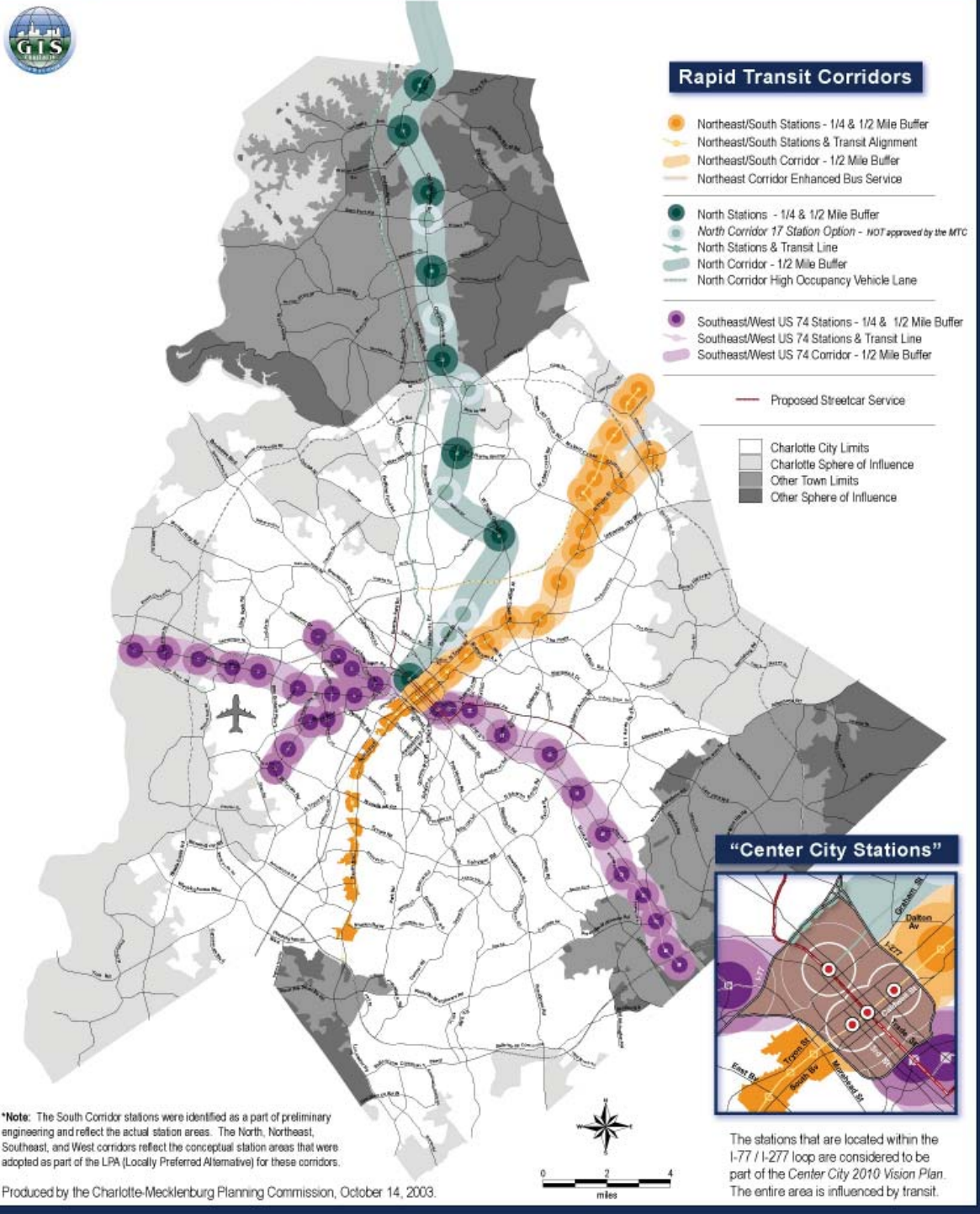
#### GOALS

1. **Provide a broad range of housing, employment, leisure and educational opportunities throughout the community.**
2. **Foster long-term neighborhood and economic viability.**
3. **Protect the natural environment** by preserving air quality, water quality and the tree canopy; retaining natural areas; providing open space; and minimizing impervious cover, as feasible.
4. **Create well-designed communities** that are interconnected; well-maintained; have adequate open space; are appropriately served by public infrastructure, facilities and services; promote healthy lifestyles; respect the natural environment; and offer a variety of transportation choices.
5. **Integrate land use and transportation.**
6. **Ensure that the availability of public infrastructure is considered** when making land use and development decisions.
7. **Support the centers and corridors land use vision** by focusing higher intensity development in transit station areas and key activity centers.
8. **Encourage a more compact, multi-use development pattern**, including appropriate infill and redevelopment, to enable people to live, work and shop in close proximity.

*Note:* These goals, originally adopted in 2003, were revised, updated and adopted in 2007.

*continued on page 6*

# Mecklenburg County Transit Corridors, Proposed Alignments, and Station Locations\*



*The Centers and Corridors concept calls for attracting higher-density development within transit station areas.*

### Key Objectives

In developing both the *2015 Plan: Planning Our Future* and the *2025 Integrated Transit and Land Use Plan*, the community engaged in discussion and identification of key land use and design objectives. These objectives, as summarized below, were reaffirmed and enhanced by the more recent work of the Smart Growth Task Force.

#### OBJECTIVES

- ▶ Create unique urban, pedestrian-oriented mixed use centers at key locations throughout the county.
- ▶ Develop a balance of appropriate land uses and higher densities in key transportation corridors and major activity centers.
- ▶ Enable new development and infill development that provides a mixture of uses, enhances and preserves existing neighborhoods and structures, is transit supportive, helps to revitalize communities and is sensitive to its surroundings.
- ▶ Enhance the strength, vitality and livability of the Center City and the City-Within-A-City area.
- ▶ Stimulate quality growth on the northwest and west sides of the city and county.
- ▶ Ensure that existing stable neighborhoods are maintained and enhanced.
- ▶ Design development that is environmentally sustainable and that integrates the built environment with the natural environment.
- ▶ Use design elements such as lighting, landscaping, scale and innovative site plans to improve the safety of both residential and commercial areas.
- ▶ Develop a holistic approach when designing streets and transportation systems so that streets function well for both vehicles and pedestrians.
- ▶ Make streets more pedestrian-friendly by providing ample sidewalks, locating entrances off sidewalks, encouraging storefront windows, providing public spaces along the street, providing bus shelters, using traffic-calming devices, providing pedestrian traffic signals and crosswalks, and allowing on-street parking.
- ▶ Develop and implement streetscape plans on major roadways.
- ▶ Support development that complements adjacent land uses and helps to create an identity for Charlotte.
- ▶ Integrate greenspace into new development and infill development.
- ▶ Include neighborhoods in the design process.

### ***III. The GDP Document and Process***

#### **The first phase**

The issues generated by ongoing growth and change in the last decade are complex and the agenda for an update is long. The first phase of the GDP update focused on four priority areas:

- Transit Station Area Principles
- Residential Location and Design Policies (for areas outside transit stations)
- Retail-Oriented Mixed/Multi-Use Centers
- Plan Amendment Process

The Transit Station Area Principles were adopted by Charlotte City Council in November, 2001, and the others in November, 2003.

#### **The second phase**

The next two major policy areas related to protection of the natural environment and to the provision of public infrastructure in connection with land development. These two chapters were adopted in November, 2007:

- Environment
- Infrastructure

#### **Future phases**

Additional policy areas will likely be identified and addressed in future phases of the GDP update. At this time, it is expected future phases could include (as outlined in the table of contents) office development, retail development, economic development and other land uses.

In addition to developing policies for these additional areas, other related initiatives must be completed. In particular, it is especially important that work continue on refining transportation adequacy at a comprehensive, community-wide level, and that this work be part of a comprehensive, long-range integrated land use and transportation plan.

#### **What the GDP document *is* and *is not***

The overall intent of these policies is not only to encourage higher-density development in appropriate locations (i.e. transit station areas and wedge locations), but also to encourage a higher standard of development and design, protective of natural resources and sensitive to community concerns throughout Charlotte-Mecklenburg. The specific applications of these general policies will be included in updated land use plans for specific geographic areas. In addition, it should be noted that:

- This is a *planning* document, not a *regulatory* document. As such, it sets policy, establishes direction, and provides guidance on a wide variety of issues. These policies can be implemented by a variety of means, such as local ordinances and capital improvements programming. Ordinances do not set policy, but rather implement policy.
- Some flexibility will be provided in applying these policies when the intent of the policies is being met.
- All of these policies can be followed, with varying degrees of success, under current zoning regulations. Therefore, it is not the purpose of this document to determine specific revisions to the zoning ordinance. However, this document does recommend that some adjustments to the zoning ordinance be pursued. The conditional rezoning process provides a tool to implement many of these policies, particularly the design guidelines. However, it should be noted that the conditions attached to a conditional district (CD) plan are agreed to *voluntarily* by the petitioner. The petitioner ultimately decides which requests to include on the site plan for rezoning approval.
- The general policies do not locate proposed land use on a map. This locational level of detail will be completed through more specific area plans. A compilation of the currently adopted future land use plans for Charlotte-Mecklenburg is available at the Planning Department. This map is updated as transit station area plans, other area plans and rezonings are adopted to carry out the policies of these GDP.
- The general policies cannot take the place of a comprehensive, long-range integrated land use and transportation plan. They provide the foundation on which such a plan may be launched.

### **The process for development and review**

Several stakeholder groups and interdepartmental/agency staff groups assisted Planning staff with the development of the GDPs. In addition, citizens were given the opportunity to voice their comments and concerns on the draft policies at public meetings during the review and adoption process.

The Charlotte-Mecklenburg Planning Commission served as the official oversight and review committee for the GDP project, and recommended adoption of the GDP to City Council. The Charlotte City Council adopted Phase I of the GDP in November, 2003. Phase II, consisting of Environmental policies and Infrastructure policies, was adopted during November, 2007.

### **Future review**

The adopted policies shall be reviewed at least every five years to ensure they are producing the desired results. Further, as new components of the GDP are completed, it likely will be necessary to update previously completed components to ensure consistency.

## Part One:

### *Adopted Policy Areas*



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## I.

# *Transit Station Area Principles*

Adopted November 2001  
by Charlotte City Council

### **The Transit and Land Use Connection**

- ▶ *Building an integrated land use and transit system is key to managing the rapid growth occurring in the Charlotte-Mecklenburg area and to invigorating existing communities and making them better places to live and work.*

As detailed in the 2025 Integrated Transit/Land Use Plan, Charlotte-Mecklenburg's land use vision focuses future higher density residential and employment growth in transit station areas and major activity centers/hubs where it can be best accommodated by transportation services and other public facilities.

In addition to focusing development in areas that can be well-served by transit, it is important to ensure that the new development takes advantage of access to transit and helps promote transit use in the community. Therefore, this section of the GDP provides guidance for future development and redevelopment at transit station areas.

### **Definition: What is Transit-Supportive Development?**

Transit-supportive development focuses on creating compact neighborhoods with housing, jobs, shopping, community services, and recreational opportunities all within easy walking distance (i.e., within ½ mile) of a transit station. The intent is to create well-designed, very livable communities where people can get from home to such places as the office, grocery store, day care center, restaurant, dry cleaner, library or park without using a car.

Transit-supportive development policies provide direction for developing and redeveloping property around rapid transit stations in a way that makes it convenient for many people to use transit. Such policies focus on land uses, mobility and community design.

### **Applicability**

The following policies apply to the area within a ½-mile walking distance of an identified rapid transit station. Additionally, land use and urban design plans will be developed for

## I. TRANSIT STATION AREA PRINCIPLES

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*Transit Station Area policies promote a mix of complementary land uses.*

the transit station areas along each of Charlotte-Mecklenburg's five rapid transit corridors. These land use and design plans will provide more specific guidance for each station area.

### POLICIES

#### ► LAND USE AND DEVELOPMENT

*Concentrate a mix of complementary, well-integrated land uses within walking distance of the transit station.*

#### **Mixture of Complementary Transit-Supportive Uses**

- Provide a range of higher intensity uses including residential, office, service-oriented retail and civic uses that are transit supportive. Such a mix of land uses increases the attractiveness of the area and increases trip options for transit uses.
- Disallow automobile-oriented uses.
- Provide uses that attract/generate pedestrian activity, particularly at ground floor level.
- Consider special traffic generators—such as cultural, educational, entertainment, and recreational uses—to locate either within or adjacent to station areas.

- Encourage multi-use developments, which include a mixture of uses on the same site. Mixed-use developments, with a mixture of uses within same buildings, are also encouraged.
- Encourage a mixture of housing types.
- Preserve and protect existing stable neighborhoods.
- Encourage development of workforce/affordable housing.

### Increased Land Use Intensity

- Encourage higher densities for new development, concentrating the highest densities closest to the transit station and transitioning to lower densities adjacent to existing single-family neighborhoods. Not only will this allow the most people to have walking access to transit, it also helps to create a focal point around the station and provides an appropriate transition to the adjacent neighborhoods.

- In most cases, minimum densities for new residential development within  $\frac{1}{4}$  mile walking distance from a transit station will be 20 dwelling units per acre (net) or greater. Between  $\frac{1}{4}$  and  $\frac{1}{2}$  mile walking distance, the typical minimum density will be 15 dwelling units per acre (net) or greater.



*Pedestrian connections are important; here, they link a transit station with the urban neighborhood.*

- In most cases, non-residential or mixed-use intensities within  $\frac{1}{4}$  mile walking distance from a transit station will be, at a minimum, 0.75 (net) FAR (floor area ratio) and should yield at least 65 employees per acre. Between  $\frac{1}{4}$  and  $\frac{1}{2}$  mile walking distance from a transit station, the non-residential or mixed-use intensities will be, at a minimum, 0.50 FAR (net) and should yield at least 50 employees per acre.
- In some cases, station area plans will recommend lesser intensities or densities for new development. These lesser intensities might be necessary to preserve existing structures, to insure that new development is consistent with the character of existing transit supportive development, to protect existing neighborhoods, or to mitigate traffic impacts.

## I. TRANSIT STATION AREA PRINCIPLES

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### ► MOBILITY

*Enhance the existing transportation network to promote good walking, bicycle and transit connections.*

#### **Pedestrian and Bicycle System**

- Provide an extensive pedestrian system throughout the station area that will minimize walking distances for pedestrians.
- Eliminate gaps in the station area pedestrian networks.
- Establish pedestrian and bicycle connections between station areas and surrounding neighborhoods.
- Design the pedestrian system to be accessible, safe, and attractive for all users.
- Insure that the pedestrian network will accommodate large groups of pedestrians.
- Utilize planting strips/street trees, onstreet parking, and/or bicycle lanes to separate pedestrians from vehicles.
- Encourage the provision of bicycle amenities, especially bicycle parking facilities.



*A bus stop next to the transit station (above) fosters good pedestrian and bicycle connections with surrounding neighborhoods for both transit modes.*

#### **Street Network**

- Within station areas, design streets to be multi-modal, with an emphasis on pedestrian and bicycle circulation and set vehicular levels of service to reflect an emphasis on pedestrians and bicyclists.
- When necessary, redesign existing street intersections with a greater emphasis on safe and comfortable pedestrian and bicycle crossings.
- Develop an interconnected street network designed around a block system, with blocks a maximum length of 400 feet.
- Insure that the pedestrian network will accommodate large groups of pedestrians comfortably, especially within ¼ mile of the station.
- Consider new mid-block street crosswalks in congested areas where there are long distances between signalized crossings.
- Incorporate traffic calming into the design of new streets.

### Parking

- Reduce regulatory parking requirements in station areas and establish parking maximums.
- Minimize large surface parking lots (greater than two acres) for private development, especially within ¼ mile of the station. Instead of surface lots, well-designed parking decks are preferred.
- Encourage shared parking facilities.

### ► **COMMUNITY DESIGN**

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*Use urban design to enhance the community identity of station areas and to make them attractive, safe and convenient places.*

### Building and Site Design

- Design buildings to front on public streets or on open spaces, with minimal setbacks and with windows and doors at street level instead of expansive blank walls.
- Locate building entrances to minimize the walking distance between the transit station and the building.
- Locate surface parking, with the exception of on-street parking, to the rear of buildings and where necessary, provide pedestrian paths through surface parking to station.
- Design parking structures to include active uses on the ground floor street frontage.
- Typically limit building heights to 120 feet, with the tallest and most intensely developed structures located near the transit stations and buildings adjacent to establish neighborhoods limited to low-rise structures.
- Screen unsightly elements, such as dumpsters, loading docks, service entrances, and outdoor storage, from the transitway.
- Take safety and security concerns into account during design.

### Streetscape

- Design the streetscape to encourage pedestrian activity.
- Include elements such as street trees, pedestrian scale lighting, and benches in streetscape design.
- Place utilities underground whenever possible.



## I. TRANSIT STATION AREA PRINCIPLES

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### Open Space

- Establish public open spaces that act as development catalysts and serve as focal points around transit stations.
- Design open spaces to be centers of activity that include items such as benches, fountains, and public art.
- Orient surrounding buildings onto the open spaces.



## II.

# *Residential Location and Design*

Adopted November 2003  
by Charlotte City Council

### **Applicability**

- ▶ *These residential development policies are based on the adopted Centers and Corridors land use concept of focusing the majority of future higher density development in the transit station areas and key activity centers.*

To implement this concept,

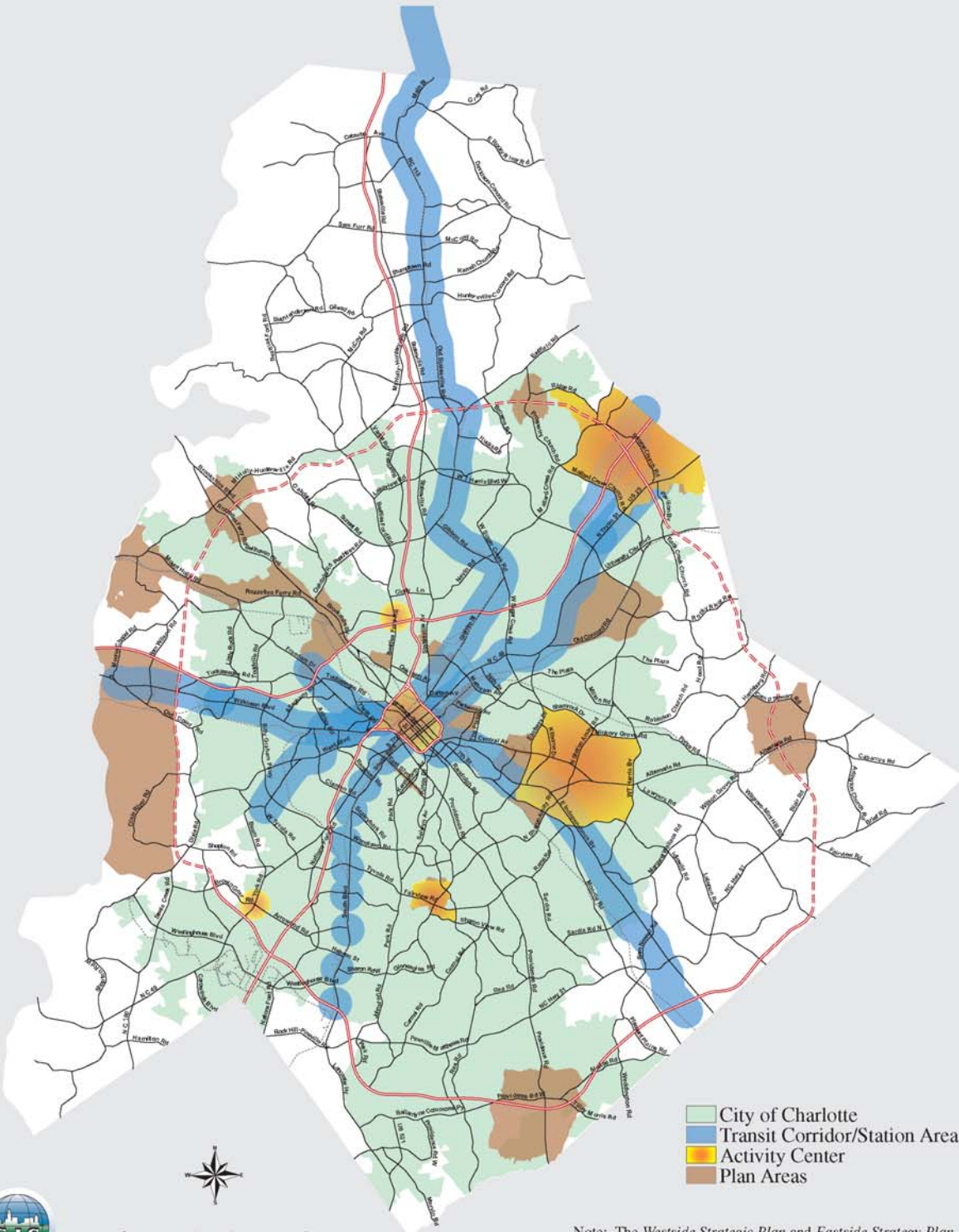
- Transit Station Area Principles have been adopted to guide appropriate development in the **transit station areas**.
- Specific land use plans have been or will be prepared to guide development in the **activity centers**.
- These residential development polices are proposed to guide residential development outside of these areas, in what has often been termed "**the wedges**."

These policies do not apply to the Center City area within the I-277 Loop. In addition, where there is an adopted plan that provides specific guidance for residential density and design, that plan will take precedence over these GDP.

A list of such plans is included for reference with these GDP (*see page 32*). Plans and plan amendments adopted subsequent to these GDP will provide specific density and design guidance that will supercede these GDP.

- ▶ **The map on the following page** illustrates in green the areas where these residential General Development Policies apply.

# General Development Policy Areas



Produced by the Charlotte-Mecklenburg Planning Commission, October 31, 2003.

Note: The *Westside Strategic Plan* and *Eastside Strategy Plan* provide specific density recommendations at key locations that supersede the revised General Development Policy (GDP) criteria for higher density residential development.

### Guiding Principles

- **Establish a balanced land use pattern** that includes a mixture of housing, shopping, employment, and civic uses.
- **Land uses should be connected** through both the pedestrian and street system.
- **Encourage mixed-use development** that has more than one type of use in a single building or on an individual site.



*Two guiding principles: multi-family housing facing outward as part of the neighborhood (left) . . . and land uses connected through the pedestrian and street system (right).*

- **Protect and enhance the character of existing neighborhoods.** New development that is built adjacent to existing neighborhoods should provide a transition to the established neighborhood.
- **Encourage a range of housing types and densities** that will meet the needs of different types of households.
- **Develop multi-family housing as part of the fabric of a larger neighborhood.** Multi-family housing should not be developed as large, inward-oriented complexes.
- **Design development to accommodate the pedestrian and bicyclist, in addition to the automobile driver.** Typically, buildings should be oriented toward the street, with parking located behind buildings instead of between the building and the street.

### Integrating Transportation and Land Use

A key goal of the GDP is to integrate land use and transportation planning. This requires two things. First, people need to have a variety of transportation choices. Second, land uses must be organized so that people will want to *and be able to* use those transportation choices.

Therefore, areas identified for higher density development should have a combination of transportation and land use elements occurring together, which may reduce the need to drive for at least some daily trips, and provide better accessibility for other trips. These elements include such things as sidewalks, bikeways, transit service, interconnected street networks and proximity to complementary land uses,

### Determining Locations for Residential Density Increases

The policies addressing residential location do not distinguish between attached and detached types of housing. In fact, a mixture of housing types is encouraged within developments. To determine if a site is appropriate for an increase in residential density above that allowed under existing zoning, the following process should be used.

- ✓ **Determine if the site is located in a transit station area.**
  - If it is, use guidance provided in the Transit Station Area Principles (pages 11-16) and/or specific station area plan.
  - If it is not, continue.
- ✓ **Determine if specific density and design guidance is provided in an existing plan.** (See list of plans on page 32.)
  - If it is, follow plan guidance.
  - If it is not, evaluate the site using the matrix shown on page 21 for density above 4 dwelling units per acre (a full copy of the form is on pages 80-81 of the Technical Guidance appendix.) (If an existing plan provides specific guidance on one—but not both—density and design, use the specifics provided in the plan and supplement with the GDP.)
- ▶ *Once it has been determined that a subject site is not in a transit station area, and there are no applicable criteria from an existing plan, the matrix should be used to assess the appropriateness of the site as a location for higher density residential development (above 4 dwelling units per acre).*

Note that for density increases up to 4 d.u.a., the point system provided in the matrix is not applicable. The site should be assessed to ensure that sewer and water will be provided appropriately, that the petitioner has met with staff, that an evaluation of the road network has been completed, and that it meets appropriate design guidelines.

*Residential Location and Design Assessment Matrix*

Assessment Criteria	Density Category				
	> 4 up to 6 dua	> 6 up to 8 dua	> 8 up to 12 dua	> 12 up to 17 dua	Over 17 dua
<b>Meeting with Staff</b>					
Yes = 1; No = 0					
<b>Sewer and Water Availability</b>					
CMUD = 2; Private = 1; No = 0					
<b>Land Use Accessibility</b>					
High = 3; Medium = 2; Low = 1					
<b>Connectivity Analysis</b>					
High = 5; Medium High = 4 Medium = 3; Medium Low = 2; Low = 1					
<b>Road Network Evaluation</b>					
Yes = 1, No = 0					
<b>Design Guidelines</b>					
Yes = 4; NA = 4; No = 0					
<b>Other Opportunities or Constraints (see below)</b>					
Comment (no points)					
<b>Minimum Points Needed</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>

The matrix above serves as a site assessment tool. Density categories are listed horizontally across the top of the matrix, and the assessment criteria are listed vertically. A column is provided under each category to rate the proposed site. A recommended minimum number of points for each density category are listed at the bottom of each column. The degree to which a project meets, exceeds, or falls short of the desired minimum will help guide decisions on whether a site is appropriate for a specific density increase **above 4 d.u.a.** A description of each of the assessment criteria shown in the matrix is provided below:

■ **Meeting with Staff**

Review steps and meet with appropriate City/County staff. Part of this review will be to determine if a Traffic Impact Study (TIS) will be needed in addition to the connectivity analysis and the road network evaluation. In addition, the staff encourages the petitioner to meet with neighborhood representatives prior to filing a rezoning petition (no points are assigned for the neighborhood meeting).



## II. RESIDENTIAL LOCATION AND DESIGN

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### ■ Sewer and Water Availability

Determine that public sanitary sewer and water are available to serve the proposed development. These must be available (or will be available at the time the project is constructed), for the proposal to be considered for higher residential densities. (A private sewer system may be considered if the State has previously permitted the system, it has capacity to serve the proposed development, and it is built to CMUD standards. If the private sewer lines are offered for donation to CMUD, the site could receive 2 points.)

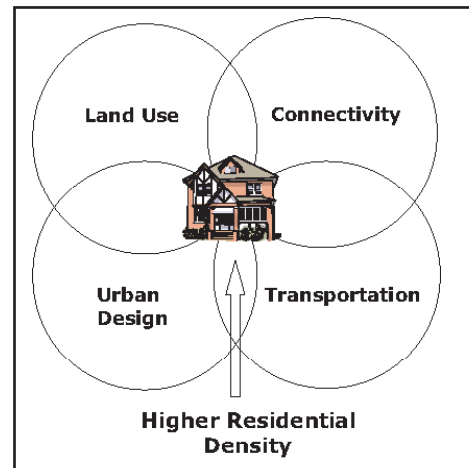
### ■ Land Use Accessibility

Evaluate land use accessibility within  $\frac{1}{4}$  and  $\frac{1}{2}$  mile of the site to determine the number of complementary land uses that either currently exist or are shown on adopted land use plans. (A technical guide included in the appendix documents the methodology used for this criterion.)

- ▶ *High* = at least 2 complementary land uses within  $\frac{1}{4}$  mile, and at least 3 additional complementary land uses within  $\frac{1}{2}$  mile
- ▶ *Medium* = 3 complementary land uses within  $\frac{1}{2}$  mile
- ▶ *Low* = 1 complementary land use within  $\frac{1}{2}$  mile

Complementary land uses are defined as the following:

- Public or private school with at least 200 students
- Public recreation center, YMCA or YWCA (see also private recreation under “Opportunities and Constraints” on page 23)
- Neighborhood serving retail
- Employment concentration (2000 employees within  $\frac{1}{4}$  mile or 5000 within  $\frac{1}{2}$  mile)
- Hospital, medical or dental facility
- Place of worship
- Post office or staffed postal or package facility (public or private)
- Library



### ■ Connectivity Analysis

Complete a connectivity analysis for the  $\frac{1}{2}$  mile area that considers roadways, transit, sidewalks, and bicycle facilities. (A technical guide is included in the appendix to document the methodology used in this step.)

- *High* = at least 600 segments/points = (5 points)
- *Medium-High* = 500 to 599 segments/points = (4 points)
- *Medium* = 400 to 499 segments/points = (3 points)
- *Medium-Low* = 300 to 399 segments/points = (2 points)
- *Low* = less than 300 segments/points = (1 point)



Undeveloped property within the 1/2 mile assessment area will be assigned connectivity points based on how the street network would likely be built under existing zoning and subdivision requirements.

### ■ Road Network Evaluation

Evaluate the existing and planned roadway network surrounding the site. This road network evaluation must show that there either exists or could exist a network of lateral and radial thoroughfares/collectors spaced no more than 1/2 mile apart within the defined area. Note that other connecting roads may also be considered under unique circumstances when it can be shown that similar mobility is provided.

In addition, the site should be designed to meet the block spacing guidance provided in the Urban Street Design Guidelines—although this will not apply until those guidelines are adopted. (A technical guide is included in the appendix to document the methodology used in this step.)

### ■ Design Guidelines

Review the site plan to determine that the design guidelines provided herein are being addressed.

### ■ Opportunities and Constraints

The opportunities and constraints listed below must be considered in evaluating a site for higher residential density. These opportunities and constraints could alter the overall site evaluation in the following ways:

- 1) a site that has not scored the minimum number of points may be deemed appropriate for a density increase;
- 2) a site that has scored the minimum number of points may be deemed inappropriate for a given density, or for any density increase; or,
- 3) a site that has scored the minimum points for some density increase may be deemed appropriate for an even higher density.

*Opportunities and Constraints:*

- How much higher density exists or is planned/approved for area, and will additional higher density development have a negative impact on the area (i.e., neighborhood stability, socioeconomics, housing diversity)?
- Does the proposal support redevelopment/revitalization goals?
- Does the size/impact of proposal indicate need for plan or plan amendment?
- Does proposal tear down existing residences in established neighborhoods?
- Is the proposal a small site “sandwiched” between higher intensity uses?
- Is the proposal internal to an established neighborhood developed at a lower density than the proposal?
- Is the site being redeveloped from a residential or non-residential use? If so, is it appropriate to exceed density maximum given the intensity of existing zoning, land use and surrounding uses?

## II. RESIDENTIAL LOCATION AND DESIGN

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*Projects that support re-development and revitalization goals, as this one does on North Davidson, may be appropriate for higher density.*

### *Opportunities and Constraints (continued)*

- If private recreational facilities are available and accessible to the public, they may be counted as a complementary land use in the Land Use Accessibility Criteria. (This may include a recreational facility provided as part of the development if it is sized to meet the needs of the development, includes more than one active recreational use and is generally available to all of the residents.)
- Is the site near a university or similar use that generates the need for additional higher density residential development that may augment the land use accessibility analysis?
- Is the proposal for age-restricted senior living?
- Is the site located along a transit route with frequent service?

### ■ **Density Bonus**

If a site has met the minimum points for a specified density, fronts on a thoroughfare and is within 1 mile of a rapid transit station area (but outside of the area included in the station area plan), it may be appropriate for an increase in density of 3 dwelling units per acre (d.u.a.).

A site may also qualify for other density bonuses that already exist, or may be adopted in the future:

- 30% of the site is dedicated for usable open space, including “tree save areas” if applicable (up to one additional unit)
- S.W.I.M. (Surface Water Improvement Management)
- Tree Save (as per Charlotte’s Tree Ordinance)

### General Design Guidelines for Residential Development

The importance of aesthetics and good design in an increasingly urban community should not be overlooked in the haste to grow.

- ▶ *The quality, scale and relationship between land use, structures and site design are of vital importance in creating a healthy and livable community.*

Close attention to details enhances the community and makes it more livable, just as a healthy economy and appropriate land use patterns do.

Urban design guidelines and expectations give direction to development and conservation. The purpose is not to make everything conform to one style, but rather to help cultivate those qualities that make Charlotte-Mecklenburg attractive and livable. The guidelines were developed with the following objectives in mind.

- To reflect the community's desire for sound design in new development, in the re-use of old buildings, and in public spaces;
- To promote the health, safety, and welfare of the community;
- To be sensitive to the natural environment, especially by preserving and protecting key resources, retaining natural areas, providing open space, preserving and protecting air quality, water quality and tree canopy, and minimizing impervious cover, as feasible;
- To create a more pedestrian and bicyclist friendly community;
- To be flexible enough to allow creativity; and
- To be easily understood by the public as well as by designers and developers.

A key part of the determination of whether a particular land use is appropriate at a given location is a review of the proposed design that addresses how the development is to be integrated into the existing landscape. The following guidelines are provided to assist in formalizing such a review and making it a more predictable process for all those involved (developers, adjacent property owners, neighborhood groups, elected officials). In some instances, staff may determine that not all of the design guidelines provided would be applicable to a given site. This is particularly true for very small sites.

Additional guidance will also be provided in the *Urban Street Design Guidelines* now being developed. The new *Urban Street Design Guidelines* will provide a framework for defining appropriate transportation elements for streets within residential areas, as well as for surrounding areas. They will address specific elements, dimension and characteristics of various categories of street types. (The guidelines will not apply until they are adopted by Charlotte City Council.)

## II. RESIDENTIAL LOCATION AND DESIGN

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Compliance with the GDP guidelines for residential development will occur primarily through the rezoning process, with planning staff working with petitioners to ensure consistency with the guidelines. For properties that do not require a rezoning, compliance with the guidelines, while strongly encouraged, is currently voluntary. Changes to ordinances will be pursued, subsequent to the adoption of this document, to help ensure that development is built according to the intent of these guidelines.

Additionally, these guidelines will be used in developing area plans for specific parts of our community. They will provide guidance during the area planning process, as staff works with area stakeholders, as well as during the plan adoption process as City Council considers approving the plans as public policy. It should be noted that while the GDP will be used for guidance, recommended density may be higher or lower than what a particular score may indicate.

In order to evaluate the site design, a site plan must be provided at the time a rezoning petition is filed. Elevations must also be provided for multi-family and most attached single-family development, prior to the public hearing, unless staff determines that there is no need for them. (For single family detached development, elevations will not be required, but language should be included on the site plan to ensure that the design guidelines will be met.)

### ■ DESIGN GUIDELINES FOR SINGLE FAMILY DETACHED DEVELOPMENT

- ▶ *These guidelines for single family developments are intended to ensure that new development and redevelopment is designed to enhance the overall community by creating a comfortable walking environment, providing for a good circulation system and respecting the natural environment.*

Existing regulations such as the recently adopted residential tree ordinance already address many of these design issues, and are therefore not repeated here. In addition, once adopted, the new Urban Street Design Guidelines will address specific elements, dimensions and characteristics of the various categories of street types. The following are proposed in addition to such existing or proposed regulations and policies.

#### *Design to Encourage Pedestrian Activity*

1. Blend the scale and set-backs of urban infill with existing development.
2. Orient buildings to the street or public/common open space and provide pedestrian access to the street. If the development is on a thoroughfare, reverse frontage is acceptable if appropriate screening and pedestrian access to the thoroughfare is provided. For development fronting a thoroughfare, provision of a secondary access point is encouraged.



*Wider sidewalks in residential areas make walking a safer and more pleasant option.*



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*Design to Encourage Pedestrian Activity (continued)*

3. Discourage tearing down historic or architecturally significant structures.
4. Provide bicycle parking in appropriate common areas (e.g., playground, swimming pool).

*Provide A Good Circulation Sytem*



1. Provide pedestrian and bicycle connections to parks, greenways, bikeways and trails.
2. Provide direct pedestrian and bicycle connections between all abutting or adjacent developments including retail centers and transit stops.
3. Design streets considering pedestrian safety and comfort.

*continued next page*

*Pedestrian and bicycle connections between developments (including retail centers) are important.*

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## II. RESIDENTIAL LOCATION AND DESIGN

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4. Ensure that collector streets align with existing collector streets at thoroughfare intersections, to promote safer crossings for pedestrians, cyclists and automobiles.
5. Encourage shared alleys and other forms of access.
6. Design the street system to calm traffic.

### *Respect the Natural Environment*

1. Reserve a meaningful amount of the site as common open space. At least half of this should be usable and accessible. (Parking areas and streets are not classified as open space.)
2. Incorporate functional, unique, natural and/or historical elements into the open space.
3. Address preservation of steep slopes along perennial streams or adjacent to significant natural landscape features in site plan submittals.



*Providing open space can increase the livability and marketability of residential areas.*

### ■ DESIGN GUIDELINES FOR MULTI-FAMILY AND ATTACHED SINGLE-FAMILY DEVELOPMENT

These guidelines for multi-family and attached single-family developments are intended to ensure that new development and redevelopment is designed to enhance the overall community. Thus, designs should create a comfortable walking environment, provide for good circulation system and respect the natural environment.

Existing regulations already address many of these design issues, and are therefore not repeated here. In addition, the new Urban Street Design Guidelines, once adopted, will address specific elements, dimensions and characteristics of the various categories of street types. The following are proposed in addition to such existing or proposed regulations and policies.



*Multi-family development*

#### *Design to Encourage Pedestrian Activity*

1. Provide pedestrian amenities such as pedestrian scale lighting and street furniture to enhance the pedestrian environment.
2. Blend the building scale and set back with existing development.



*Pedestrian scale lighting and furniture*

3. Orient buildings to the street or public/common open space and provide pedestrian access to the street.
4. Avoid blank walls along pedestrian circulation areas.
5. Discourage tearing down historic or architecturally significant structures.
6. Encourage on-street parking to reduce the size of surface parking lots.
7. Provide bicycle parking.

## II. RESIDENTIAL LOCATION AND DESIGN

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### *Provide a Good Circulation System*

1. Provide more than one vehicular entry point to a development.
2. Provide pedestrian and bicycle connections to parks, greenways, bikeways, and trails.
3. Provide connectivity by including direct vehicular, pedestrian and bicycle connections between abutting or adjacent developments, including retail centers and transit stops.
4. Design streets considering pedestrian safety and comfort.
5. Encourage shared driveways and other forms of secondary access to single-family attached developments.
6. Ensure that collector streets align with existing collector streets at thoroughfare intersections to promote safer crossings for pedestrians, cyclists and automobiles.
7. Design developments around an internal street system with at least one primary street that functions as the vehicular and pedestrian spine of the development.
  - Include parallel parking, street trees and sidewalks on the primary street(s). (Parking should not be located between the curb and buildings along the street.)
  - Provide driveways or secondary streets to function as the main connection between parking lots and the primary street(s).
  - Provide sidewalks on secondary streets, even if they are private streets.



### *Respect the Natural Environment*

1. Provide a meaningful amount of useable and accessible open space.
2. Incorporate functional, unique and/or natural elements in the open space.
3. Address the preservation of steep slopes along perennial streams or adjacent to significant natural landscape features in site plan submittals.
4. Preserve at least 10% of the site as a "tree save area," consistent with the intent of the residential tree ordinance for single family development.







### *Checklist for Assessing the Design of Residential Development*

#### ■ SINGLE FAMILY DETACHED DEVELOPMENT

##### *Design to Encourage Pedestrian Activity*

- Scale
- Building Orientation
- Historic Character
- Bicycle Parking

##### *Provide a Good Circulation System*

- Pedestrian/Bicycle Connections
- Street Design
- Collector Street Alignment
- Shared Access
- Traffic Calming

##### *Respect the Natural Environment*

- Open Space
- Steep Slopes

#### ■ MULTI-FAMILY AND SINGLE FAMILY ATTACHED DEVELOPMENT

##### *Design to Encourage Pedestrian Activity*

- Pedestrian Amenities
- Scale
- Building Orientation
- Blank Walls
- Historic Character
- Parking (Bicycle and Automobile)

##### *Provide a Good Circulation System*

- Multiple Entry Points
- Pedestrian/Bicycle Connections
- Connected Street System
- Street Design
- Shared Access
- Collector Street Alignment
- Internal Street System

##### *Respect the Natural Environment*

- Open Space
- Steep Slopes
- Trees

## II. RESIDENTIAL LOCATION AND DESIGN

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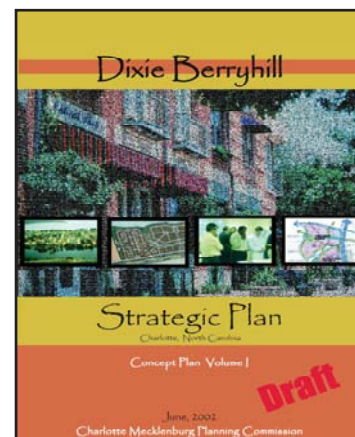
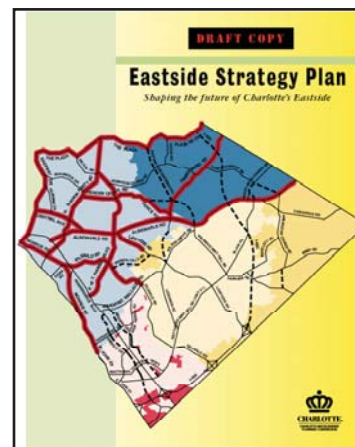
### Plans That Supersede The GDP For Residential Density

The following is a list of area plans that have been adopted or that are currently under development, that provide specific guidance regarding appropriate residential densities for the area they encompass.

- ▶ *The guidance provided regarding residential densities in these plans should supersede that provided in the 2003 updated General Development Policies (GDP).*

Some of the plans listed below also provide at least limited design guidance. While the specific design guidelines provided in these plans should be followed, it should be supplemented by the guidelines provided in this 2003 GDP. Where the GDP and a specific area plan (*that predates the GDP*) are in conflict, the more rigorous guidance should take precedence.

- Central Avenue Pedscape Plan, underway
- Eastland Area Plan, 2003
- Belmont Area Revitalization Plan, 2003
- Dixie-Berryhill Strategic Plan, 2003
- Albemarle Road/I-485 Interchange Study, 2003
  
- Newell Area Plan, 2002
- Thomasboro/Hoskins Area Plan, 2002
- Brookshire Boulevard/I-485 Area Plan, 2002
- East Boulevard Pedscape Plan, 2002
- Washington Heights Neighborhood Plan, 2002
- Optimist Park Neighborhood Plan, 2002
  
- Eastside Strategy Plan, 2001 \*
- Statesville Avenue Corridor Area Plan, 2001
  
- Northeast Area Plan, 2000
- Providence Road/I-485 Area Plan Update, 2000
- SouthPark Small Area Plan, 2000
- Westside Strategic Plan, 2000 \*
  
- Prosperity Church Road Villages Plan, 1999
- Briar Creek/Woodland and Merry Oaks Small Area Plan, 1998 \*
- SouthEnd/Uptown Rail Corridor, 1998
- Oakhurst Land Use and Zoning Plan, 1996
- Mt. Holly Road Special Project Plan, 1994





## II. RESIDENTIAL LOCATION AND DESIGN

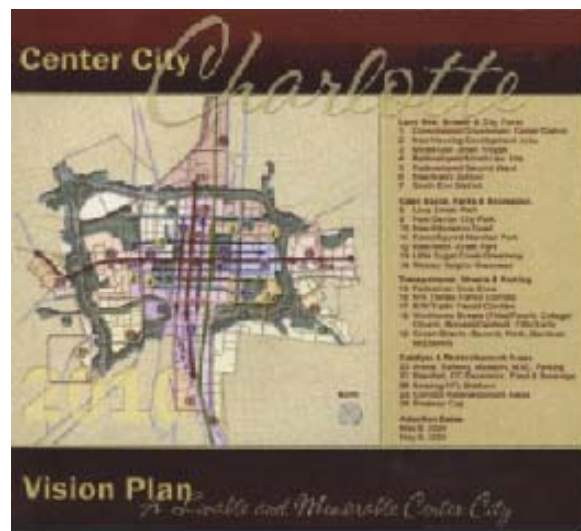
- Northeast District Plan, 1996\*\*
- Central District Plan (includes Park Road Corridor Plan by reference), 1993\*\*
- South District Plan, 1993\*\*
- Southwest District Plan, 1991\*\*
- East District Plan, 1990\*\*
- Northwest District Plan, 1990\*

\* These plans provide specific density guidance for some areas, but not for the entire area they encompass. The area plan guidance should be used for those areas it addresses and the GDP should be used for areas not specifically addressed in the area plan. (For example, the Eastside Strategy Plan provides specific density guidance only for the properties within the study area corridors and outside of the boundaries for the rapid transit corridors.)

\*\* In most instances specific density guidance is not provided in the district plans and the GDP should be used to guide the location of appropriate densities. However, in a few instances, specific density guidance is provided and should supercede the GDP. (Note that some of the district plans discuss base density. If no additional density guidance is provided, other than the base density, it is appropriate to apply the GDP.)

*Note:* The GDP do *not* apply to the area within the I-277 loop. Specific plans cover this area including the:

- Center City 2010 Vision Plan (2000)
- First Ward Master Plan (1997)
- Second Ward Plan (2002)
- Third Ward Plan (1997)





### III.

## *Retail-Oriented Mixed/Multi-Use Centers*

Adopted November 2003  
by Charlotte City Council

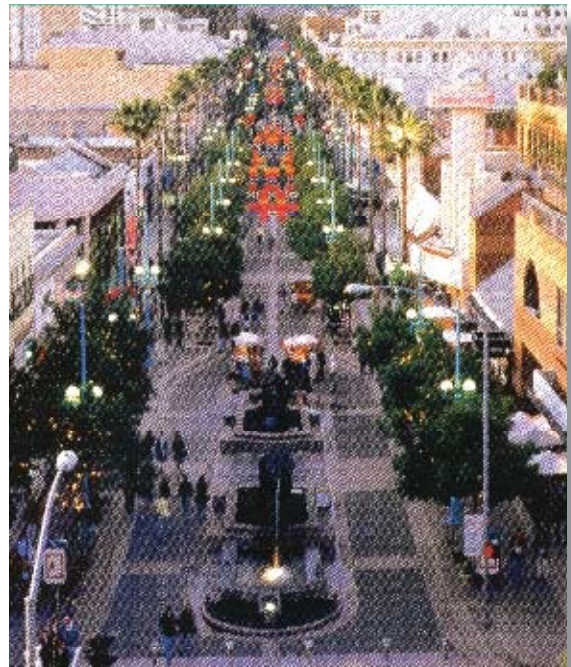
#### Definition

- ▶ *The retail-oriented mixed/multi-use centers should be a focal point for the surrounding community, providing retail and other services in a pedestrian-oriented, compact, mixed use setting.*

The centers should be comprised of compact buildings that complement the surrounding neighborhoods, and are supported by transportation networks that provide for a variety of travel choices (i.e., automobile, bicycle, transit, pedestrian). Ideally, the centers should be designed around a square, plaza or other open space that can serve as a focus of community activities.

In general, the mixed/multi-use centers should provide retail (such as eating establishments, personal services, food stores and banks), office, civic, and residential uses within comfortable walking distance of each other. The specific type of mixed/multi-use center (convenience, neighborhood, community, regional or super-regional) will determine the variety of uses necessary.

These centers should be well integrated into the surrounding neighborhood and developed around a pedestrian-oriented street. The internal street system may be a private street,



*Centers should be designed around a plaza or shared open space (above), or developed around a pedestrian-oriented street (below).*



### III. RETAIL-ORIENTED MIXED/MULTI-USE CENTERS

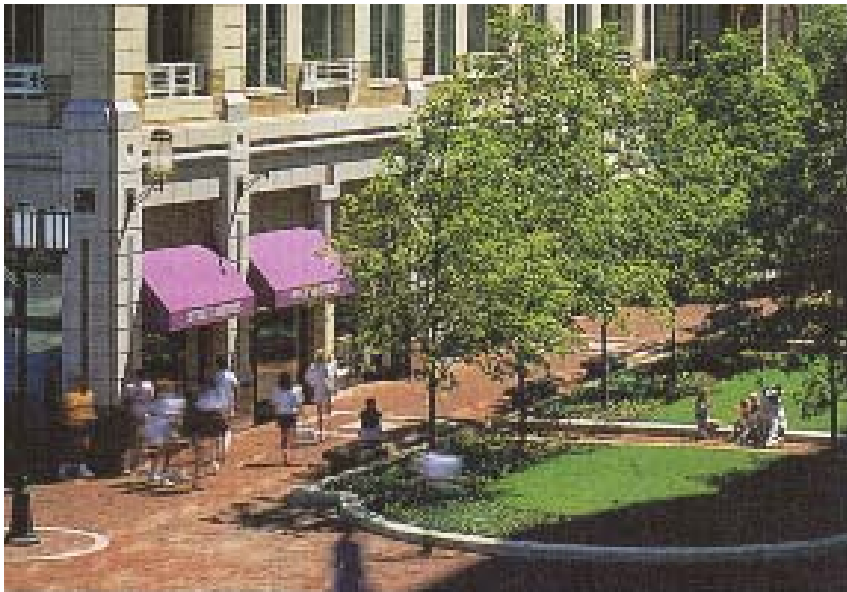
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but should be designed to look and function like a public street. Some auto-dependent uses may be appropriate in these centers, but should be located away from the center of pedestrian activity.

The core of the centers should contain the most intense development, possibly vertically integrated, and be the center of pedestrian activity. The core area typically radiates 1/8 to 1/4 mile. Development intensity lessens as it moves away from the core area to the edge, providing the potential for a variety of housing types transitioning to predominantly single family neighborhoods seamlessly connected to the core by pedestrian-friendly streets.

#### Applicability

Locations for retail-oriented convenience, neighborhood, community, regional and super-regional centers are identified on adopted land use plans. (The District Plans, as well as some area plans, typically note these as retail centers.) These General Development Policies will be applied to the development of new centers at these identified locations, and will also be used to evaluate new locations during the area planning process.



Neighborhood and convenience center locations increasingly are being identified through the development process. Therefore these policies will also be applied to neighborhood and convenience centers during the rezoning review process.

Redevelopment of existing retail centers is strongly encouraged and will be evaluated on a case-by-case basis. General guidelines for redevelopment are provided herein to help ensure that such redevelopment is consistent with the overall intent of the GDP.

While future retail uses are encouraged to be developed in “centers,” these policies recognize that there will still be appropriate “non-center” locations for some retail uses as indicated on adopted land use plans. (More specific policies will be developed in the future to address freestanding retail development.)

#### Guiding Principles

##### *Location*

- Future retail development is strongly encouraged to locate in existing commercial areas (areas where retail is already built and could be redeveloped or where property is already zoned or planned for retail land uses), especially where a center can be created.
- Identification of new locations for retail-oriented centers larger than the neighborhood size center will occur through the area planning process.

This process will consider the impact of new centers on existing land uses, particularly existing retail uses, including vacant/underutilized retail areas. In addition, this process will seek to take advantage of the existing and planned transportation network in identifying new locations for retail-oriented development.

##### *Land Uses*

- Retail-oriented centers should contain a mixture of land uses that includes residential components, or will enhance an existing mixture of services and uses, to provide a compact development with living, shopping, and employment opportunities. Public amenities and facilities including recreation, education, public art, and cultural activities are also encouraged to further enrich this mixture.

##### *Design*

- Centers should be internally and externally convenient and accessible to different modes of transportation and designed so they are accessed from surrounding neighborhoods by using local streets, sidewalks and paths. They should be designed to encourage pedestrians to walk between the various uses within the center, including any free-standing single tenant buildings.



*The photo simulation shows how an existing shopping center (above) can be a redevelopment opportunity (below).*





### III. RETAIL-ORIENTED MIXED/MULTI-USE CENTERS

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- Centers should make efficient use of land by providing for more development intensity, reduced setbacks and alternatives to surface parking (such as structured, shared parking, when feasible). The centers should complement related buildings and uses, especially when sites are being redeveloped. In addition, centers should be designed to incorporate the natural environment in the development.



*Retail-oriented centers should contain a mixture of land uses.*

#### **Policies for Redevelopment**

Redevelopment of abandoned or under-utilized retail centers is encouraged to help stabilize and revitalize the surrounding community. Because successful redevelopment strategies must be site-specific, these projects will be evaluated on a case-by-case basis within their specific community context. However, the following guidelines will be used in this evaluation to ensure that the redevelopment is consistent with the overall intent of the General Development Policies.

- **Compact and Integrated Uses:** The center should be compact and interconnected, instead of large buildings with large parking lots in front of them. Uses should be integrated rather than each use being placed in isolated pods.
- **Parking:** Large surface parking lots should be broken down into smaller pods with extensive landscaping. Surface, shared and on-street parking are encouraged.

- **Pedestrian Mobility:** An extensive pedestrian network should be provided. Both internal and external streets should be designed with pedestrian amenities such as sidewalks, enhanced crosswalks and pedestrian level lighting. Pedestrian connections should be provided between the front doors of buildings and the sidewalks along streets.
- **Street Network:** Redevelopment of larger centers should include an expanded street network to serve as the organizing framework of the development and to break up the large, monolithic blocks of land. New buildings should front on these streets with doors and windows facing the street.
- **Appearance and Pedestrian Orientation:** Redevelopment should focus on improving the appearance and pedestrian-friendliness of abandoned and underutilized commercial areas.
- **Mix of Uses:** When the site is of adequate size, consider including a mix of uses **within the center** such as residential, retail, office and civic. This can be accomplished through demolition and reconstruction or through the addition of new development to the currently developed site. Excess parking could be converted into building sites.
- **Additional Development Rights:** In redeveloping a retail center, additional development rights should be considered (especially for office, residential or civic uses) based on how well the site plan meets the intent of the general design guidelines provided herein, as well as how well transportation impacts are addressed. In some cases it may be appropriate to add additional development to the site that would result in a total square footage greater than the maximum for the specific type of center (i.e. neighborhood, community, regional, super-regional). Additional retail development may be particularly appropriate within Route 4.
- **Residential Densities:** If property is redeveloped only with residential uses, the existing zoning, transportation impacts and guidelines provided in the residential location and design section of these General Development Policies (*pages 17-33 of this document*) should be used for guidance in evaluating the proposed residential densities. It should be noted that one factor that is considered in the residential guidelines is whether or not the site is being redeveloped. It may be appropriate to exceed the density indicated in the matrix on page 21.
- **Open Space:** Open space should be incorporated into larger developments and can be used as a public gathering space and an organizing feature for the development.

#### General Design Guidelines

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*Note:* These guidelines will be used in conjunction with the policies provided for each type of center — convenience, neighborhood, community, regional and super-regional. Please note that these guidelines do not apply to redevelopment sites. These guidelines should be supplemented with those for single and multi-family development for corresponding components of a retail-oriented mixed/multi-use center.

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- ▶ *The following guidelines for retail-oriented mixed/multi-use developments are intended to ensure that new development is designed to encourage pedestrian activity, reduce vehicle trips, encourage transit and promote long-term economic vitality.*

*Thus, designs should help tie together complementary land-uses, create a comfortable walking environment, provide for good vehicular circulation, encourage transit use and respect the natural environment.*

#### *Transportation/Connectivity*

Well-designed retail-oriented mixed/multi-use centers are integrated with the surrounding community, easily accessible and have a good internal circulation system for a variety of travel modes. When centers are integrated with surrounding areas through multiple travel connections, people can choose among alternative routes and modes, potentially reducing congestion on the thoroughfares and the need to bring an auto on-site at all.

By providing well-designed internal circulation and accessibility for all modes, particularly for the pedestrian, it becomes possible for people who do drive onto the site to “park once” and complete their activities by walking. Thus, a well-designed site has the

potential to reduce congestion, encourage walking, and provide a safe, attractive, and lively atmosphere for all users.

The new *Urban Street Design Guidelines* provide a framework for defining appropriate transportation elements for streets within centers and in surrounding areas. Please refer to those guidelines for specific elements, dimensions, and characteristics of pedestrian-oriented streets. (These guidelines will not apply until adopted by Charlotte City Council.)



*Access from and to surrounding neighborhoods should be “low key” so that it primarily serves residents of the immediate area. Rosedale, in northern Mecklenburg, is a retail center (see photo on page 49) connected to this residential development.*

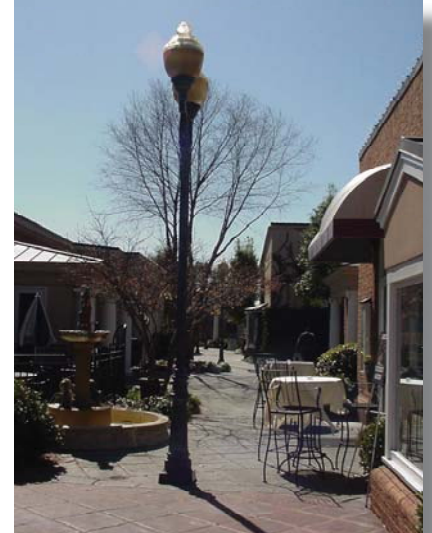
The following are the major transportation-related considerations for a well-designed center, and are provided as guidelines (not requirements) to implement the intent of these policies:

► **Pedestrians**

Pedestrians need a comfortable, safe, secure, and efficient pedestrian network into and throughout the center. They need well-defined, direct routes between activities, sufficiently buffered from moving vehicular traffic, but providing convenient access to and from the other modes. The center should include sufficient space for pedestrian movement and congrega-



*Pedestrian crossing*



*Sidewalks that accommodate outdoor dining*

tion, as well as points of interest to encourage walking. The following are guidelines (not requirements) provided to implement the intent of the policies.

1. Create an interconnected system of sidewalks.
2. Minimize the length of internal street blocks and create an organized street pattern.
3. Encourage shared driveways and alleys within the development.
4. Provide pedestrian connections to any nearby parks, greenways, bikeways and trails.
5. Design the internal streets considering pedestrian safety and comfort.
6. Provide an organized sidewalk system to accommodate ample room for people to circulate, have outdoor dining, and to congregate.
7. Provide ample space for furnishings such as lighting, receptacles, furniture artwork and trees.
8. Implement a clear “way-finding” signage system for both automobiles and pedestrians.
9. Create buildings with transparent openings, ornamentation and architectural character. Create entrances that have pedestrian interest.
10. Provide a pedestrian circulation area in the design of parking lots (for example, include planted medians containing pedestrian pathways).



### III. RETAIL-ORIENTED MIXED/MULTI-USE CENTERS

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#### ► Motorists

Visitors entering the site by automobile need multiple access points, clearly defined travel routes within the site, and easily accessible parking. Recognizing that motorists will become pedestrians once on-site, movement between parking facilities and the on-site activity areas should be safe, secure, and attractive. The following are guidelines (not requirements), provided to implement the intent of the policies:

1. Establish a central vehicular access from the more auto-oriented street and provide secondary access options from the minor streets.
2. Implement a clear “way-finding” signage system for automobiles.
3. Design parking lots on a street/block pattern, allowing breaks in larger lots to enable greater vehicular and pedestrian movement.
4. Keep the amount of parking as close to the minimum as possible, as needed to encourage pedestrian mobility.
5. Consider the feasibility of providing structured parking (subject to economic and locational considerations) rather than surface parking to conserve land, minimize impacts on the environment, and accommodate pedestrian circulation.
6. Include active commercial or residential uses in parking decks fronting pedestrian circulation areas.
7. Design access locations to and from the surrounding neighborhood so that their appearance is residential in character.



#### ► Cyclists

Cyclists need facilities that buffer them from higher speed vehicular traffic and provide as few conflict points with turning vehicles as possible. For both cyclist and pedestrian safety, bicycle facilities should also be buffered from pedestrian facilities. Cyclists also need safe, secure parking facilities that, by their location and design, recognize that the cyclist is also a pedestrian once parked on-site. The following are guidelines (not requirements), provided to implement the intent of these policies:

1. Provide bicycle connections to nearby parks, greenways, bikeways and trails.
2. Include bicycle parking in accordance with guidelines provide in the *Charlotte-Mecklenburg Bicycle Transportation Plan* (1999).

#### ► Transit Users

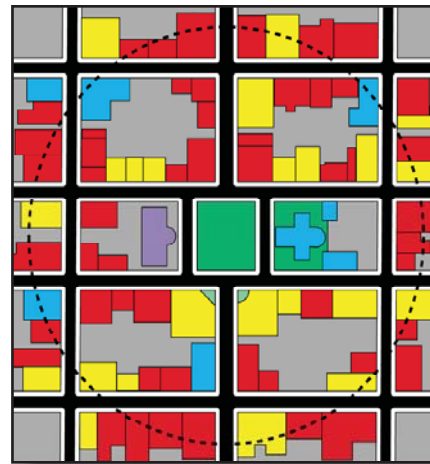
Visitors arriving via transit should be considered pedestrians, with the added need for safe, secure, comfortable waiting facilities if transit access is on-site or adjacent to the site.



#### *Site and Building Designs*

Architecture and landscape design define streets and public spaces as places of shared use. Streets lined by buildings and trees rather than parking lots provide a more interesting and safer environment. The following are guidelines (not requirements), provided to implement the intent of these policies:

1. Connect the site to surrounding land uses with pedestrian and vehicular circulation, landforms, and landscaping.
2. Orient buildings to the street if the center is located on a pedestrian-oriented type street and provide pedestrian access to the street at regular intervals.
3. Arrange the buildings on the site in an orderly block configuration that enables future expansion and redevelopment (no super blocks).
4. Discourage tearing down historic or architecturally significant structures.
5. Integrate landscaping with seating along facades when possible and, when practical, work to integrate the existing tree canopy into the site design.
6. Break down the mass of the building horizontally and vertically to provide for human scale and visual interest.
7. Locate dumpsters and service areas away from surrounding residential uses.



*Design buildings and parking lots on a street pattern that allows redevelopment.*

#### *Natural Environment*



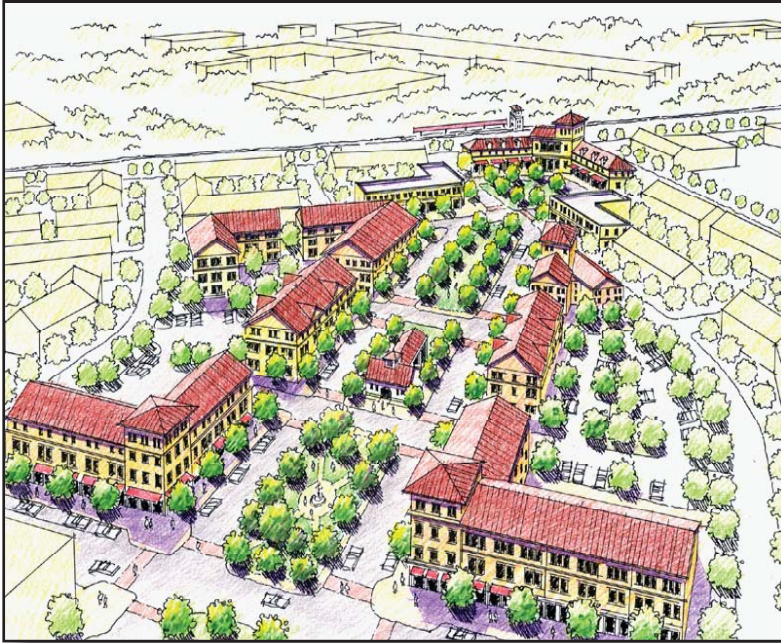
Site development should respect the natural environment. Measures to retain naturally occurring landscape forms, vegetation and drainage systems should be undertaken.

The following are guidelines (not requirements) for implementing the intent of these policies:

*Accessible and useable common open space should be reserved on the site.*

### III. RETAIL-ORIENTED MIXED/MULTI-USE CENTERS

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*Centers should be well-integrated with the surrounding residential areas.*

1. Address the preservation of steep slopes along perennial streams, or adjacent to significant natural landscape features in site plan submittals.
2. Reserve a meaningful amount of the site for use as common open space/urban open space. The space needs to be useable and accessible. Integrate the tree canopy, when practical, into the open space.
3. Use a bridge rather than a culvert at existing creeks, where possible. Piping creeks should be avoided and channelization should be minimized.
4. Consider the use of pervious pavement systems for large centers that require peak season parking. This is strongly recommended adjacent to environmentally sensitive areas or where a parking structure is not feasible.
5. Retain existing landscaping where possible. Mass clearing is not typically preferable. Existing tree canopy should be preserved where practical.

#### *Freestanding Single Tenant Buildings*

A contextual design approach is essential in developing freestanding single tenant buildings (including co-branded uses). A contextual design is one that is sensitive to the surrounding neighborhood environment, including both built and natural conditions.

Freestanding single tenant buildings are classified as one of the following:

■ **Independent**

The building functions independently of the surrounding complex and is usually disconnected from the adjacent development by drive-through lanes, parking areas, alleys and/or driveways. More than one building may be part of an independent cluster if the buildings within the cluster are well-connected to each other.

■ **Interconnected (pedestrian)**

The building shares parking and **at least one** site amenity such as a plaza, fountain or pedestrian pathway system, with other buildings in the complex. These buildings function, collectively, as a compact “village” with common pedestrian connections and open space. The title “interconnected” refers to pedestrian connectivity. A pedestrian pathway system could qualify as providing the necessary connectivity. (Not all the amenities listed are required to be considered an interconnected freestanding single tenant building.)

One *independent* freestanding single tenant building will be allowed in the neighborhood size center. A maximum of two independent freestanding single tenant buildings will be allowed in the community center. Up to three *independent* freestanding single tenant buildings will be allowed in the regional and super-regional size centers.

There will be no limit on the number of interconnected freestanding single tenant buildings in any of the size centers. However, to be considered interconnected, the following design guidelines must be addressed:

1. Design buildings so they relate to the overall scale, height and configuration of the center.
2. If drive-through windows and services are included in interconnected freestanding buildings, they must not compromise pedestrian circulation.
3. Design to encourage (and facilitate) pedestrians to walk to the freestanding building from other buildings within the center. The connections should be directly accessible without creating conflicts with automobiles by providing safe pedestrian pathways and crossings.
4. 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.
5. The site layout should be clustered in a village arrangement around shared amenities.

## *Checklist for Assessing the Design of Retail-Oriented Mixed/Multi-Use Centers*

### GENERAL DESIGN GUIDELINES

#### *Transportation/Connectivity*

##### **Pedestrians, Cyclists and Transit**

- Interconnected Sidewalk System
- Short Block Lengths
- Organized Street Pattern
- Pedestrian/Bicycle Connections
- Street Design for Pedestrian Safety
- Pedestrian Pathways
- Ample Sidewalk Width
- Clear Way-Finding Signage
- No Blank Walls
- Pedestrian Circulation in Parking Lot
- Bike Parking
- Transit Access

##### **Motorists**

- Central Vehicular Access
- Clear Way-Finding Signage
- Parking Designed on Block Patterns
- Minimized and/or Structured Parking
- Active Uses in Parking Decks
- "Low Key" Neighborhood Access

#### *Freestanding Single Tenant Buildings*

- Scale, Height and Configuration
- Drive-Throughs and Their Impact Minimized
- Pedestrian Safety
- Aesthetics
- Shared Amenities

#### *Site and Building Design*

- Connections to Surrounding Uses
- Building Orientation
- Block Pattern
- Historic Significance
- Landscaping
- Building Massing
- Dumpster Location

#### *Natural Environment*

- Preservation of Steep Slopes
- Open Space (useable/accessible)
- Bridge vs. Culvert
- Pervious Pavement for Overflow Parking
- Existing Landscaping Retained
- Tree Canopy



#### Policies For Types Of Centers

#### *Convenience Size Centers*

##### Description (Size and Use)

- *Convenience Size Centers* generally are mixed use centers that contain small-scale retail and often office uses. The retail uses focus on personal services and convenience goods that meet the day-to-day needs of the immediate area.
- Residential uses are not required but are encouraged. The center must be well connected to the surrounding residential uses. Civic uses may also be included.
- A maximum of 70,000 sq. ft. may be devoted to retail. As an option, up to 10,000 sq. ft. of the total 70,000 sq. ft. may be devoted to office uses that are very well integrated with the retail and other uses.
- The maximum ground floor square footage of a single retail use is 35,000 sq. ft.
- The largest tenant may expand up to 20% beyond the maximum tenant size, not to exceed 10,000 sq. ft. after the tenant space is built.
- The appropriate density for new residential development will be determined either by the adopted area plan or through the application of the residential GDP (*pages 17-33*).
- No independent freestanding single tenant buildings are permitted. However, there is no limit on the number of interconnected freestanding uses.
- Pedestrian connectivity is emphasized so that people can easily walk from the surrounding area to all the uses included in the center.
- Scale is typically 1-2 stories and/or compatible with the scale and character of adjacent neighborhoods.
- The center also meets general design guidelines (*pages 40-45*).



*Strawberry Hill, on Providence Road at Fairview*

##### Location

- Oriented to the pedestrian street, with pedestrian and vehicular access oriented to a collector or internal street.
- Primary pedestrian access streets are typically two-lane with on-street parking and planting buffers.
- Transportation impacts are adequately addressed.
- Consistent with existing land use policies for the area, including consideration of the impact on existing retail in the area.

##### Typical Characteristics

- Convenience size centers are often anchored by small-scale grocery stores (e.g. Fresh Market, Harris Teeter Express) with other tenants typically being local-serving.
- Office uses, if included, are usually local-serving.
- Examples of convenience size centers include Strawberry Hill and Myers Park Center.



## Neighborhood Size Centers

### Description (Size and Use)

- *Neighborhood Size Centers* generally are retail shopping centers, although they may also include offices and residential uses.
- A maximum of 100,000 sq. ft. may be devoted to retail and a maximum of 30,000 sq. ft. devoted to office uses that are very well integrated with the retail and other uses.
- The maximum ground floor square footage of a single retail use is 50,000 sq. ft.
- The maximum size of a single tenant may be increased to 60,000 sq. ft. as long as the site plan addresses substantially all applicable guidelines (pages 40-45), with a special focus on pedestrian mobility. The maximum *Neighborhood* center size will then be adjusted for the additional retail, to a maximum of 110,000 sq. ft., and the overall maximum center size to 140,000 sq. ft. The maximum office space would remain 30,000 sq. ft.
- Residential uses are encouraged, but not required. However, the centers must be well connected to surrounding residential uses. Civic uses may also be included.
- The appropriate density for new residential development will be determined either by an adopted area plan or through the application of the residential GDP (pages 17-33).
- The largest tenant may expand up to 20% beyond the maximum tenant size, not to exceed 10,000 sq. ft. after the tenant space is built.
- A maximum of one independent freestanding single tenant building is allowed. There is no limit on the number of interconnected freestanding uses (see page 45 for definitions).
- Pedestrian connectivity is emphasized so that people can easily walk from the surrounding area to all the uses included in the center.
- Scale (floor area and building height) is compatible with the scale and character of adjacent neighborhoods.
- The center also meets general design guidelines (pages 40-45).



*Park Selwyn Terrace*

### Location

- Typically located on a thoroughfare with pedestrian and vehicular access also oriented to a collector or local street. Often, these centers will be located on the most pedestrian-friendly type of street characterized by low speeds and higher level of pedestrian activity, consistent with the Urban Street Design Guidelines.
- Primary pedestrian access streets are typically, two-lane with on-street parking and planting buffers.
- Transportation impacts are adequately addressed.

- Consistent with existing land use policies for the area, including consideration of the impact on existing retail in the area.

#### Typical Characteristics

- Neighborhood Size Centers are often anchored by a grocery store with other tenants typically being local-serving.
- Office uses, if included, are usually local serving.
- According to the Urban Land Institute (ULI), the population requirement typically ranges from 3,000 to 40,000 persons within a 1.5-mile radius.

### Community Size Centers

#### Description (Size and Use)

- *Community Size Centers* should have an integrated mix of retail and residential. Office uses are optional, but if included must be very well integrated with the other uses. Civic uses are also encouraged as part of this integrated mix of uses.
- A maximum of 225,000 sq. ft. is devoted to retail and a maximum of 75,000 sq. ft. is devoted to office uses.
- The maximum ground floor square footage of a single retail use is 90,000 sq. ft.
- The maximum size of a single tenant may be increased to 130,000 sq. ft. as long as the site plan addresses substantially all applicable guidelines (pages 40-45), with a special focus on pedestrian mobility. The maximum *Community* center size will then be adjusted for additional retail, to a maximum of 265,000 sq. ft., and the overall maximum center size to 340,000 sq. ft. The maximum office space would remain 75,000 sq. ft.
- The square footage of a grocery component of a “super center” tenant may be in addition to the allowed maximum tenant size.
- The largest tenant may expand up to 20% beyond the maximum tenant size, not to exceed 10,000 sq. ft., after the tenant space is built.
- Must be well connected with pedestrian and vehicular linkages to at least 1,000 residential units within ¼ mile. (This includes any units planned on site plus any existing, planned, zoned or shown on adopted land use plans within the ¼ mile area, measured from the edge of the site.)
- If the residential component is developed on the same site as, and in conjunction with the retail and other uses, the GDP residential density guidelines do not apply. Density



Rosedale

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### III. RETAIL-ORIENTED MIXED/MULTI-USE CENTERS

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#### *Community Size Center (continued)*

will be determined as part of the overall analysis for the center, based on transportation and other impacts. In addition, the residential component may be phased if it is agreed on and noted on the approved site plan. Residential units will also be considered if the center connects to a residential area where there has been an approved subdivision plan where the number of lots can be determined.

- A maximum of two independent freestanding single tenant buildings are allowed. There is no limit on the number of interconnected freestanding uses (*see page 45 for definitions*).
- On-street and/or shared parking provided.
- Scale (floor area and building height) is compatible with scale and character of adjacent neighborhoods.
- Meets general design guidelines (*pages 40-45*).

#### **Location**

- Locations are identified on adopted land use plans.
- Community Size Centers are typically located on a major thoroughfare with pedestrian and vehicular access also oriented to a collector or local street that is more pedestrian oriented, consistent with the Urban Street Design Guidelines. If located in more than one quadrant of an intersection, the components should be located across the pedestrian-oriented collector or local street (not the thoroughfare) and should have a pedestrian-friendly crossing.
- Primary pedestrian access streets are typically two-lane streets with on-street parking and planting buffers.
- Transportation impacts are adequately addressed.

#### **Typical Characteristics**

- Retail and office uses will usually be local-serving, although some regional-serving office uses may sometimes be included.
- Retail is often anchored by discount retailers such as Target or Wal-Mart in smaller prototype buildings, or by “mid-size” specialized retailers (e.g., GAP, Old Navy, Marshalls), as well as by a grocery store.
- People will typically drive to the center, but will be able to “park once and walk.”
- According to ULI, the population requirement typically ranges from 40,000 to 150,000 persons with a 3-5 mile radius.

## Regional Size Centers

### Description (Size and Use)

- *Regional Size Centers* should have an integrated mix of retail and residential. Office and civic uses are encouraged and, if included, must be well integrated with the other uses.
- A maximum of 600,000 sq. ft. is devoted to retail and a maximum of 150,000 sq. ft. to office uses.
- The maximum ground floor square footage of a single retail use is limited to 150,000 sq. ft.
- The maximum size of a single tenant may be increased to 200,000 sq. ft. as long as the site plan addresses substantially all applicable guidelines (pages 40-45), with a special focus on pedestrian mobility. The maximum *Regional* center size will then be adjusted for additional retail, to a maximum of 650,000 sq. ft., and the overall maximum center size to 800,000 sq. ft. The maximum office space would remain 150,000 sq. ft.
- No more than 2 tenants can be over 90,000 sq. ft. (ground floor).
- The largest tenant may expand up to 20%, beyond the maximum tenant size, not to exceed 10,000 sq. ft., after the tenant space is built.
- Must be well connected with pedestrian and vehicular linkages to at least 1,000 residential units within ¼ mile. (This includes any units planned on site plus any existing, planned, zoned or shown on adopted land use plans within the ¼ mile area, measured from the edge of the site.)
- If the residential component is developed on the same site as, and in conjunction with the retail and other uses, the GDP residential density guidelines do not apply. Density will be determined as part of the overall analysis for the center, based on transportation and other impacts. In addition, the residential component may be phased if it is agreed on and noted on the approved site plan. Residential units will also be considered if the center connects to a residential area where there has been an approved subdivision plan where the number of lots can be determined.
- A maximum of three independent freestanding single tenant buildings are allowed. There is no limit on the number of interconnected freestanding uses (*see page 45 for definitions*).
- Meets general design guidelines (*pages 40-45*).



*University Place, in northeast Charlotte, incorporates some of the elements proposed for a regional size center.*

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### III. RETAIL-ORIENTED MIXED/MULTI-USE CENTERS

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#### *Regional Size Center (continued)*

##### **Location**

- Locations are identified on adopted land use plans.
- Typically located along limited/controlled access freeways and major thoroughfares.
- Access should be far enough away from interchange ramps so as not to impede traffic flow, but close enough to take advantage of the accessibility offered by the interchange location.
- Transportation impacts are adequately addressed.

##### **Typical Characteristics**

- Depending on the location, office may be local or regional-serving. Buildings are typically low-rise (2-5 floors) with some decked parking.
- Residential densities are low to moderate, generally below 30 dwelling units per acre.
- Depending on orientation of center, retail may include uses typically found in a discount power center, lifestyle center or upscale mall.
- According to ULI, population required to support a regional center is approximately 150,000 people within an 8-mile radius.

## **Super-Regional Size Centers**

*The development of new super-regional shopping centers is strongly discouraged except in Charlotte's Center City.*

##### **Description (Size and Use)**

- *Super-Regional Size Centers* should have a well-integrated mixture of land uses, including at least retail, office, residential, civic and open space uses.
- The retail center is generally larger than 750,000 square feet with an office maximum of 200,000 sq. ft.
- It must be well-connected with pedestrian and vehicular linkages to at least 1,000 residential units within ¼ mile. (This includes any units planned on site plus any existing, planned, zoned or shown on adopted land use plans within the ¼ mile area, measured from the edge of the site.) At least 200 of these units must be part of the development.



*SouthPark, built in the early 1970s, is expanding and incorporating many of the elements proposed for a super-regional size center.*

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#### *Super-Regional Size Center (continued)*

- If the residential component is developed on the same site as, and in conjunction with the retail and other uses, the GDP residential density guidelines do not apply. Density will be determined as part of the overall analysis for the center, based on transportation and other impacts. In addition, the residential component may be phased if it is agreed on and noted on the approved site plan.
- A maximum of three independent freestanding single tenant buildings are allowed. There is no limit on the number of interconnected freestanding uses (*see page 45 for definitions*).
- Parking decks should be provided and should be “wrapped” with active commercial or residential uses. If multiple parking decks are provided, they should be intermingled with other active uses (retail, office, civic, residential).
- Given the size of these centers, a park/open space component will be required.
- An extensive pedestrian network must be provided. Both internal and external streets must be designed with pedestrian amenities such as sidewalks, enhanced crosswalks and pedestrian level lighting. Pedestrian connections must be provided between the front doors of buildings and the sidewalks along streets.
- Meets general design guidelines (*pages 40-45*).

#### **Location**

- Locations are identified on adopted land use plans.
- Driven by regional access and high visibility, these centers are typically located along limited/controlled access freeways and major thoroughfares.
- Access should be far enough away from interchange ramps so as not to impede traffic flow, but close enough to take advantage of the accessibility offered by the interchange location.
- Transportation impacts are adequately addressed.

#### **Typical Characteristics**

- Retail is usually regionally-oriented, with large department stores and potential up-scale retailers.
- Office uses can include regional or national headquarters and can be multi-level, elevator buildings. Depending on the densities achieved, decked parking may become necessary and/or desired.
- Dense housing, up to and exceeding 30 dwelling units per acre, is often provided around the activity center.
- According to the ULI, the population required to support a super-regional center is more than 300,000 people within a 12-mile radius.

### III. RETAIL-ORIENTED MIXED/MULTI-USE CENTERS

#### *Retail-Oriented Mixed/Multi-Use Centers* Summary of Center and Tenant Sizes

Type of Center	Center Size	Largest Tenant	Additional Expansion Area (after tenant space is built)	Expanded Maximum Tenant Size with Exceptional Site Plan*	Expanded Maximum Center Size with Exceptional Site Plan*
<b>Convenience</b>	Up to 70,000 sf	Up to 35,000 sf on ground floor	Up to 10,000 sf	Up to 35,000 sf on ground floor	Up to 70,000 sf
<b>Neighborhood</b>	Up to 130,000 sf: • 100,000 max retail • 30,000 max office	Up to 50,000 sf on ground floor	Up to 10,000 sf	Up to 60,000 sf on ground floor	Up to 140,000 sf: • 265,000 max retail • 75,000 max office
<b>Community</b>	Up to 300,000 sf: • 225,000 max retail • 75,000 max office	Up to 90,000 sf on ground floor	Up to 10,000 sf	Up to 130,000 sf on ground floor**	Up to 340,000 sf: • 265,000 max retail • 75,000 max office
<b>Regional</b>	Up to 750,000 sf: • 600,000 max retail • 150,000 max office	Up to 150,000 sf on ground floor	Up to 10,000 sf	Up to 200,000 sf on ground floor	Up to 800,000 sf: • 650,000 max retail • 150,000 max office
<b>Super-Regional</b>	Over 750,000 sf: • 200,000 max office	No limit	As per site plan	No limit	No limit

\* Assumes that the site plan addresses substantially all applicable design guidelines with a special focus on pedestrian mobility. Does not include allowable 10,000 square foot expansion area for largest tenant.

\*\* The square footage of a grocery component of a “super center” tenant may be in addition to the allowed maximum tenant size.

## IV.

# *Plan Amendment Process*

Adopted November 2003  
by Charlotte City Council

### **Background**

Charlotte City Council and the Mecklenburg Board of County Commissioners have adopted land use plans covering all of Mecklenburg County.

These are specific policy guides for how land should develop and/or redevelop. Considerable analysis and community involvement have shaped the policies and recommendations of these plans. A variety of factors such as access, availability of transit, and maintaining integrated land uses were considered when the plans were developed. Therefore, any actions that conflict with adopted plans or their intent should be weighed carefully before proceeding with a change. Changes made in one area may necessitate changes elsewhere, thus affecting the overall development pattern.

- ▶ *To deal with proposed changes to plans, the General Development Policies provide for a process for amending adopted plans.*

This process has been designed to guide those desiring to amend a plan and ensure consistency in how amendments are handled, while allowing for thorough analysis, meaningful public input, and a clear understanding of what the adopted plan's land use recommendation for the area is and what the impact of changing that recommendation may be.

The *Plan Amendment Process* is part of the Planning Commission staff's annual Area Plan Assessment. The purpose the Area Plan Assessment is to assist in determining areas where additional planning efforts are needed, and where resources should be focused.

### **Applicability**

Plan amendment requests are reviewed through the annual Area Plan Assessment process (*see chart on page 57*). This allows staff to look comprehensively at where planning efforts should be directed and, in terms of the plan amendment process, allows amendments to be integrated into larger planning efforts—such as area plans—where

## IV. PLAN AMENDMENT PROCESS

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applicable. It also allows plan amendments to be incorporated into the staff work program so that there is adequate time for a thorough analysis and review of each request.

- ▶ *Applications for Plan Amendments are accepted annually and scheduled through the Area Plan Assessment Process.*

Amendments can be requested by the public, Planning Commission, City Council and Planning staff. Amendment requests will be reviewed in January to coincide with the Area Plan Assessment process and the Planning Commission's work program. The process is outlined in the chart on page 57. City Council may direct staff to complete amendments outside of the area plan assessment process. The Planning Director may also direct staff to complete amendments outside of the area plan assessment process when resources are available to do so. In addition, staff will accept plan amendment requests from the public throughout the year and will notify the requestor within 30 days as to the tentative review schedule.

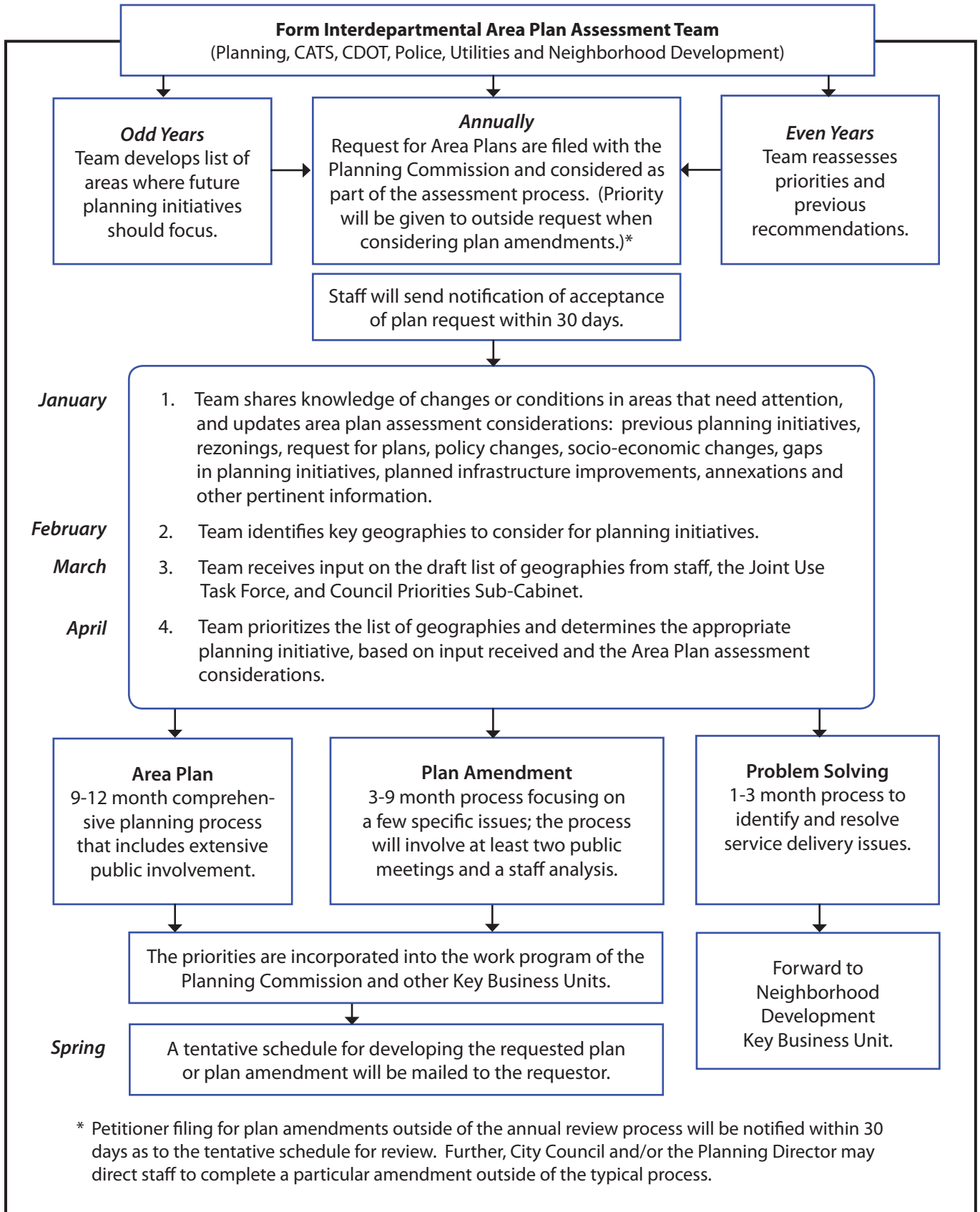
A rezoning request may be filed within a Plan Amendment area, but staff will recommend deferral of the rezoning public hearing until after City Council has made a decision on the Plan Amendment. It is current City policy that approved rezoning petitions inconsistent with adopted land use plans serve to amend the plan.

### Guiding Principles

The Plan Amendment Process will:

- **Include analysis and public involvement.**  
The process is designed to allow for a thorough staff analysis and meaningful public involvement. The approach involves input from other departments and opportunities for public comment.
- **Consider land use changes in a larger context.**  
The process provides a comprehensive approach to considering plan amendments. By reviewing all the requests simultaneously, it allows for requests in similar geographic areas to be grouped together for review rather than analyzing each one in a vacuum.
- **Separate land use issues from zoning issues.**  
The process serves to separate land use issues from specific zoning issues that often focus on the site plan.
- **Include an explanation of the context and an evaluation of the impacts.**  
The process provides an avenue to explain what the adopted plan for the area is and how and why its recommendation differs from the plan amendment request. This is essential to encouraging meaningful public input during the process.

## Plan Assessment Process





## IV. PLAN AMENDMENT PROCESS

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### Review and Scheduling Process

Plan amendment requests typically will be scheduled through the Area Plan Assessment Process. The time frame and level of analysis and public involvement required will depend upon the size and complexity of the plan amendment request.

■ **Public Involvement:** At a minimum, a simple plan amendment will require two public meetings, one at the beginning of the process and another at the start of the adoption process. (This is in addition to the public comment session with City Council.) A larger or more complex plan amendment may require a number of public or stakeholder group meetings in addition to the minimum requirement of two public meetings.

■ **Time Frame:** The complexity of each plan amendment will dictate the time frame required to allow meaningful public input and analysis, with the general time frame being 3-9 months. The general review and adoption process, along with a typical time frame are illustrated in the chart on page 59. After the plan amendment request has been accepted and determined to be appropriate, staff will develop a tentative review schedule and hold an interdepartmental staff review meeting to discuss the proposed amendment. This process enables different City departments to review and comment on the proposed amendment.

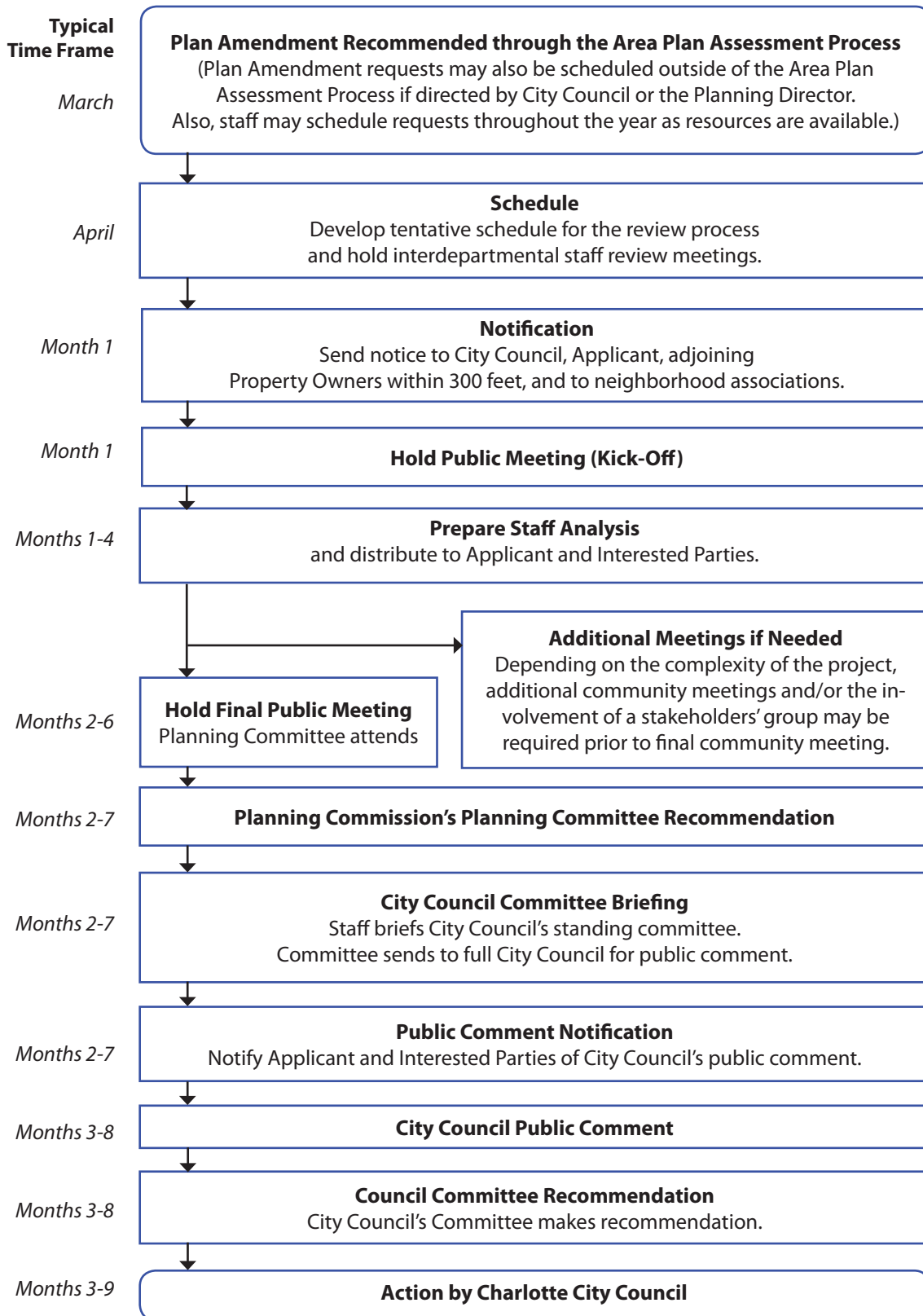
■ **Notification:** Staff will then mail a notice to the City Council, the applicant, adjoining property owners (within 300 feet), neighborhood associations (within three miles) and other interested parties, describing the public meeting process. It will also include a date, time and location for the initial public meeting and a tentative schedule for the review process. Notice is to be sent at least 14 days prior to the public meeting.

■ **Public Meetings and Staff Analysis:** The purpose of the first public meeting is to provide citizens with information about the process, the proposed plan amendment, how it differs from the adopted plan, and to receive public input. A staff analysis will then be prepared and mailed to the applicant and other interested parties. A final public meeting will be held to present staff's recommendations. These two public meetings are the minimum that is required (in addition to the public comment session before City Council) and more complex plan amendments may require additional meetings and/or the involvement of a stakeholder group.

■ **Planning Committee Review and Recommendation:** The Planning Commission's Planning Committee attends the final public meeting to hear citizen comments. In a subsequent meeting, the committee reviews the proposed plan amendment, considers the citizen comments and makes a recommendation to City Council.

■ **City Council Review, Public Comment and Action:** The plan amendment then moves to a City Council standing committee (usually the Economic Development and

**Plan Amendment Review and Adoption Process**



## IV. PLAN AMENDMENT PROCESS

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Planning Committee) for review and to the full City Council for public comment. City Council's committee will make a recommendation to the full Council, and the Council will then take action.

### Staff Analysis

The staff analysis included in the plan amendment will be tailored to the complexity of the individual application but, typically, will include the following information:

- **Summary of the Request**
- **Discussion of Existing Land Use and Zoning**
- **Background Information, i.e., the adopted plan recommendation**
- **Assessment of Land Use Impacts**
  - ▶ Address the triggers and unanticipated changes referred to in the application.
  - ▶ Describe the adopted plan's intent and buildout scenario.
  - ▶ Compare and discuss demographic data/trends.
  - ▶ Discuss development trends (residential and non-residential as applicable).
  - ▶ Describe development context, including existing commercial services (retail, office, etc.), scale and urban design.
  - ▶ Discuss related policy framework.
  - ▶ Discuss transportation impacts.
  - ▶ Provide other applicable information.

## V.

# *Environment*

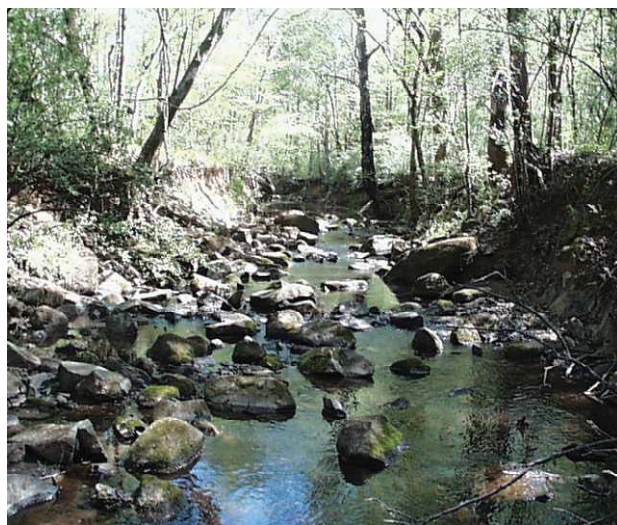
Adopted November 2007  
by Charlotte City Council

### Definition and Purpose

- ▶ *The purpose of the Environmental GDP is to minimize negative environmental impacts of land use and land development.*

Charlotte is the center of one of the fastest growing regions in the country. While growth contributes to our economic vitality, it also presents challenges for achieving and maintaining a healthy environment and a sustainable regional economy. This chapter of the GDP is intended to provide direction to help accommodate growth and change without undermining the environmental systems on which we depend, including the quality of our air, water and land.

It is increasingly being recognized that livability and the quality of life—including economic vitality—is tied to the quality of our physical environment. A healthy environment enriches our quality of life and can give us a competitive advantage in economic development.



*A healthy environment can give us a competitive advantage in economic development.*

This Environment chapter is therefore intended to give guidance to the City Council, staff and the broader community in acknowledging environmental factors in decision-making and day-to-day operations. Environmental concerns cover a broad spectrum and may include a variety of issues. This Environment chapter focuses on those issues that are directly related to land use and seeks to address the interrelated impacts of growth and development on our air, land and water resources.

In practice, these environmental policies will help guide staff recommendations and City Council action on a variety of initiatives including land use policies and plans, development proposals, rezoning petitions, regulatory and process changes and the design

and construction of public projects. In addition, the environmental policies can help in establishing priorities and guiding coordinated action among City departments (referred to as Key Businesses) in a way that uses the City's resources to maximum advantage in protecting our community's environment.

*Thoughtful implementation of these environmental policies will result in a healthier urban environment.*

The City already has various policies and regulations that address environmental concerns related to land use and development and is in the process of adopting others, including the Post Construction Controls Ordinance. This Environment chapter is not intended to replace such policies and regulations. Rather, it is intended to address those issues related to environmental impacts of land use and development that are not adequately addressed by existing and proposed policies and regulations.

Since the mid-1990s, most U.S. cities of comparable size to Charlotte have embarked on vigorous environmental programs, going beyond traditional regulatory functions to more far-reaching programs in recognition of the importance of the environment to quality of life. Fundamentally, there is a wide acceptance of the notion of "environmental stewardship" and a growing awareness of the concept of living in our "ecological footprint" or "ecological carrying capacity" — meaning, simply, that the earth's resources are limited, we should use no more than we need, and we should replenish what we use for the next generation. The City of Charlotte is in a position to exercise leadership in that regard for our community. The environmental policies of the GDP will help provide a framework for that leadership in terms of land use and development.

### Planning Context

The *Centers, Corridors and Wedges Growth Framework* was originally introduced in the early 1990s and reaffirmed in 1997 with the adoption of the *2015 Plan*, as a key tool to guide future growth. *Centers, Corridors and Wedges* is intended as a framework for organizing and managing growth to help ensure that development happens in a way that enhances the community and contributes to its character and identity.

*The vision for the City of Charlotte is to be an urban community of choice for living, working and leisure.*

*Centers, Corridors and Wedges* is discussed in the introduction of this GDP document. However, it is currently being revisited to provide an updated growth strategy for the community that focuses on strengthening the ties between land use and transportation networks; promoting more efficient use of existing infrastructure systems; and, establishing a context for addressing land use and economic development issues. The framework is intended to help the City of Charlotte achieve the vision of becoming "an urban community of choice for living, working and leisure."

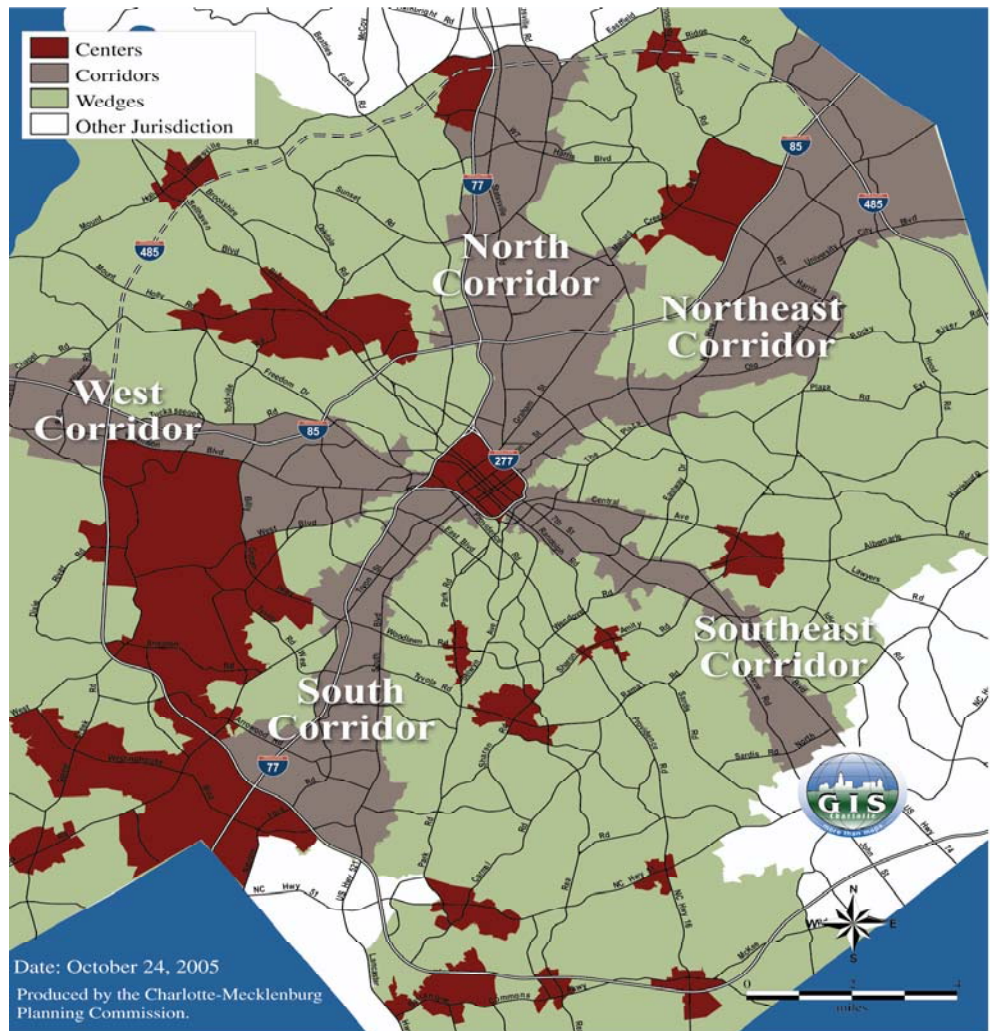


Policies and principles have been created as part of the *Centers, Corridors and Wedges* update which focus on various “characteristics” in three distinct geographies—activity centers, growth corridors and wedges—by providing guidance relative to land use, transportation systems, infrastructure and urban design. These characteristics help define and differentiate the unique conditions found in the activity centers, growth corridors and wedges, and may be used to better determine where population and infrastructure improvements can be targeted within these areas.

From an environmental perspective, *Centers, Corridors and Wedges* is especially important because it facilitates a more compact development pattern that not only helps to make more efficient use of land, but also encourages the use of alternative modes of transportation and increases the potential for conservation of open space.

**Centers,  
Corridors  
and Wedges**

*A thoughtful growth strategy will ensure that development happens in a way that enhances the community and contributes to its character and identity.*



### Existing Conditions and Trends

The Mecklenburg County Land Use and Environmental Services Agency (LUESA), biennially develops a report that summarizes the environmental conditions of the Charlotte area's air, land and waters. Unless noted otherwise, the information on existing conditions and trends provided in this section was extracted from the 2006 edition of that report, the *State of the Environment Report (SOER)*. The example strategies, while not included in the SOER, are generally accepted as ways to address the various environmental issues identified.

#### Air Quality

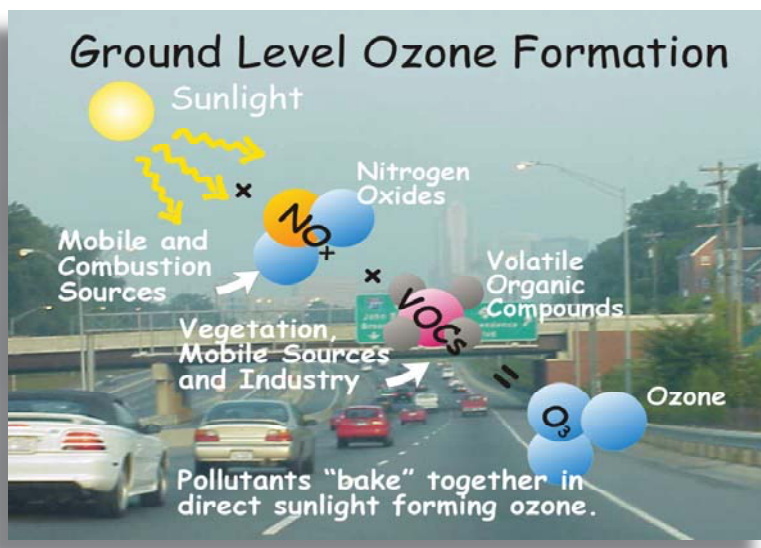
While a number of air pollutants are monitored in the Charlotte area, *ozone* and fine *particulate matter* are of the most concern because their concentrations locally are closest to the limits set by the U.S. Environmental Protection Agency (EPA).

- **Ozone** is not emitted directly into the air. Rather, it is formed by the reaction of volatile organic compounds (VOCs) and oxides of nitrogen (NO<sub>x</sub>) in the presence of heat and sunlight. Local sources of VOCs and NO<sub>x</sub> include mobile sources such as cars and trucks, as well as stationary sources like power plants and manufacturing facilities.

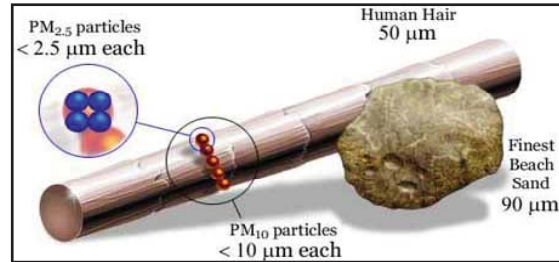
The EPA's standard for ozone is based on an 8-hour average daily concentration measured from April 1st through October 31st. Since the 1980s, Charlotte has consistently exceeded the 8-hour ozone standard and, as a consequence, in 2004 the EPA designated the Charlotte area (eight-county region) as an ozone "non-attainment" area. For the past three years, the value used to determine compliance with the EPA standard has decreased, possibly as a result of favorable weather conditions (i.e., cool

and wet). However, ozone concentrations were still approximately 4% above the 8-hour standard in 2005.

Since the EPA's standards for ozone and other pollutants are based upon public health and welfare thresholds, *this means that multiple days a year the air is unhealthy to breathe.*



- Particulate matter** refers to a mixture of solid particles and liquid droplets found in the air. Some particles are large enough to see as dust or dirt. Others can only be seen with a microscope. Particulate matter includes primary particles such as dust from roads or soot from combustion sources emitted directly in to the atmosphere. It also includes secondary particles which are formed in the atmosphere from primary gaseous emissions such as nitrates formed from NO<sub>x</sub> emissions from power plants and automobiles.



Particulate matter compounds air quality issues, which is a concern for Charlotte since it hovers near the standard for PM 2.5, which are the fine particles less than or equal to 2.5 micrometers in diameter.

Changes in federal and state regulations such as those recently proposed by the EPA to strengthen the ozone standards by reducing the parts per million standards will, hopefully, compel needed reductions in both ozone and particulate matter over time. However, local action is also needed now to ensure both the attainment of standards and the continued improvement of Charlotte’s air quality.

Mobile sources of pollutants, primarily automobiles, are the main culprit for Charlotte’s air quality problems. Therefore, *improving air quality is directly contingent upon reducing the time and distance individuals spend traveling in automobiles*, also called vehicle miles traveled (VMT) per capita.

**Some strategies to reduce VMT per capita include:**

- ▶ providing a mixture of well-connected land uses at appropriate locations;
- ▶ filling in vacant land or redeveloping underutilized parcels;
- ▶ locating development to take advantage of existing infrastructure and services;
- ▶ facilitating use of alternative modes of transportation, including bicycling, walking and riding transit; and
- ▶ shortening travel distance by increasing street connections.

**Water Quality**

Mecklenburg County has over 3,000 miles of streams and 197 miles of lake shore. Unfortunately, our streams are currently degraded to the point where 73.5% of the monitored stream miles are not meeting their designated use. Point and non-point sources of

## V. ENVIRONMENT

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pollution are problematic for the Charlotte's water resources; however, non-point sources of pollution are the hardest to combat.

- **Non-point sources of pollution** are associated with storm water run-off. In urbanized areas, large expanses of impervious surface, such as roads and parking lots, force storm water into drains and ditches. As the water runs off the land, it carries with it pollutants and sediment, which degrade water quality in destination streams and lakes. Furthermore, channelized drainage causes the water to move faster, eroding stream banks and picking up more sediment.

According to the 2004 *State of the Environment Report*, an estimated 20% of Mecklenburg's 530 square miles was covered by impervious surfaces—a number projected to grow—so if water quality is to improve, non-point pollutants need to be addressed.

**Strategies for reducing the impact of non-point pollution on water quality include:**

- ▶ minimizing impervious surface area;
- ▶ improving the quality of stormwater run-off; and
- ▶ reducing erosion and sedimentation.

### Land Use

As Mecklenburg County becomes more urban, its land resources are threatened. According to U.S. Census data, Charlotte's population grew 168% between 1960 and 2000. During this same time, Charlotte's land area increased by 274%, suggesting land consumption is far outpacing population growth.

With land consumption often comes the loss of environmental features, which are critical to ecosystem function and quality of life. For example, according to American Forests, between 1984 and 2003 Mecklenburg County lost 35% of its tree canopy, an asset vital for natural habitat, water quality and energy efficiency.

**As a result of this rapid growth, two issues in particular relating to land use confront Charlotte:**

1. How can we make the most efficient use of our land?
2. How can we preserve key natural features and protect environmentally sensitive areas?

### Applicability

- The policies contained in this chapter apply throughout the City of Charlotte, as well as the area it can eventually annex (its extraterritorial jurisdiction).
- The policies will be used to provide direction in addressing environmental impacts of development when developing future land use plans as well as in making rezoning decisions.
- They will also give direction in updating zoning and subdivision ordinances, and other regulations.

Following adoption of the Environmental GDP, the intent is to include specific guidance and recommendations in area plans to address environmental impacts of land use and development. The area plans, in most cases, would enhance and supersede the GDP guidance. Where the GDP and a specific area plan (that predates the GDP) are in conflict, the more rigorous guidance will take precedence.

The conditional rezoning process provides a tool to implement many of the environmental policies. However, the conditions attached to a conditional zoning district (CD) plan are agreed to voluntarily by the petitioner. The petitioner ultimately decides which requests to include on the site plan for the rezoning approval.

### Guiding Principles

Charlotte Mecklenburg is endowed with an abundance of natural resources, including trees, streams and rivers, lakes, wetlands, wildlife and natural beauty. Increasingly, development impacts are threatening the quality of the natural environment that makes Charlotte a special place to live and work. Recognizing that environmental protection represents prudent stewardship of land and good business, the City of Charlotte embraces the following principles to guide future growth and development:

- 1. Make the protection of our natural environment a priority in land use and development decisions.**
- 2. Facilitate a land use pattern that accommodates growth while respecting the natural environment.**
- 3. Promote and enable environmentally sensitive site designs.**
- 4. Consider the environmental impacts of land use and development comprehensively and strive to reconcile the various environmental concerns with each other and balance them with other land and economic development considerations.**



### POLICIES

#### GUIDING PRINCIPLE 1

Make the protection of our natural environment a priority in land use and development decisions.



#### ► POLICY 1-A

**Support local and regional efforts to inventory natural features to enable identification and protection of environmentally sensitive areas.**

The intent of this policy is to support proactive identification of environmentally sensitive areas to provide better guidance for acquisition and protection, and to determine where more environmentally sensitive land use and development practices are especially warranted. Identifying environmentally sensitive areas will be important to do at a regional scale, especially to facilitate linking these areas across jurisdictional boundaries. But, it will also be important that this information is available and utilized at a local level.

Data from the *Open Space Framework Plan* and City/County GIS information can be used as the foundation for a local and regional inventory of natural features. However, the data should be enhanced with additional information and continually updated. The intent is to present the most accurate information possible to provide the foundation for sound decision making. Implementation of this policy will likely require additional funding/resources to enhance current data and to delineate areas of highest environmental sensitivity.

► **POLICY 1-B**

**Identify environmentally sensitive areas in land use plans and development proposals and address how they will be protected or mitigated.**

Environmentally sensitive areas are characterized by the presence of natural features such as significant wetlands, streams and floodplains; tree canopy; and/or topography and are not limited to those addressed by existing ordinances and regulations. The following guidance should be used to determine if the natural feature is of a significance to protect and/or mitigate:

1. Could it link to existing or future protected sites or undisturbed areas?
2. Does it have rare or unique habitat or features?
3. Is there a diversity of species present?
4. Is it identified on an adopted plan as an area of environmental concern?
5. Does it have multiple environmental benefits?

A “yes” to all of these questions is not needed for a feature to be environmentally significant. However, the more “yes” answers certainly heightens the probability of significance.

In addition to the five guidelines listed above for determining the significance of natural features, when considering topography, the concern is especially with naturally occurring slopes, particularly near water, that are of sufficient height and steepness to cause problems such as accelerated erosion or increased flooding when disturbed.

The intent of this policy is to better understand the existing environmental conditions and to ensure that plans for future development can minimize potential impacts to the natural environment. This includes protection/ mitigation of the natural feature and, even more importantly, the characteristics that make it environmentally significant. Further, the intent is to allow the potential impacts to the various aspects of the natural environment to be evaluated concurrently to better understand any potential trade-offs.

Identification and protection of environmentally sensitive areas in land use plans (i.e., small area plans) will typically be at a broader scale, providing less detail than can be achieved in a specific development plan. Additionally, while both the land use plans and development proposals may propose various alternatives for protecting or mitigating environmentally sensitive areas, the land use plans typically will not “choose” among

## V. ENVIRONMENT

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the alternatives. Thus the land use plans will provide flexibility for when the property is actually proposed for development or redevelopment. A development plan, on the other hand, will identify which of the various alternatives will be utilized to address the impacts.

The implementation of this policy should recognize that, when feasible, protection is typically preferred over mitigation. The protection and/or mitigation of an environmentally sensitive area may be influenced by the conditions of the watershed in which it is located. Implementation should include additional research on ways to protect the natural environment — such as incorporating environmentally sensitive areas into required open space; providing undisturbed buffers for natural features; public purchase for parks/nature preserves; conservation easements; and dedication to home owner’s associations or parks — as well as on developing innovative techniques for mitigating impacts. Additionally, implementation of this policy will require that our current environmental data be continuously refined and updated.

### ► POLICY 1-C

**Consider environmental opportunities and constraints, including watershed conditions, when identifying appropriate future land uses in area plans.**

Although Policy 1-B provides guidance for addressing environmentally sensitive areas in land use plans, Policy 1-C seeks to better integrate consideration of environmental conditions when determining future land uses in the area planning process. For example, if greater emphasis is placed on these conditions in the area planning process, it is more likely that areas with constraints (such as significant topography and hydrology, groundwater contamination, or voluntary deed restrictions) would be recognized and the most compatible type of future land use could be identified.

Additionally, land use plans should recognize that within Charlotte’s sphere of influence there are several watersheds (Yadkin, Central Catawba, etc), at varying stages of development, that provide a variety of uses (endangered species habitat, recreation, drinking water). These differences may require distinctive development patterns and land uses. Land use plans should identify a development vision appropriate for the watershed and guide future development recognizing the cumulative impacts on water quality.

### POLICY 1-D

**Provide the education, information and outreach to facilitate the successful implementation of environmental policies.**

The intent is to raise the awareness and understanding of the importance of our natural environment (including air, land and water) and how it can be protected, and to provide a broader context for communicating the GDP.

Part of implementing this policy should be providing a better understanding of how various policies and regulations can work together, rather than at cross-purposes, to ensure environmental protection. Also part of this policy should be to seek out partnerships to provide information and assistance to ensure the ongoing management of natural areas within developments. While protected and restored natural areas generally require much less maintenance than conventional landscapes, basic maintenance functions may not be familiar to many property owners. Additionally, property owners may not understand the value of protecting the natural areas. Therefore, ensuring that ongoing management is successful could include such actions as partnering with the private sector to provide property owners with educational material or assisting in establishing an institutional structure for long-term permanent management of the site.

### ► POLICY 1-E

**Target environmentally sensitive areas when acquiring land for public protection.**

Land acquisition for public purposes that provide an opportunity for protection of environmentally sensitive areas should focus on such areas. Examples of such public purposes could include passive parks; nature preserves; greenways; and cultural heritage, natural heritage or historic sites.

### GUIDING PRINCIPLE 2

**Facilitate a land use pattern that accommodates growth while respecting the natural environment.**

### ► POLICY 2-A

**Pursue strategies to encourage and facilitate redevelopment of abandoned/underutilized sites and development of vacant sites in built-up areas (infill).**

A greater emphasis on infill and redevelopment that is designed to be environmentally sensitive and is located appropriately will help to: (1) accommodate some growth that might otherwise spread out to undeveloped areas; (2) reduce the growth in vehicle miles traveled (VMT) per capita; and, (3) improve on-site environmental conditions.



## V. ENVIRONMENT

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It is particularly important that infill and redevelopment be located where it can be served by existing and/or planned infrastructure and services and that it be designed to be integrated with and connected to the surrounding area. Additionally, improving the existing site conditions (e.g. removing hazardous materials, adding trees and vegetation, removing impervious areas like large surface parking lots) should be emphasized in redevelopment projects. One way to make sure sites with groundwater contamination are safe for redevelopment is to utilize the Brownfields program if the project is eligible.

While infill and redevelopment are both valuable strategies for ensuring efficient use of land, redevelopment can be even more desirable when the project improves existing conditions. This distinction should be made in prioritizing redevelopment strategies, particularly in providing any incentives.

### ► POLICY 2-B

**Facilitate the incremental development of well-designed and well-connected mixed/multi-use development in appropriate locations.**

Existing policies and regulations already provide direction for achieving a complementary mix of land uses within the same building and/or on the same site, which has been identified as a strategy to help reduce both VMT and land consumption per capita.

However, while achieving such a mix within the same building and/or on the same site is often ideal, a similar outcome can be achieved incrementally as single uses are developed if they are: (1) located so they are consistent with adopted land use plans and can be served by a variety of transportation modes; (2) complement existing and/or planned land uses to create a compatible mixture in the immediate area; and (3) are designed to be integrated with and connected to each other and the surrounding area.

Enhancing the guidance provided in area plans for mixed/multi-use development and non-residential development will be a key tool to help facilitate this type of “incremental mixed-use.” This type of development can help to reduce the length, and possibly the number of automobile trips that people make to work, shop and recreate. It may also help to reduce the amount of land and/or impervious area needed to provide supporting infrastructure and services.

### ► POLICY 2-C

**Encourage more of our new development to be located where transportation facilities, public utilities and services already exist, or are planned, to minimize impacts to undeveloped areas.**

Focusing development where it can best be supported by existing and planned infrastructure and services can help to make the most efficient use of infrastructure and land. On a per capita basis, this can help to reduce VMT, land consumption, impervious surface and land disturbance, resulting in less impact on the natural environment.



► **POLICY 2-D**

**Encourage partnerships (e.g. joint use) to enable the sharing of both public and private facilities.**

Sharing of facilities has the potential to reduce land consumption and impervious area by making more efficient use of land, buildings and parking. An example of such a joint use might be a church and an abutting office building sharing some parking. Since the two uses have different periods of peak usage, the needs of each could be accommodated together, with less overall impervious surface.

► **POLICY 2-E**

**Integrate plans for existing and future bus routes/service improvements and expansions with adopted future land use plans.**

The ability to serve future land uses with CATS bus service has become a key consideration in the development of land use plans. However, adopted future land uses have yet to be given similar importance in the development of future bus routes/service improvements.

The intent is to provide CATS bus service to areas planned for higher density development and other land uses particularly supportive of transit. In addition, the intent is to make sure the development and surrounding area are designed to support air quality goals and to make it easy for people to use the bus service (i.e., conveniently located bus stops/shelters, safe walkways and crosswalks, direct connections).

► **POLICY 2-F**

**Ensure that public facilities (including schools, parks, libraries, recreation facilities, etc.) are well connected to the surrounding area and to each other and take advantage of joint use opportunities.**

The intent is not only to make it easy for people to walk or bicycle to nearby public facilities, but also to shorten automobile trips to these facilities and to connect them to each other and to transit when possible. Although students often do not live near the schools they attend, these facilities still need to be well connected to the surrounding area as they serve other functions (e.g., meeting rooms, events, playgrounds, tracks, voting) for area residents. If public facilities are located together (joint use), they may be able to make more efficient use of the site as well as reduce the need for people to make multiple trips to various facilities.

In addition to making sure public facilities are well connected, it will also be important from a VMT perspective to ensure that there are a sufficient number of such facilities and that they are located appropriately to serve the population without necessitating long automobile trips.

### GUIDING PRINCIPLE 3

Promote and enable environmentally sensitive site designs.

#### ► POLICY 3-A

Enable site designs and construction practices that: 1) facilitate the use of alternative modes of transportation; 2) reduce ground level temperatures; 3) minimize impacts to the natural environment; 4) reduce the amount and improve the quality of stormwater run-off; and 5) use water efficiently.

The intent of this policy is to consider and minimize onsite environmental impacts from development during the site design process. Identifying the characteristics of environmentally sensitive site design takes the “guess work” out of the site design by specifying what should be addressed up front, while allowing flexibility on how it will be addressed. Below is a list of some characteristics of environmentally sensitive site design. Not all characteristics are applicable in every development. Applicability is dependent on the type, intensity and location of the development.



- Preserves and/or restores environmentally sensitive areas and connects them to other significant natural features as much as possible and integrates them into the development when appropriate.
- Minimizes impervious surfaces, including building footprint and parking area.
- Uses low maintenance native vegetation as much as possible.
- Shades constructed/impervious surfaces (e.g, with landscaping) and/or considers replacing them with vegetated surfaces.
- Emphasizes pedestrian mobility, comfort and safety.
- Facilitates conservation of water, energy and other natural resources.
- Seeks to minimize the amount and improve the quality of storm water run-off.
- Minimizes site disturbance and related erosion and sedimentation.

Part of implementing this policy will be to ensure that existing ordinances and regulations result in environmentally sensitive site design and construction practices; that staff, citizens and elected/appointed officials understand the importance/purpose of the various regulations; and that the ordinances and regulations have enough flexibility to ensure that unique circumstances and/or specific site constraints can be addressed in the most appropriate manner. Encouraging the use of innovative design solutions, materials and construction practices should also be part of implementing this policy.

► **POLICY 3-B**

**Minimize impacts to the City’s tree canopy to allow it to flourish and to be a healthy and viable part of our environment.**

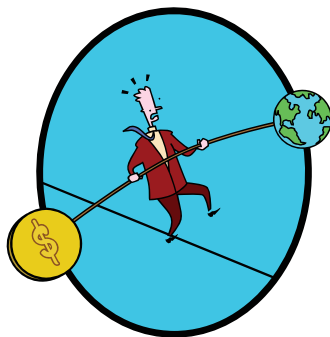
Although protection/mitigation of the tree canopy is addressed in Policy 1-B in regards to environmentally sensitive areas, the intent of this policy is to ensure tree regulations are adequate to achieve desired results including: (1) making sure trees in parking lots, urban districts and other “hostile” environments can grow to their full potential; (2) ensuring that tree save requirements not only preserve our tree canopy, but also minimize impervious surface; and (3) promoting opportunities to “revegetate” areas that were previously developed.

**GUIDING PRINCIPLE 4**

**Consider the environmental impacts of land use and development comprehensively and strive to reconcile the various environmental concerns with each other and balance them with the other land and economic development considerations.**

► **POLICY 4-A**

**Raise awareness and understanding of the environmental costs and benefits of land development and better incorporate this information in the decision-making process.**



The intent is to better understand how land use and development negatively impact the natural environment and to determine what can be done to mitigate these impacts.

The focus should include awareness of costs and benefits including: tangible and intangible; site specific and overall; public and private; and, short and long term. Health-related impacts should be included in the discussion.

### ► POLICY 4-B

**Ensure that implementation of the City's various policies and regulations related to land development minimizes the overall environmental impacts that result from the need to accommodate future growth.**

The aim is to ensure that when policies and regulations are implemented that the results minimize the environmental impacts of land use and development. In particular, this policy is meant to address the issue of competing interests between various policies and regulations recognizing that area and site conditions may influence how land can be developed. Implementation of this policy will likely require a review of, and changes to existing and proposed policies, regulations and practices.

### ► POLICY 4-C

**Ensure that public projects are designed and constructed to minimize environmental impacts.**

Recognizing that public projects may be subject to state and federal regulations, in addition to/or instead of local regulations, the intent is to make sure that local public projects also follow or exceed the guidance provided in these GDP.

## VI.

# *Infrastructure*

Adopted November 2007  
by Charlotte City Council

### Definition and Purpose

- ▶ *The purpose of the Infrastructure GDP is to more closely link land use and land development decisions to the availability of public infrastructure needed to support it.*

The City of Charlotte—like many other communities experiencing growth—is attempting to balance investments in capital infrastructure between maintaining viable systems and expanding systems to accommodate growth and increasing demand.

Meanwhile, decisions regarding infrastructure investment are not always well connected to decisions regarding future land use and development. This creates the potential for infrastructure shortfalls which impact the quality of life, particularly within fast-growing areas of the community.

These Infrastructure GDP are therefore intended to provide guidance to City Council, City staff, and the broader community in recognizing the relationship between infrastructure availability and investments, and land use and land development decisions that will impact the demand for that infrastructure.

They can also be used to guide infrastructure providers in enhancing the processes used to project and anticipate infrastructure needs and to identify innovative measures to fund and provide infrastructure to the Charlotte community.



*Johnston Road*



## VI. INFRASTRUCTURE

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### ■ Types of Infrastructure

This Infrastructure chapter of the GDP focuses generally on types of infrastructure that can be most directly impacted by development and land use changes, and that may include the following:

- transportation systems
- storm water facilities
- sewer and water facilities
- schools
- public safety facilities
- parks, greenways, nature preserves and recreation facilities.

### ■ Uses of Infrastructure GDP

These Infrastructure GDP are intended to be used to:

- help make future land use decisions (both during the land development review process and the area planning process),
- guide the identification, prioritization, and funding of infrastructure projects,
- enhance the levels of collaboration among infrastructure planning providers,
- guide the identification of alternative funding and innovative delivery of infrastructure, and
- help guide the design, location, and construction processes of future infrastructure improvements.

### ■ Policy Framework

Many communities that are grappling with the issues of growth and the ability to provide the infrastructure to accommodate that growth have enacted laws and ordinances that deal specifically with the land development permitting process. Impact fees, adequate public facilities ordinances (APFO's) and concurrency are the three most common tools applied to the complex relationship between development and infrastructure.

The Infrastructure GDP takes a different approach, instead identifying a set of broad policies that certainly deal with the development approval process, but also deal with such diverse issues as:

- the internal City capital investment planning process,
- the various facilities and infrastructure planning initiatives undertaken by different infrastructure agencies,
- the identification of potential new and innovative methods to fund infrastructure,
- the relationship between various infrastructure providers,
- the use of the area planning process and growth framework as a means of identifying and prioritizing future infrastructure investment,
- the impacts upon the environment of infrastructure development, and
- the regional context of infrastructure.

While impact fees, APFO's, and/or concurrency may ultimately play a role in Charlotte's approach toward infrastructure and growth, the Infrastructure GDP provide a policy framework that could be used to develop these and/or a wide range of appropriate implementation tools to respond to the complex issues of development and infrastructure, ranging from land development proposal review, to capital infrastructure planning coordination, to land use planning.

Many of these General Development Policies will serve satisfactorily as policies, providing guidance and direction to City staff and City Council as issues are considered and decisions are made with regard to infrastructure, proposed development, and related matters. Such policies are not intended to mandate certain actions be taken.

However, over time it may become evident that the GDP goals might be achieved through adoption of a regulation or ordinance to assist in implementation. An adoption process would include public participation, a public hearing before City Council, and City Council adoption in order for such regulations or ordinances to be enacted.

### Planning Context

The *Centers, Corridors and Wedges Growth Framework* was originally introduced in the early 1990's and reaffirmed in 1997 with the adoption of the *2015 Plan*, as a key tool to guide future growth. *Centers, Corridors and Wedges* is intended as a framework for organizing and managing growth to help ensure that development happens in a way that enhances the community and contributes to its character and identity.

*Centers, Corridors and Wedges* is discussed in the introduction of this GDP document. However, it is currently being revisited to provide an updated growth strategy for the community that focuses on strengthening the ties between land use and transportation networks; promoting more efficient use of existing infrastructure systems; and establishing a context for addressing land use and economic development issues. The framework is intended to help the City of Charlotte achieve the vision of becoming an urban community of choice for living, working and leisure.



*South Boulevard*

Policies and principles have been created as part of the *Centers, Corridors and Wedges* update which focus on various "characteristics" in three distinct geographies—activity centers, growth corridors, and wedges—by providing guidance relative to land use, transportation systems, infrastructure, and urban design. These characteristics help define and differentiate the unique conditions found in the activity centers, growth corridors,

## VI. INFRASTRUCTURE

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and wedges, and may be used to better determine where population and infrastructure improvements can be targeted within these areas.

From an infrastructure perspective, *Centers, Corridors and Wedges* provides a policy context within which both private development investments and public infrastructure investments can be coordinated, and which infrastructure development can be aligned with one another, as well as with other related City policies and initiatives. An outcome will not only be more efficient use of land, but also more efficient use of limited resources committed to the development of infrastructure.

### Existing Conditions and Trends

The local governmental agencies within Charlotte and Mecklenburg County responsible for the construction and maintenance of infrastructure (notably Charlotte-Mecklenburg Schools, the City Department of Transportation, Charlotte Mecklenburg Utility Department, and Mecklenburg Park and Recreation) typically develop long-range facilities needs assessments and master plans based upon generally-accepted growth projections and established infrastructure levels of service.

Additionally, a ten-year Capital Needs Assessment is developed every two years—in even-numbered years for City agencies and in odd-numbered years for County agencies. Finally, Charlotte and Mecklenburg County annually develop Capital Investment Plans that prescribe infrastructure implementation and funding.

Within the Charlotte-Mecklenburg growth environment, the resources needed to adequately maintain current infrastructure and construct new infrastructure to meet projected needs, nearly always exceed available and anticipated resources. Levels of infrastructure service consequently have eroded as demand exceeds local government's ability to meet that demand. As evidence of this shortfall:



*Ardrey Kell High School*

- since 2000, CMS student enrollment has grown by 33,000 students while 20 new schools were constructed, yet building utilization has increased from 91% to 102%;
- some 29 percent of City major roads are currently ranked as having extremely poor levels of service; and
- in 1990, there were 13 acres of land per 1,000 population designated for public parks while today that figure stands at 12 acres per 1,000 population.

### Applicability

The policies contained herein are intended to be implemented in combination with one another and are designed to complement one another. It is not expected that implementation of only one or a few of these policies will be as effective in achieving the Infrastructure GDP goals as the application of all of the policies working in combination with one another.

The policies contained in this chapter apply throughout the City of Charlotte, as well as the area it can eventually annex (its extraterritorial jurisdiction).

The Infrastructure GDP will be used to help guide:

- decisions regarding future land use and development;
- decisions relating to land development regulations such as revisions to the Zoning and Subdivision Ordinances;
- updates to infrastructure needs assessments and facilities plans;
- decisions regarding prioritization for funding of various infrastructure types;
- the manner in which limited infrastructure resources may be used and allocated;
- options associated with the funding or delivery of infrastructure;
- the role of the private sector in the provision of infrastructure;
- the consideration of potential environmental impacts of the development of infrastructure; and
- the assessment of the impact of infrastructure upon the community and the region.

In applying the Infrastructure GDP it will be important to balance the needs and benefits of the Infrastructure GDP with the needs and benefits of other City Council policies.

One mechanism to help implement several Infrastructure GDP policies is the conditional rezoning process. Conditions attached to a conditional zoning (CD) plan are agreed to voluntarily by the petitioner, who ultimately decides what infrastructure requests made by the City are included on the site plan.

Adoption of these Infrastructure GDP will be accompanied by a process enhancement whereby staff will clearly identify in the conditional rezoning process those conditions required as per adopted *ordinance*, and those which are requested (and agreed upon by the petitioner) as per adopted City *policy*.

## VI. INFRASTRUCTURE

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### Guiding Principles

Charlotte Mecklenburg continues to be challenged with the rapid physical changes that accommodate growth, and its ability to effectively respond to increased demands upon its infrastructure to support this growth. At the same time, aging infrastructure in need of modernization and replacement is competing for limited resources with the needs associated with system expansions to address growth.

To enhance our community's ability to coordinate growth and development with its responsibility to provide infrastructure to serve its citizens and visitors, the City of Charlotte embraces the following Guiding Principles:

1. **Define infrastructure needs comprehensively and with enhanced coordination among infrastructure providers.**
2. **Use existing and future infrastructure resources efficiently.**
3. **Seek new/additional/innovative funding sources to help meet unfunded local government-identified priority infrastructure needs.**
4. **Coordinate growth with the provision of infrastructure.**
5. **Ensure that infrastructure provision seeks to minimize negative impacts to both the natural and social environment.**
6. **Seek regional solutions—where applicable—to infrastructure issues and problems.**

## POLICIES

### GUIDING PRINCIPLE 1

**Define infrastructure needs comprehensively and with enhanced coordination among infrastructure providers.**

#### ► POLICY 1-A

**Take a comprehensive and coordinated approach to defining existing and future infrastructure needs, based on the City's land use policies and overall growth framework of Centers, Corridors and Wedges.**



Currently, both the City and County identify capital needs for a 10-year planning horizon through their Capital Needs Assessment (CNA) processes. However, City and County needs aren't identified together or cumulatively, don't cover the same 10-year period, and may not be based upon the same assumptions, geography, or growth policy framework. Additionally, many major infrastructure providers (CMS, CDOT, etc.) derive CNA projects from their own agency's infrastructure needs assessments and master plans that are developed and updated on schedules unrelated to one another.

The intent of this policy is to build on existing processes so that individually identified needs of both City and County (including CMS) can be identified jointly to provide a more comprehensive and coordinated picture of the needs the community is facing, and to recognize the inter-relatedness of some categories of infrastructure investments. Needs identified by other key agencies (e.g. N.C. Department of Transportation) should also be included for reference. As proposed, the needs assessment would:

- ▶ establish a common and consistent growth framework;
- ▶ identify all infrastructure needs and costs together to allow a better understanding of the cumulative impact;
- ▶ include short and long-term needs (including planning for Charlotte's entire extraterritorial jurisdiction), even if funding is not available;
- ▶ include the need for—in addition to system expansions to accommodate growth—renovation and/or expansion/upgrade of existing facilities (including defining terms such as “renovation/upgrade” and making a clear distinction between what is a capital budget expense vs. an operating budget expense);
- ▶ be based on the same assumptions (e.g. population projections);
- ▶ address any needed adjustments to level of service standards/expectations from individual infrastructure service providers;
- ▶ address any needed adjustments to how infrastructure needs may be met differently in the future (e.g. enhanced use of technology, changing lifestyle preferences);
- ▶ be multi-jurisdictional (e.g. reflect City, County, State—and possible other—infrastructure need for Charlotte's jurisdiction);
- ▶ be conveniently summarized for public review; and
- ▶ assure that there are no redundant and/or overlapping processes among multiple City and County agencies.

One means of achieving this vision is to develop and maintain a mechanism for key individuals in agencies charged with infrastructure planning (in Charlotte, Mecklenburg County and neighboring jurisdictions) to regularly communicate with one another with regard to issues of infrastructure planning, development, and maintenance.

## VI. INFRASTRUCTURE

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### GUIDING PRINCIPLE 2

Use existing and future infrastructure resources efficiently.

#### ► POLICY 2-A

**Support a coordinated and comprehensive funding/prioritization strategy for all public infrastructure (as defined in these GDP) making Centers and Corridors priority areas for capital investments.**

The intent of this policy is to improve upon existing capital investment planning processes, in particular to use the information from the needs assessment detailed in Policy 1-A and to align priorities with the *Centers, Corridors and Wedges Growth Framework*. The implementation of this policy could include the development of a comprehensive land use and infrastructure plan/policy and would also likely result in some revisions to the “Guiding Principles of Capital Planning.”

#### ► POLICY 2-B

**Strive to have infrastructure projects that address a variety of needs, are multi-purpose (e.g. right-of-way and greenway) and take advantage of opportunities to share elements (e.g. parking, best management practices for stormwater projects, sidewalks, and schools, parks, watershed protection).**

#### ► POLICY 2-C

**Seek innovative techniques for meeting infrastructure needs.**

This policy recognizes that there may be a variety of ways to meet infrastructure needs that would help to use resources more efficiently. For example, in the future greater reliance on technology may help lessen the burden on some types of infrastructure. Expanding partnerships with the private and/or not-for-profit sectors may also leverage resources or enhance efficiencies. Additionally, greater use of design/build strategies and joint use opportunities could help to “stretch” infrastructure budgets. Finally, the ability of philanthropic gifts in helping to meet infrastructure resources should be fully explored.

#### ► POLICY 2-D

**Ensure that privately-constructed infrastructure (e.g. stormwater infrastructure) meets all local standards prior to the City accepting ownership of it.**

#### ► POLICY 2-E

**Design and construct public infrastructure to maximize anticipated life and minimize life cycle costs.**

This policy recognizes that there must be a balance between the cost of providing public infrastructure and the longer term costs (e.g. maintenance, replacement) often associated with the quality of infrastructure design, construction and materials. Using infrastructure resources efficiently may sometimes mean spending more up front and/or exceeding minimum design and/or construction requirements to provide a high quality product that avoids more costly maintenance, repair or replacement in the longer term.

### ► POLICY 2-F

**Provide funding to ensure that existing infrastructure is well-maintained.**

This policy recognizes that any cost savings realized in the short term by not adequately maintaining our existing infrastructure will be more than offset, in the longer term, by the cost of repairing or replacing it when it fails due to inadequate maintenance. The policy also recognizes that as our community continues to grow and mature, increased interest in (and emphasis upon) redevelopment and infill development will be dependent upon well maintained and well functioning infrastructure in previously developed areas.

### GUIDING PRINCIPLE 3

**Seek new/additional/innovative funding sources to help meet unfunded local government-identified priority infrastructure needs.**

### ► POLICY 3-A

**Continue to consider both non-financial and financial strategies that are potential/feasible options for Charlotte to better meet infrastructure needs.**

From 1996 to 2006, the City has been able to fund about 43% of non-enterprise funded needs identified in the City Capital Needs Assessment (with the 2007-08 figure improving slightly above 50%). The intent of this policy is to provide guidance to ensure that funding can be provided to meet Council-identified priority infrastructure needs.

### GUIDING PRINCIPLE 4

**Coordinate growth with the provision of infrastructure.**

### ► POLICY 4-A

**Facilitate growth consistent with the Centers, Corridors and Wedges Growth Framework.**

## VI. INFRASTRUCTURE

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### ► POLICY 4-B

**Encourage infill and redevelopment as one strategy to take advantage of existing infrastructure.**

This policy intends to encourage infill and redevelopment located where it can be served by existing or planned infrastructure and services, and which supports the City's overall growth framework, as well as the Environment chapter of the GDP.

### ► POLICY 4-C

**Use area plans as a tool to better link future land uses with infrastructure needed to serve it and with the Centers, Corridors and Wedges Growth Framework.**

This policy is intended to better utilize the area planning process to identify, coordinate, and prioritize future infrastructure needs and to better coordinate these needs with planned future land uses identified in the area plans.

Additionally, it is intended to raise the funding priority for infrastructure projects identified in an adopted plan developed through an inclusive, community-based process with interdepartmental/agency cooperation.

Implementation of this policy might call for greater participation of infrastructure providers in area planning processes and for greater participation of land use planners in the infrastructure planning processes. It may also call for some land use recommendations in area plans to depend upon the existence of Capital Investment Plans that would ensure availability of infrastructure to serve the recommended land uses.

### ► POLICY 4-D

**Ensure that decisions regarding location and intensity of development take into account geographic areas in which infrastructure is (and will be) available.**

The centerpiece of this policy would be revising the GDP Residential Location Criteria to emphasize geographic areas in which infrastructure is available. This might involve replacing the current "potential connectivity" standard with an infrastructure indicator tied to existing and/or funded projects, and/or a refinement of the road network evaluation.

### ► POLICY 4-E

**Consider both the on-site and community-wide impacts of a proposed development on public infrastructure (e.g., roadways, parks and recreation, police and fire protection, schools, stormwater, water and sewer), as well as the possibility of timing/phasing development as infrastructure can be provided.**

The intent of this policy is to provide a more complete picture of development's infrastructure impacts and to help determine any needed mitigation measures, mitigation timeline, and mitigation responsibility.

### **GUIDING PRINCIPLE 5**

**Ensure that infrastructure provision seeks to minimize negative impacts to both the natural and social environment.**

#### **POLICY 5-A**

**Make the protection of the natural environment a priority in the infrastructure design and construction process, while acknowledging the need to balance the advantages of the improvements with their environmental impacts.**

The intent of this policy is to ensure that infrastructure projects are designed and constructed so that their impacts on the natural environment are acknowledged and can be minimized as much as reasonably possible. The policy recognizes that environmental protection is one of many competing priorities and that it must be balanced with these other factors. (Guidance for minimizing/mitigating environmental impacts is provided in the Environment Chapter of the GDP.)

#### **► POLICY 5-B**

**Consider the impacts to existing neighborhoods when providing infrastructure.**

The intent of this policy is to ensure that when constructing new infrastructure, such as streets and sewer and water lines, impacts are considered such as physically dividing neighborhoods, creating safety issues and/or eyesores or negatively impacting existing service.

#### **► POLICY 5-C**

**Consider sustainability (location, design, materials, operation) when making infrastructure decisions.**

The intent of this policy is to ensure that decisions pertaining to future infrastructure include consideration of principles of "sustainability" — defined as the long-term implications of the infrastructure's location, design, etc. upon the community, the environment and upon operations and maintenance expenses. This exercise needs to acknowledge any additional costs associated with sustainability and the potential benefits (including lower maintenance and operational expenses and environmental benefits).



### **GUIDING PRINCIPLE 6**

**Seek regional solutions—where applicable—to infrastructure issues and problems.**

#### **► POLICY 6-A**

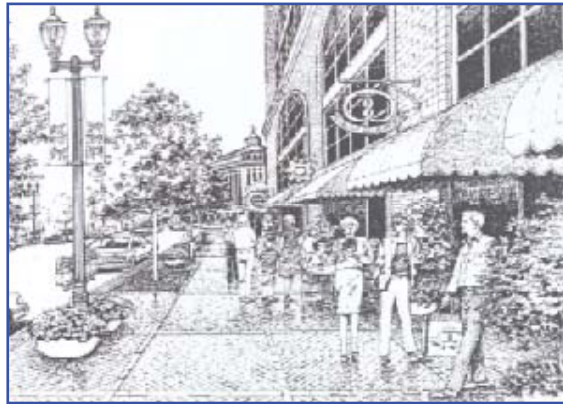
**Encourage regional partners to be engaged in collaborative problem-solving to identify creative regional solutions to infrastructure issues.**

Infrastructure solutions might be found in the development of partnerships with organizations beyond the boundaries of the City of Charlotte. Many transportation, stormwater and utilities infrastructure issues can be more effectively addressed with regional infrastructure investment solutions. Additionally, it is important to ensure that local decisions do not have unintended impacts regionally. Enhanced communication on infrastructure issues with regional partners is one means of achieving this.

Also important to understand is that the nature of the issue will influence the definition of “regional.” For example, the regional partners gathered to address an air quality issue may represent different geographic areas than those gathered to address water quality issues.

## Part Two:

### *Future Updates*



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## VII.

### *Office Development*

► *Policies will be developed to address office, business park and research land uses in the next phase of updating the General Development Policies. The update will likely include these sections:*

- Definition
- Applicability
- Guiding Principles
- Policies

## VIII.

### *Retail Development*

▶ *Although previous sections have addressed retail uses within retail-oriented mixed/multi-use centers, this section will address “free-standing” retail land uses, in the next phase of updating the General Development Policies. The update will likely include these sections:*

- Definition
- Applicability
- Guiding Principles
- Policies

## IX.

### *Other Land Uses*

► *The need for policies to address other land uses, in addition to those addressed in previous sections, may be identified through the GDP update process. Such additional land uses may include:*

- Industrial (particularly mini-warehouses)
- Institutional (e.g. schools, churches, day care facilities)
- Other mixed uses not addressed by the policies for retail-oriented mixed/multi-use centers
- Parks and Recreation Uses
- Re-use of single family to non-residential uses
- Assisted living and senior housing

The update will likely include these sections:

- Definition
- Applicability
- Guiding Principles
- Policies



## X.

### *Economic Development*

► *The next phase of the update process for General Development Policies could include a discussion of key economic development policies and initiatives, such as:*

- Transit Station Joint Development  
(also discussed in Infrastructure Section)
- Business Corridor Revitalization
- Pedscape Planning

## XI.

### *Other Initiatives*

In addition to developing policies for other types of land use, and discussing related policies and initiatives, as suggested on pages 91-94:

► *A key outgrowth of these General Development Policies must be the development of a comprehensive, long-range plan that integrates land use and transportation at the community-wide level.*

These GDP provide the foundation for developing such a plan, and suggest the need for additional analysis and refinement of transportation adequacy that would be necessary prior to undertaking that plan.

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## APPENDIX 1

# ***Technical Guidance: Documentation of Methodology***

### **Introduction**

- ▶ *This appendix provides detailed descriptions of the methodology used in evaluating sites for higher density residential development (above 4 dwelling units per acre).*

In particular, this appendix addresses the following evaluation criteria of the Residential Location and Design section (pages 20-24) of the GDP:

- *Land Use Accessibility*
- *Connectivity Analysis*
- *Road Network Evaluation*

These criteria are just part of the process for evaluating potential locations for higher density residential development in areas between corridors that are often termed “the wedges.” All of the criteria are shown in the matrix on the following page. The specific geography where these policies apply is described on page 17 and illustrated by the map on page 18.

#### ***Key Definitions***

- ▶ *Accessibility* - The number of opportunities (activity sites or land uses) available within a specified distance.
- ▶ *Connectivity* - The number of connections potentially available to those activity sites or land uses within the specified distance.

*The matrix for assessing Residential Location and Design is shown on pages 100-101. A description of the methodology for using this matrix begins on page 102. ▶*

## Residential Location and Design Assessment



### Density Category

Assessment Criteria	> 4 up to 6 dua	> 6 up to 8 dua	> 8 up to 12 dua	> 12 up to 17 dua	Over 17 dua
<b>Meeting with Staff</b>					
Yes = 1; No = 0					
<b>Sewer and Water Availability</b>					
CMUD = 2; Private* = 1; No = 0					
<b>Land Use Accessibility</b>					
High = 3; Medium = 2; Low = 1					
<b>Connectivity Analysis</b>					
High = 5; Medium High = 4 Medium = 3; Medium Low = 2; Low = 1					
<b>Road Network Evaluation**</b>					
Yes = 1, No = 0					
<b>Design Guidelines</b>					
Yes = 4; NA = 4; No = 0					
<b>Other Opportunities or Constraints (see below)</b>					
Comment (no points)					
<b>Minimum Points Needed</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>

\* A private sewer system may be considered if the State has previously permitted the system, it has capacity to serve the proposed development, and it is built to CMUD standards. (If the private sewer lines are offered for donation to CMUD, the site may receive 2 points for this criteria.)

\*\* If a site does not pass the road network evaluation, it can still be considered for higher density development (but with no points given in the assessment for road network).



*Residential Location and Design Assessment (continued)***Opportunities and Constraints that must be considered:**

- ▶ How much higher density exists or is planned/approved for area, and will additional higher density development have negative impact on the area (i.e. neighborhood stability, socioeconomics, housing diversity)?
- ▶ Does proposal support redevelopment/revitalization goals?
- ▶ Does the size/impact of proposal indicate need for plan or plan amendment?
- ▶ Does proposal tear down existing residences in established neighborhoods?
- ▶ Is the proposal internal to an established neighborhood developed at a lower density than the proposal?
- ▶ Is the proposal a small site “sandwiched” between higher intensity uses?
- ▶ Is site being redeveloped from a residential or non-residential use? If so, is it appropriate to exceed the density maximum given the intensity of existing zoning, land use and surrounding uses?
- ▶ If private recreational facilities are available and accessible to the public, they may be counted as a complementary land use in the Land Use Accessibility Criteria. (This may include a recreational facility provided as part of the development if it is sized to meet the needs of the development, includes more than one active recreational use and is generally available to all of the residents.)
- ▶ Is the site near a university or similar use that generates the need for additional higher density residential development that may augment the land use accessibility analysis?
- ▶ Is the proposal for age-restricted senior living?
- ▶ Is the site located along a transit route with frequent service?

These opportunities and constraints could alter the overall site evaluation in the following ways:

- 1) a site that has not scored the minimum number of points may be deemed appropriate for a density increase;
- 2) a site that has scored the minimum number of points may be deemed inappropriate for a given density, or for any density increase; or,
- 3) a site that has scored the minimum points for some density increase may be deemed appropriate for an even higher density.

**Finally, a density bonus may be assigned:**

If a site has met the minimum points for a specified density, fronts on a thoroughfare and is within 1 mile of a rapid transit station area (but outside of the area included in the station area plan), it may be appropriate for an increase in density of 3 d.u.a.

Note that a site may also qualify for other density bonuses that already exist, or may be adopted in the future:

- ✱ 30% of the site is dedicated for usable open space, including “tree save” areas if applicable (up to one additional unit)
- ✱ S.W.I.M. (Surface Water Improvement Management)
- ✱ Tree Save (as per Charlotte’s Tree Ordinance)

## Methodology

### Land Use Accessibility

Staff will evaluate land use accessibility within a  $\frac{1}{4}$  and  $\frac{1}{2}$  mile radius of the site to determine the number of complementary land uses that either currently exist or are shown on adopted land use plans. The complementary land uses are defined below.

It should be noted that the  $\frac{1}{4}$  and  $\frac{1}{2}$  mile radius will be measured from the center of the site unless there are specific circumstances (i.e. the site is very large, development will be phased, placement of higher density on the site). In such cases, staff will work with the petitioner to determine the most appropriate location for the "center." However, the same "center" will be used for each component of the analysis. For larger sites, more than one center and radius may be needed to encompass the entire site.

#### ■ COMPLEMENTARY LAND USES

The complementary land uses are defined as follows:

- Public or private school with at least 200 students (including college or university)
- Public recreation center or park; YMCA or YWCA (see also private recreational facilities discussed under "Opportunities and Constraints" on page 101)
- Retail (a mixture of neighborhood-serving uses such as supermarkets, restaurants, banks, shopping centers, personal services)
- Employment concentration (defined as 2,000 employees within  $\frac{1}{4}$  mile radius and/or 5,000 employees within  $\frac{1}{2}$  mile)
- Hospital, medical or dental facility
- Place of worship
- Post office or staffed postal or package facility (public or private)
- Public library

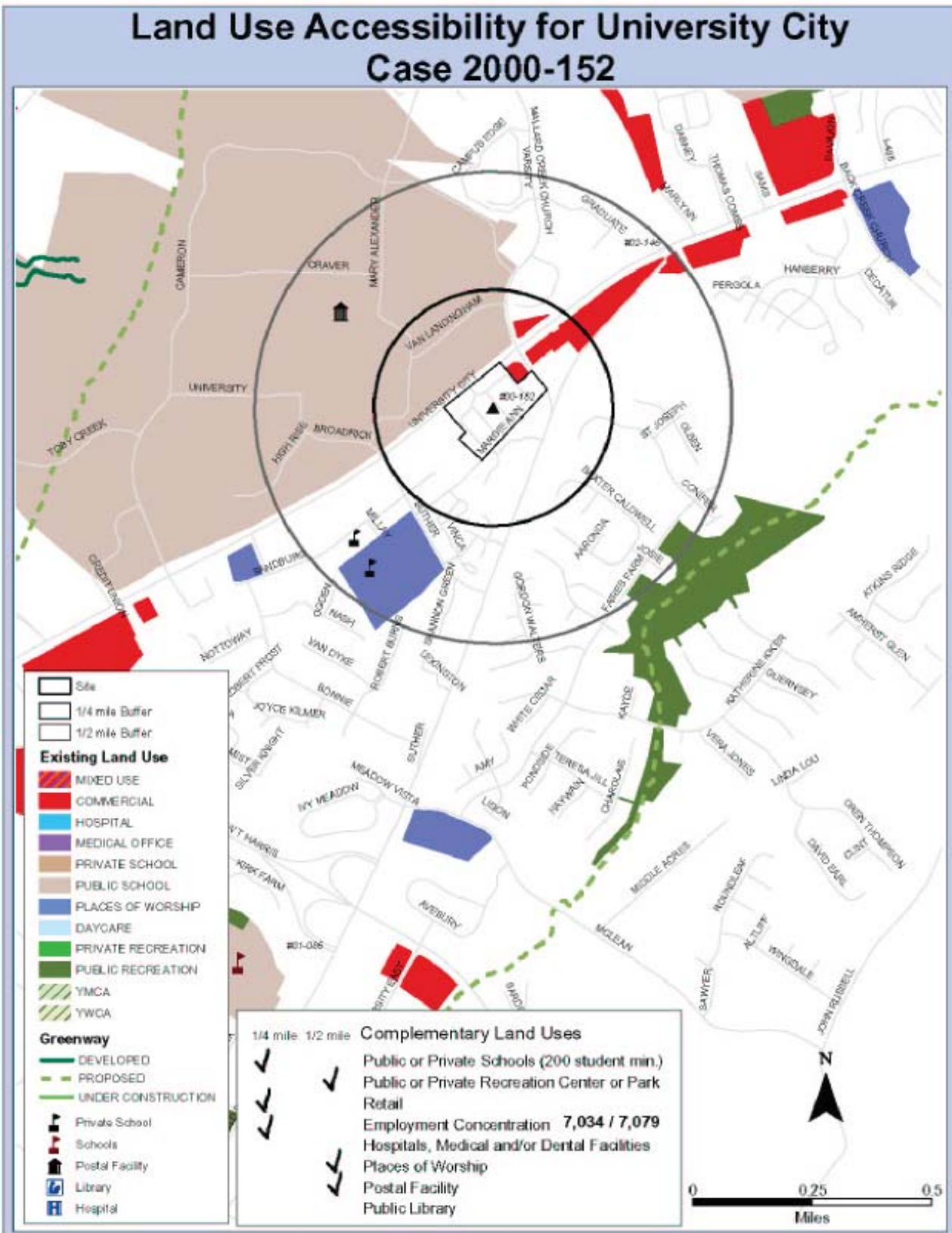
#### ■ LAND USE ACCESSIBILITY SCORE

Land use accessibility is calculated as follows:

- High* = at least 2 complementary land uses within  $\frac{1}{4}$  mile and at least 3 additional complementary land uses within  $\frac{1}{2}$  mile
- Medium* = 3 complementary land uses within  $\frac{1}{2}$  mile
- Low* = 1 complementary land use within  $\frac{1}{2}$  mile

An example of how land use accessibility is evaluated is shown on the facing page (*page 103*). In this example, the site has 3 complementary land uses within  $\frac{1}{4}$  mile of the site, and three additional complementary land uses within  $\frac{1}{2}$  mile. Therefore, this site receives a HIGH Land Use Accessibility score.

Exhibit 1



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## Connectivity Analysis

Staff will complete a connectivity analysis for the area surrounding the site. This area is typically defined as a ½ mile radius from the site unless there are physical barriers or other constraints that would cause the area to be measured differently. (Undeveloped property within the ½ mile assessment area will be assigned connectivity points based on how the street network would likely be built under existing zoning and subdivision requirements. The methodology for calculating these points is to consider residentially-zoned, vacant parcels of at least five acres that do not have a site plan associated with them. For each mode—bicycle, pedestrian and automobile—it will be assumed that there will be 1.5 segments per acres [1.5 x 3 x acreage].) Note that street, sidewalk and bicycle “segments” provided within the proposed development (both multi-family and single family) are also counted in the connectivity score.

*The connectivity analysis considers roadways, transit, sidewalks and bicycle facilities:*

### ■ ROADWAYS

One point is assigned to each street segment within a ½ mile area. A *street segment* is a portion of a street that originates at one intersecting street and ends at another intersecting street (a block). A cul-de-sac or stub street counts as one street segment.

*For the site shown on page 105:*

- ▶ There are 124 total street segments within ½ mile area. This site receives **124 roadway points**.

### ■ TRANSIT

Transit points are assigned based on proximity to transit service. Proximity refers to the walking distance from the site to the nearest transit route. Express bus service is included only if the bus actually stops within the ¼ or ½ mile walk area. Future bus routes identified in the Countywide Service Plan will be included in the assessment.

Sites are scored as follows:

For sites within 1/4 mile of a transit route: 200 points

For sites between 1/4 and 1/2 mile of a transit route: 75 points

*For the site shown on page 105:*

- ▶ The closest transit routes are within ¼ mile of the subject site (Routes 29 and 39). As a result, this site would receive 200 transit points.

*continued page 106*





## ■ SIDEWALKS

Sidewalk points are assigned for each segment within a ½ mile radius of the site, including sidewalks shown on the proposed site plan and sidewalks that are programmed but not yet constructed. Points are based on the following:

- Sidewalk on both sides of street = 1 point per street segment
- Sidewalk on one side of street and partial on other = .75 point per street segment
- Sidewalk on one side of street = .5 point per street segment
- Sidewalk is partial on both sides of street = .25 point per street segment
- Sidewalk is partial on one side of street = .125 point per street segment
- No sidewalk on either side of street = 0 points

*For the site shown on page 105:*

- ▶ This site receives a total of 28 sidewalk points.

## ■ BICYCLE FACILITIES

Bicycle points are assigned for each street segment within the ½ mile radius of the site. Points are based on the following:

- Local street = 1 point per street segment
- Thoroughfares with striped bike lanes = 1 point per street segment
- Designated bikeway = 1 point per segment

*For the site shown on page 105:*

- ▶ There are 110 total street segments consisting of local streets, thoroughfares with striped bike lanes, and/or designated bikeway within the ½ mile area. This site receives 110 bicycle facility points.

## ■ POTENTIAL CONNECTIVITY

Potential connectivity is calculated for residentially-zoned, vacant parcels of at least five acres. For each mode—bicycle, pedestrian and automobile—it is assumed that there will be 1.5 segments per acre.

*For the site shown on page 105:*

- ▶ There are 46 acres that are vacant, residentially-zoned parcels of greater than five acres. This results in 69 segments per mode or a total of 207 points.



### Connectivity Analysis Score

To calculate the connectivity score, sum the points for **ROADWAYS, TRANSIT, SIDEWALKS, BICYCLE FACILITIES and POTENTIAL CONNECTIVITY**. The total connectivity score is categorized as follows:

- *High* = at least 600 segments/points = (5 points)
- *Medium-High* = 500 to 599 segments/pomts = (4 points)
- *Medium* = 400 to 499 segments/points = (3 points)
- *Medium-Low* = 300 to 399 segments/points = (2 points)
- *Low* = less than 300 segments/points = (1 point)

An example of how connectivity is evaluated is shown in the exhibit on page 105. In this example, the site receives a **total of 669 points**. It received 124 Roadway points, 200 Transit points, 28 Sidewalk points, 110 Bicycle points, and 207 points for Potential Connectivity. The total of 669 points translates into a HIGH Connectivity score.

### Road Network Evaluation

Evaluate the existing and planned roadway network surrounding the site. The area to be evaluated is defined as the polygon created by thoroughfares encompassing the site.

This road network evaluation must show that there either exists, or could exist (i.e., there are no physical impediments or lack of right-of-way which would preclude developing a network), a network of relatively direct lateral and radial thoroughfares or collectors spaced no more than ½ mile apart within the defined area. (Note that other connecting roads may also be considered under unique circumstances when it can be shown that similar mobility is provided.)

In addition, the site must be designed to meet the block spacing guidance provided in the Urban Street Design Guidelines once they are adopted.

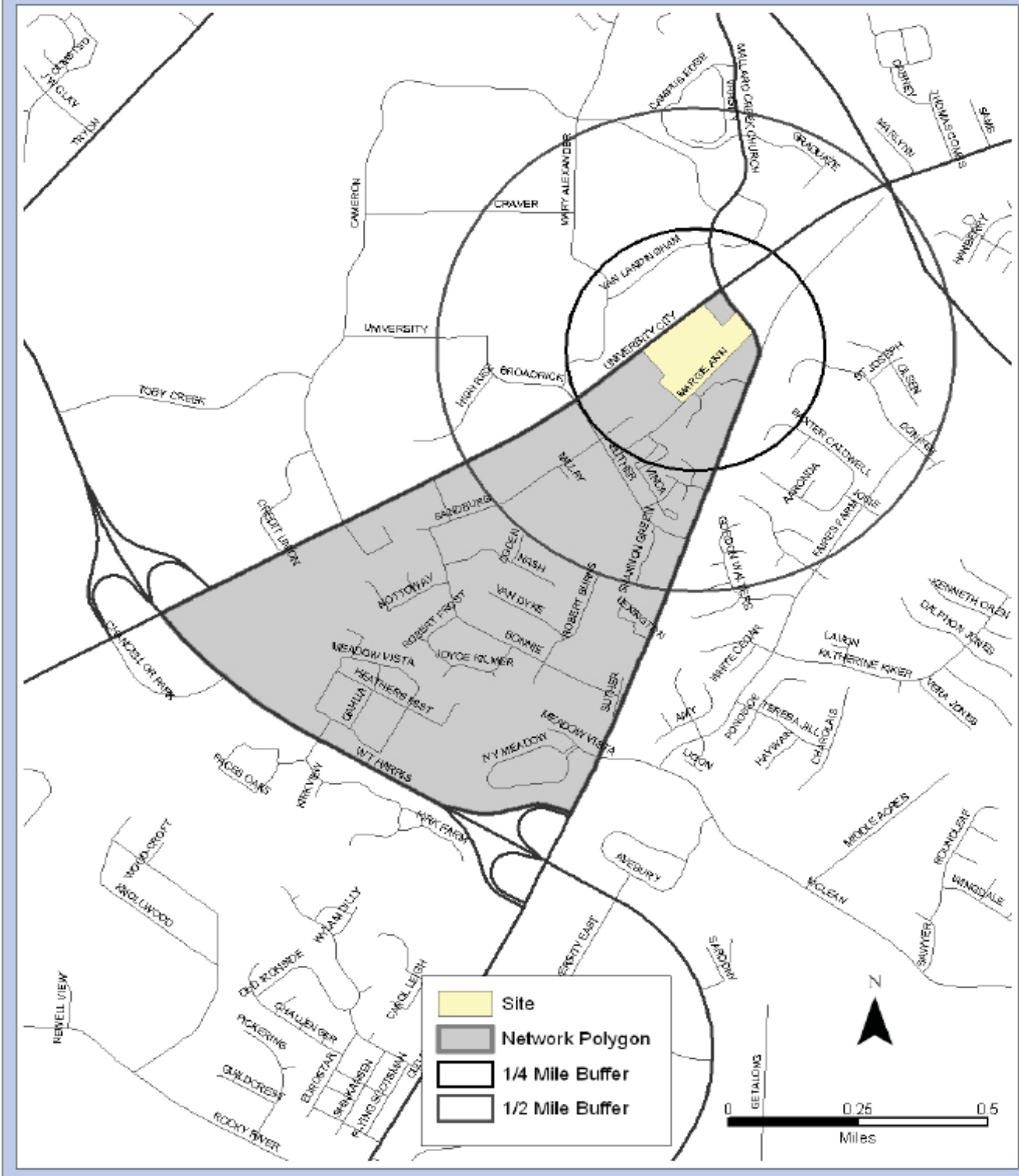
*Exhibit 3 (page 108)* illustrates the road network evaluation methodology described below:

#### ■ AREA TO BE ANALYZED

1. *Locate the site.* The example site is located on University City Boulevard near Old Concord Road.

*continued page 109*

### Road Network Evaluation for University City - Case 00-152



2. *Draw a polygon around the site using the nearest thoroughfares in each direction. The polygon for this example is formed by University City Boulevard, Old Concord Road, Mallard Creek Church Road and W.T. Harris Blvd. (Note that when the site is located on a thoroughfare, that thoroughfare forms one "side" of the polygon. The other "sides" will be determined by choosing the nearest thoroughfares. The result will be to create the smallest possible polygon.)*

#### ■ EVALUATION OF EXISTING/PLANNED ROAD NETWORK

1. *Analyze the area within the polygon to determine if there are connector roads in each direction spaced no more than ½ mile apart. Roads forming the sides of the polygon are included in the evaluation. Because the spacing between University City Boulevard and Old Concord Road is somewhat greater than ½ mile in various locations, additional connector roads are needed. The network of local streets in this area provides some connectivity, but a connection to W.T. Harris Boulevard is a critical missing link.*
2. *Determine if there are new road projects planned for the area within the polygon that would create additional connections. By looking at the 2020 Long Range Transportation Plan, staff determined that there are no such connections planned for the example area.*

#### ■ EVALUATION OF POTENTIAL FOR FUTURE ROAD NETWORK

*If the "1/2 mile thoroughfare/collector network" does not exist and is not planned, determine if it is physically possible for such a network to exist in the future. If it is possible, then make sure the development of the subject site does not preclude the development of such a future road network. It is unlikely that such a network will exist in the future for this example, given that the area is already developed.*

#### Outcome of Evaluation

If the "½ mile thoroughfare/collector network" is found through the above evaluation to:

- a) currently exist, or
- b) be planned, or
- c) have potential to exist in the future; *and*
- d) is not precluded by development of the subject site,

the site "passes" the road network evaluation step.

If the site does *not* pass the road network evaluation, the site assessment can still proceed, but no point is received for this criterion. In the example, the site did not pass the road network evaluation. However, the assessment would continue with no points given for "road network."



## APPENDIX 2A

# *General Implementation Tools*

### Introduction

- ▶ *The General Development Policies provide direction in developing future land use plans, making rezoning decisions and planning for specific functions such as capital facilities, transportation and economic development. While the policies do give guidance, it requires implementation tools to make the GDP's underlying vision a reality. This is a summary of common implementation tools.*

### ■ Adherence to Plans and Policies

Consistent application and support of the policies provided in this document and their specific application in area plans will be the most significant means of ensuring that the desired land use pattern will evolve. Although some deviations may be necessary at times, they should be kept to a minimum. Changes made in one area may necessitate changes elsewhere, thus affecting the overall development pattern.

### ■ Rezoning

Many policies provided in this document can be implemented immediately through the rezoning process. The policies provide guidance for both staff and petitioners to use in evaluating rezoning requests. Design guidelines, in particular, will be used in the evaluation of conditional rezoning requests.

### ■ Increasing Densities

To facilitate and encourage a more transit supportive development pattern, the public sector should assume a proactive role with regard to “upzonings”. Areas designated for increased densities in the transit corridor planning process should be rezoned to allow that density by right, as long as specific design criteria are met. The Planning Commission staff should initiate rezonings that would align the zoning with the desired maximum density. In the interim, the private sector is encouraged to request “upzoning” property on a case by case basis in accordance with adopted plans.



## ■ Corrective Rezoning

The Planning Commission staff pursues corrective rezonings, or downzonings, as part of the area planning processes to rectify land use and zoning conflicts. The intent is to ensure that the intensity or type of development that occurs in the future will be consistent with adopted plans.

Corrective rezonings may be recommended in developed areas where, for example, properties on the edge of a neighborhood are zoned for office or commercial use but are actually developed with solid single family homes. A rezoning would be recommended to prevent fraying of the residential edge. Downzonings could also be appropriate in areas that are identified as environmentally sensitive.

In areas where considerable analysis of a zoning pattern is needed, an area plan will be proposed to address the potential zoning conflicts.

## ■ Zoning Ordinance Changes

*Transit Oriented Development (TOD) Zoning:* TOD zoning is needed to incorporate the land planning and urban design characteristics that create a good mixed-use development. The most important features of TOD zoning should be:

- 1) a wide range of by-right uses likely to generate ridership (e.g. office employment) and a limitation on uses that will not (e.g. warehouse and distribution);
- 2) the use of minimum density requirements to secure adequate intensification and greater land-use efficiency;
- 3) reduced parking requirements in recognition of transit ridership access;
- 4) incorporation of transit and pedestrian-friendly urban design standards in all site plans;
- 5) clear requirements and streamlined approval process to encourage private investment in transit-related developments; and
- 6) stepped up public sector involvement in such areas as parking provision, infrastructure support and land assembly.

TOD zoning will promote uses such as office employment that benefit most from transit access and create a higher pool of potential riders. Land uses that do not benefit from transit access are best located elsewhere. Those uses that are permitted must be implemented at an appropriate level of intensification.

*Mixed-Use Development:* Mixed-Use zoning is needed to encourage a true mixture of uses within developments.

■ **Infrastructure and Public Services Planning**

The City of Charlotte should document the build-out status of the entire 380 square miles into which it will eventually expand, from both a land use and transportation perspective. The outcome of the build-out analysis should guide future land use and infrastructure planning as well as CIP development.

■ **Integration of Land Use and Transportation Planning**

Land use plans should be included as part of the criteria analyzed to determine transportation improvement priorities and transportation impacts should be reflected in proposed land use plans.

Growth Allocations should be completed and various land use scenarios tested as input for the development of a Long-Range Comprehensive Land Use and Transportation Plan.

■ **Public Involvement**

Public involvement in the planning process is critical to developing and implementing land use plans. To ensure a proper balance of public input, staff should continue to look for ways to strengthen the citizen input process. In particular, staff should continue to take advantage of technology to better educate and inform citizens of planning issues.

■ **Future Review**

The adopted policies shall be reviewed at least every five years to ensure that they are producing the desired results. Further, as new components of the GDP are completed, it likely will be necessary to update previously completed components to ensure consistency.

## APPENDIX 2B

# *Environment Implementation Tools*

### Introduction

- ▶ *This appendix outlines strategies to help guide staff work in implementing the Environment policies. Many of the strategies listed below will require future City Council direction and approval, particularly those items suggesting changes to existing ordinances and regulations. Such changes will also require additional public input and will typically involve stakeholder group review.*

### ■ Area Planning

- Use the *Centers, Corridors and Wedges Growth Framework* as guidance for developing recommendations in area plans.
- Use existing data layers and enhance with additional information/surveys for the plan area to document the existing environmental conditions. Examples of the types of existing conditions that could typically be addressed in area plans (if data can be made available) include:
  - ◆ Topography
  - ◆ Tree cover
  - ◆ Wetlands, streams and floodplains
  - ◆ Undisturbed/natural areas within plan and surrounding area
  - ◆ Known rare or unique natural habitats
  - ◆ Known rare or unique features
  - ◆ Areas with a potential diversity of species
  - ◆ Natural heritage sites, parks and nature preserves
  - ◆ Protected and/or preserved areas
  - ◆ Watershed conditions and drainage pattern
  - ◆ Known hazardous sites and/or areas with potential environmental contamination.

- Identify any environmentally sensitive (per Policy 1-B) areas within area plans, to the extent possible, and suggest ways to protect and/or minimize impacts to these areas.
- Fully consider the existing environmental opportunities and constraints when determining the appropriate type, intensity and form of future land use and development in area plans.
- Identify appropriate locations for infill and redevelopment in area plans and provide design guidance to ensure that it occurs in an environmentally-friendly fashion.
- Provide guidance to facilitate incremental mixed use development at appropriate locations within area plans.
- Share future land use plans with CATS operations for consideration in developing County-wide services plans and include CATS staff on area plan development teams and on area plan assessment team. Additionally, ensure that area plans identify the need for providing transit facilities.

■ **Research, Data and Analysis**

- Establish a city/county staff team tasked with development and maintenance of an inventory/database of natural features that can be used, in particular, to help identify environmentally sensitive areas. This will likely involve creation of an “environmentally sensitive areas” GIS layer (map).
- Develop a user-friendly guide(s) with information on environmental protection methods, innovative mitigation techniques and characteristics of environmentally sensitive site design.
- Develop tools (i.e., guidelines, checklist) to help determine environmental significance.
- Identify strategies to encourage appropriate infill development and to meet development targets in Centers and Corridors.
- As part of the City’s Connectivity Program, the City will continue to develop and refine a list of roads/walkways/pedestrian ways that could be extended to provide additional connectivity between land uses either by extension of the pavement or by providing pedestrian or bicycle connections. This is a dynamic list that will continue to be prioritized and incorporated into the capital needs assessment process to complement the new connections being provided through the development process.

■ **Information and Education**

- Work with private sector to develop and distribute information to help ensure the long-term appropriate management of environmentally sensitive areas, particularly in residential areas.
- Seek opportunities to educate staff and elected/appointed officials on environmental impacts and benefits related to land development and redevelopment.
- Provide information on the various costs and benefits of minimizing environmental impacts of land use and development.

■ **Land Acquisition and Disposal**

- Utilize an environmental inventory/geodatabase to target areas for continued public ownership (as opposed to disposal as surplus property) or future public acquisition.

■ **Interagency Communication/Cooperation**

- Work with public agencies (e.g. Parks, Schools, Libraries, Fire, Police, Transit) to identify future facility needs and opportunities for joint use and to ensure that new facilities are located, designed and constructed to minimize environmental impacts.

■ **Rezoning and Subdivision Process**

- Identify areas thought to be environmentally sensitive and recommend ways to protect and/or minimize impacts to these areas through the rezoning and subdivision processes. Include this information in the rezoning staff analysis.
- Fully consider the environmental impacts, consistent with adopted city ordinances and policies, when assessing development proposals. In particular, consider the existing environmental opportunities and constraints when evaluating the type, intensity and form of the land uses in a development proposal.

■ **Ordinance Changes (zoning, subdivision, tree, etc.)**

- Add language to zoning and subdivision ordinances to help minimize impacts to environmentally sensitive areas.
- Add characteristics of environmentally sensitive site design into the zoning ordinance as standards for certain districts.

- Review the zoning ordinance to enable “small-scale” mixed-use development and to enhance the ability to implement area plan recommendations (particularly recommendations for mixed-use land uses) and to enable mixed/multi-use development on adjacent parcels in appropriate locations.
- Review parking requirements in zoning ordinance relative to environmental impacts, particularly looking for ways to reduce parking needs such as making shared parking more appealing/feasible and establishing parking caps in some districts.
- Review tree ordinance to ensure that tree regulations are adequate to achieve desired results (underway).

■ **Ongoing Policy Review and Alignment**

- Review existing policies and regulations to address any inconsistencies or conflicts among them and to ensure they meet intent of GDP to minimize environmental impacts of land use and development.
  - ◆ As part of the process of updating the GDP Phase I, incorporate environmental policies as appropriate.
  - ◆ Continue work on policy alignment of GDP, draft post construction controls ordinance (PCCO) and *Urban Street Design Guidelines* (USDG) as these are adopted and implemented.



## APPENDIX 2C

# *Infrastructure Implementation Tools*

### ■ Infrastructure Master Planning and Capital Investment Planning

- Ensure that City and County infrastructure providers understand the *Centers, Corridors and Wedges Growth Framework* and are enabled to use it to guide infrastructure master planning initiatives and capital needs assessments.
- Update the City's capital planning principles to incorporate the *Centers, Corridors and Wedges Growth Framework* and to more strongly address the need for collaborative and coordinated infrastructure planning. Additionally, ensure that these principles are consistently used to identify and prioritize capital projects.
- Work with City and County infrastructure providers to enhance infrastructure master plans and needs assessment processes so that needs are identified in coordination with one another and data and reporting is more standardized among providers.
- Seek greater collaboration between and among City and regional (especially County, but also including NC Department of Transportation) Infrastructure Master Planning and Capital Investment initiatives.
- Create a reliable timely and convenient electronic medium that can be used by each infrastructure provider (City and County) that allows for comparison among various agencies' infrastructure master plans and capital investment plans so that adjustments may be made accordingly in master plan and capital investment plan updates.

### ■ Land Development Review and Regulatory Processes

- Create mechanisms that allow all infrastructure providers to more actively and meaningfully participate in reviewing and evaluating land development proposals.
- Consider short-term and long-term (i.e. in excess of 10 years) infrastructure implications as articulated in various long range infrastructure plans when reviewing land development plans and proposals.

- Review land development ordinances and regulations to ensure that they do not make it more difficult to develop in infill and Center and Corridor areas than in other geographies.
- Develop a mechanism to measure the effectiveness of the Infrastructure GDP policies relating to the land development review process, and develop a reporting mechanism to report the same.

■ **Communication and Coordination**

- Explore means of establishing more formal inter-jurisdictional relationships (e.g. joint resolution like Joint Use Task Force) that may involve development of interdepartmental and inter-agency agreements to coordinate major planning initiatives.
- Utilize regional organizations (such as the Centralina Council of Governments) as a platform for regional infrastructure planning, communication, and coordination discussions, focusing particularly upon establishing and maintaining regular, meaningful, and reliable communications on pertinent infrastructure issues with a goal of enhanced collaboration.

■ **Land Use Planning**

- As part of the update of the Phase I General Development Policies, incorporate greater consideration of infrastructure availability and capacity.
- Incorporate greater consideration of infrastructure availability in developing recommendations in area plans.
- Reflect infrastructure needs articulated as part of Area Plans in:
  - ◆ Individual agencies' infrastructure needs assessments and
  - ◆ Capital Investment Programs and Capital Needs Assessments.

■ **Funding and Resources**

- Explore the potential role of the NCDOT for roadway improvements outside of the City's corporate limits.
- Continue the process to explore new funding sources for infrastructure used following passage of the *Transportation Action Plan* in 2006. This should include identification and examination of funding and resource approaches used successfully in comparable communities to finance/expedite/enable infrastructure to be developed, and the identification of regulations that may be obsolete,

duplicative, or otherwise unnecessary that unfairly burdens the ability of localities to develop needed infrastructure.

- Identify and monitor legislative approaches to innovation (e.g. proposed legislative authority to use “design-build” process for utilities projects, legislative authority to allow school districts to contractually partner with private sector to build schools, etc.), and advocate for legislative reforms where warranted.
- Explore potential creative financing opportunities that may involve public/private partnerships, IRS tax codes, naming rights, philanthropic gifts of infrastructure or funding, etc.
- Explore alternate means of infrastructure service delivery in annexation areas as a means of potentially softening the infrastructure cost impacts of serving annexed areas.
- Periodically report out on various aspects of funding and resources, including (but not limited to) potential new infrastructure funding sources and approaches, potential legislative approaches, and creative financing opportunities.

#### ■ Research and Data Analysis

- Quantify the funding gap between projected infrastructure needs and likely resources available to meet those needs, using reasonable revenue projections alongside updated capital needs assessments and infrastructure plans.
- Explore innovative approaches that can be used to reduce the demand for infrastructure and to ensure that environmental impacts are minimized.
- Develop an infrastructure sustainability checklist to help determine sustainability of infrastructure decisions (location, design, materials, etc.).
- Develop and maintain an inventory of environmental resources and obstacles to be considered both in location and design of infrastructure and for land use and land development decision-making.

## APPENDIX 3

### *Future Land Use Map*

The District Plan maps that were adopted during the 1990s have been digitized and include all the adopted land use changes that have occurred since the hand-drawn versions were completed. These changes have occurred as the result of new area plans being adopted, plan amendments being approved, or rezonings that were inconsistent with the plan being approved. Thus, these maps provide a complete picture of our adopted land use future.

*A generalized land use map compiles all the adopted district plans is available from the Planning Department. A complete set of the more detailed district plans is also available at the Planning Department or online at [www.charlotteplanning.org](http://www.charlotteplanning.org).*

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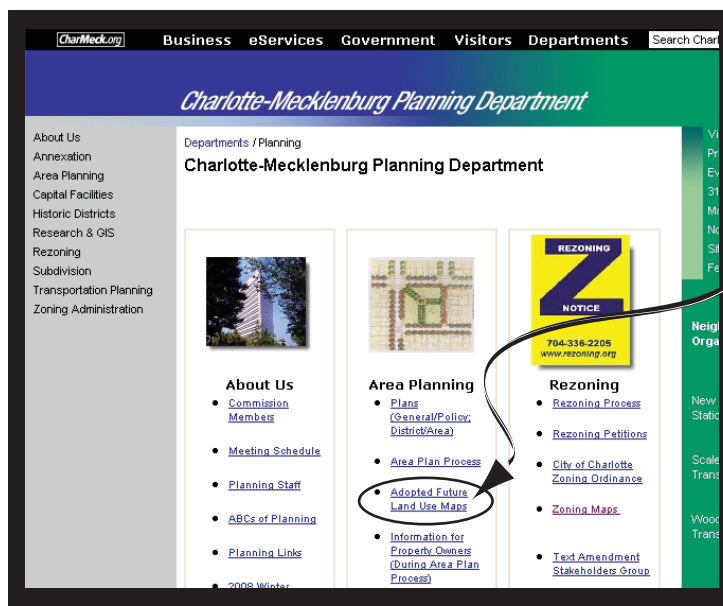
*Note:* This text has been updated from the 2003 document.

## APPENDIX 4

# District Plan Maps

District Plan maps are available at the Planning Department or on the department's website: [www.charlotteplanning.org](http://www.charlotteplanning.org).

*A complete set of the more detailed district plans are also available at the Planning Department or on line*



**1** Charlotte-Mecklenburg  
Planning Department  
600 East Fourth Street, 8th floor  
Charlotte, NC 28202

**2** go to *OR*  
[www.charlotteplanning.org](http://www.charlotteplanning.org)



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Transit Station Area Principles (Adopted 2001); Residential Location & Design (Adopted 2003); Retail-Oriented Mixed / Multi-Use Centers (Adopted 2003); Plan Amendment Process (Adopted 2003); Environment (Adopted 2007); Infrastructure (Adopted 2007)