



## II. INTRODUCTION

Charlotte has a long-standing tradition of planning for its Center City, beginning in 1966 when it was still the city's major retail district. That year, the "Greater Charlotte Central Area Plan" emphasized wide streets for access to Uptown stores, and parking for shoppers near the Square. Later, as an office skyline took shape and, more recently, when residential neighborhoods were revitalized, new plans in 1980 and 1990 broadened the focus to address pedestrian and transit considerations. Now, the latest plan – the Center City 2010 Vision Plan (adopted in 2000) – brings more ideas and proposals for the public agenda that affect the Center City's transportation system.

Meanwhile, the vitality of Center City Charlotte brings ongoing, dynamic change. Light rail transit began service Uptown in the fall of 2007, and other transit corridors are being planned. New public facilities are opening, including the Arena, ImaginOn, and the new County Courthouse. A new multi-modal Charlotte Gateway Station on West Trade Street will affect how people come to Center City and how they move around once they are here. Private sector development plans continue to fuel growth in Center City, too. In particular, the prospect of several high-rise residential buildings means an expanding population base – and a changing residential character – for Center City.

### Objectives

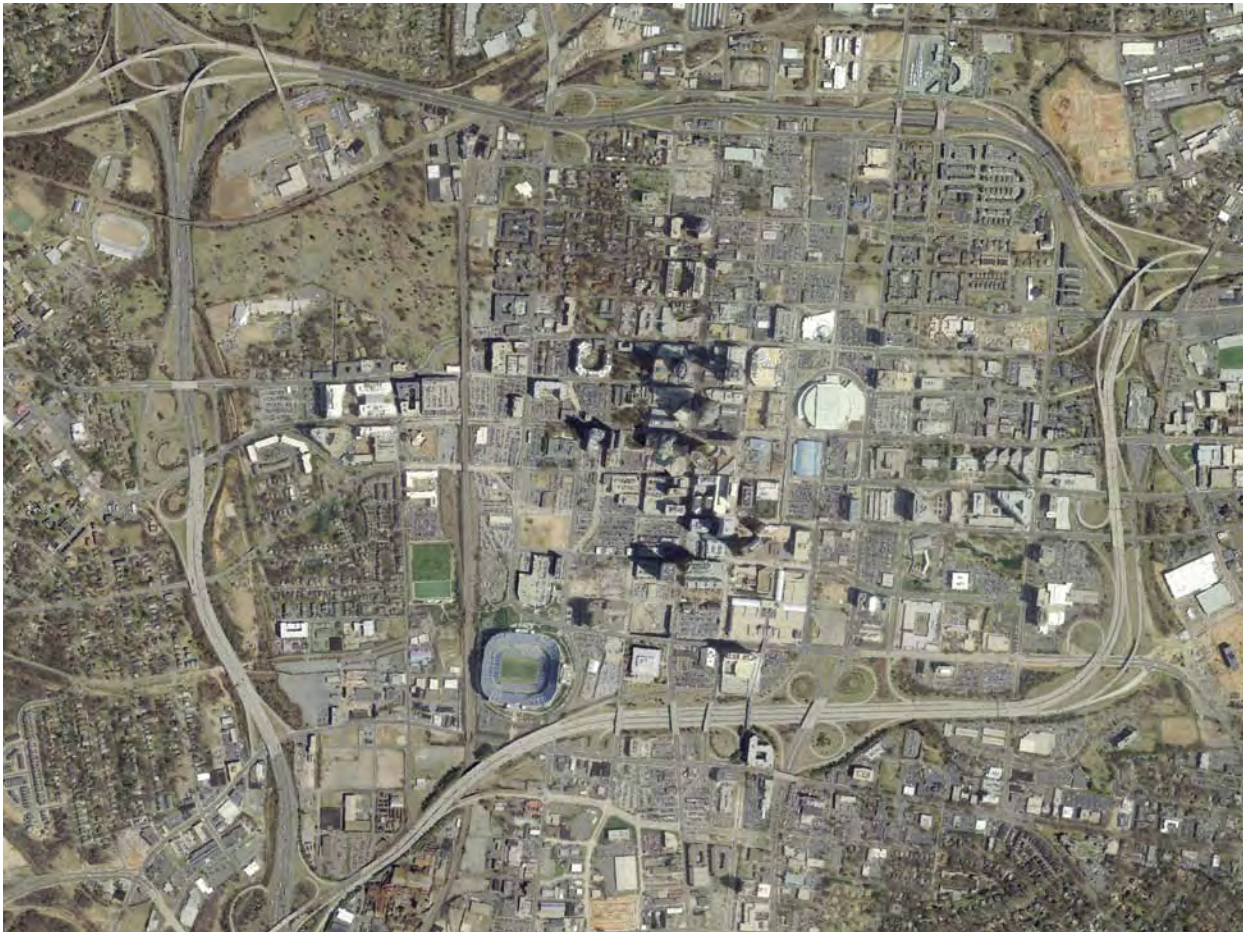
The *2010 Vision Plan* – as well as ongoing growth and change in Center City – makes it important to re-examine the way the transportation system is working and incorporate new proposals that will enhance the system to support growth through 2030.

This **Center City Transportation Plan** (CCTP) provides policy direction and strategies for implementing the *2010 Vision Plan's* transportation recommendations and those of subsequent planning studies.

Specifically, this plan's objectives are to:

- Implement transportation recommendations of the *Center City 2010 Vision Plan* and subsequent area plans,





Area of Center City Transportation Plan

### Basic Assumptions

The approach to this study is guided by three fundamental assumptions.

1. *Center City is the regional economic hub and the heart of the city.*

Since Center City is the central business district and a vital hub of Charlotte, its influence extends well beyond its own boundaries. It is the nation's second largest banking center as well as the commercial capital of the Carolinas, and has the region's richest concentration of office, governmental, cultural, sports, entertainment, education and health facilities.

Charlotte's emphasis on Center City as the metropolitan center has been well established as a matter of policy. The **Centers and Corridors Plan** (1994) is Charlotte's basic growth policy and is built on Center City as the region's primary center. The plan encourages growth in existing centers and corridors in Charlotte-Mecklenburg in order to make better use of existing infrastructure and transportation and promote mixed-use development there while protecting lower-density neighborhoods in the "wedges" between the corridors.

- Implement transportation and parking strategies to support economic development in Center City, and
- Implement appropriate enhancements for all transportation modes.

The study area is depicted in the map on page 2. While the *Center City Transportation Plan* focuses on the area within the I-277 Loop, the importance of connections to adjacent areas is also considered.

2. *Employment and residential growth will continue in Center City.*

The Charlotte region boasts one of the most robust economies in the United States. A key objective of this *Center City Transportation Plan* is to develop transportation strategies to maximize economic development opportunities in the Center City and, by extension, the Charlotte region.

The forecasts of this plan and of other studies anticipate strong and sustained growth in the Center City between 2005 and 2030.







Centers and Corridors Plan

Over the next 25 years, employment in Center City is expected to grow from the current estimate of 55,000 jobs to about 95,000 in 2030. During the same period, the resident population in Center City will increase from the current estimate of 7,840 to 30,200.

3. The “Center City 2010 Vision Plan” sets the stage for this plan.

The **Center City 2010 Vision Plan** (adopted in 2000) is the latest in a series of comprehensive center city plans that have helped shape Center City’s form over the years. The plan envisions a

“livable and memorable” place with “distinct neighborhoods and unique infrastructure.” It proposes bold “catalyst projects” - such as a large central park near the federal courthouse, an urban village on North Tryon, and housing in Second Ward - to help make the vision a reality.

The plan’s transportation component highlights the notion of pedestrian-oriented “green streets,” along with one-way “workhorse streets” and an east-west transit corridor along Trade Street.

While the *2010 Vision Plan* is the platform for this Center City Transportation Plan, other technical studies were also reviewed for this plan, including a 1996 parking study and a 1998 analysis of street capacity. This plan also considers the 2003 *CATS Corridor System Plan*, which includes a description of how the five rapid transit corridors are expected to function in Center City and how specific streets will be used in this configuration.

### The Role of this Plan

*Given this background, what is expected of the “Center City Transportation Plan”?*

The primary purpose of the CCTP is the definition of a comprehensive strategy, encompassing all modes, for implementing transportation improvements that support the recommendations of the *Center City 2010 Vision Plan* (2000) and related subsequent plans and actions.

The *2010 Vision Plan* is a comprehensive plan for all aspects of Charlotte’s Center City. This follow-up plan narrows the focus to the critical transportation elements and how those can be carried out to make the overall vision for Center City a reality. Accordingly, this plan plays an important role as part of the overall public strategy for maintaining Center City’s viability as a major employment center while also expanding its livability through increased residential, retail, public and entertainment activity.

In keeping with the *2010 Vision Plan*, this study gives particular emphasis to integrating pedestrian, bicycle and transit modes, in balance with the automobile, in the Center City’s transportation system - a concept referred to as “complete streets.”

*How will this study be applied?*

The *Center City Transportation Plan* will be used in a number of important ways that are more fully described in this report’s concluding chapter on “Implementation.” Among the key applications are these:

- Perhaps the most significant product of the plan is the **Street Enhancement Standards Map** (page 81) which codifies the study’s recommendations related to pedestrian and vehicular circulation, on-street parking, and other functions that will occur in the street rights-of-way and adjoining property frontage.
- Equally important, this plan includes a specific agenda of improvement projects (incorporated in policies) to the Center City street network and the I-277/I-77 Expressway Loop that will be implemented through the City’s Capital Investment





Plan (CIP), the Transportation Improvement Program (TIP) and other public initiatives, as well as in conjunction with specific private and public development projects.

- Key parking recommendations - a **collaborative public-private parking system** and a related, comprehensive **wayfinding system** - could mean fundamental change and exciting improvement for the way parking is made more available and accessible, and in the way visitors and commuters find their way into and around Center City.
- **Streetscape standards** are established for a hierarchy of pedestrian street types (page 75), to enhance the pedestrian environment, and these will be implemented through revisions to the Uptown Mixed Use District (UMUD) zoning district standards and the Uptown Streetscape Design Guidelines (USDG).
  - The recommendations for the streetscape and pedestrian environment set the stage for **amendments to the Zoning Ordinance**, the primary mechanism through which these recommendations can be implemented.
  - Furthermore, the **Uptown Streetscape Standards** (previously adopted as the Uptown Streetscape Design Guidelines) have been expanded to encompass all of Center City. The USDG are now limited to the Tryon Street Mall and Transit Corridor, but the CCTP incorporates design elements that are very similar to classifications in the USDG and greater priority is given in the CCTP to specifying pedestrian elements in the street network.

The *Center City Transportation Plan* provides a conceptual framework for why its recommendations are important for the transportation system, as well as a pragmatic course of action for carrying them out.

#### Public Involvement In The Preparation Of This Plan

Preparation of the *Center City Transportation Plan* began in 2003 with key stakeholder interviews in October 2003 followed by the first Community Workshop in January 2004. Presentations to interest groups occurred continuously between 2003 and 2005. Uptown Public Information Kiosks were displayed in December 2004 to communicate the purpose and components of the Study. Separate Workshops were held on Parking and Wayfinding in 2004 and 2005. A second Community Workshop was held in April 2005 followed by a second round of Key Stakeholder Interviews during May - July 2005.

City Council's Transportation Committee reviewed Study Policy Recommendations during September - November 2005, then referred the Study Policy Recommendations to City Council for consideration and action. City Council adopted the *Center City Transportation Plan*, including the Policy Statements and the Street Enhancements Standards Map on April 24, 2006.

#### Special Notes:

1. Concurrent with the preparation of this plan, the City of Charlotte prepared and adopted new *Urban Street Design Standards* (USDG). The standards resulting from this plan and those from the USDG are complementary to each other. The USDG are not applicable inside the I-77/I-277 Loop, and the *Center City Transportation Plan* is not applicable beyond the Loop.
2. Second Street was renamed as Martin Luther King, Jr. Boulevard after all of the maps and analyses tables contained in this Plan were completed. Thus, the "Second Street" name still appears on the maps and tables. However, the name has been changed in the text and the approved short form of MLK Blvd. is most commonly used.





### III. VISION

The introductory chapter outlines the reasons for this new plan, which is the latest in a series of plans for Charlotte's Center City over the last forty years. This plan focuses on transportation aspects of the Center City; specifically, on implementing recommendations of the comprehensive *Center City 2010 Vision Plan* and responding to more detailed sub-area plans as well as new developments since that plan was adopted in 2000.

Before the specifics of this plan can be developed, it is necessary to know the "vision," or the view of the future, toward which we are moving. This vision is articulated as a matter of policy primarily by the *2010 Vision Plan*, but it is also shaped by other Uptown area plans prepared since 2000, by new public and private projects already under construction or planned for the near future, and by the views of stakeholders consulted during this plan's development.

#### Public Plans And Policies

##### Center City 2010 Vision Plan

The *2010 Vision Plan* is the benchmark for current Center City planning. It continues a series of plans for Charlotte's Uptown, beginning in 1966 with the Greater Charlotte Central Area Plan and continuing with the *Center City Plan* (1980), *Center City Urban Design Plan* (1990) and, most recently, the *2010 Vision Plan* (2000).

The *2010 Vision Plan* is the key plan because it represents the adopted policy of Charlotte City Council and guides public actions for Center City. In fact, several of its unique ideas - the plan calls them "catalyst projects" - have since been incorporated in adopted plans for Uptown neighborhoods, including a major park in Third Ward and future residential housing in Second Ward. The plan's basic goal is:

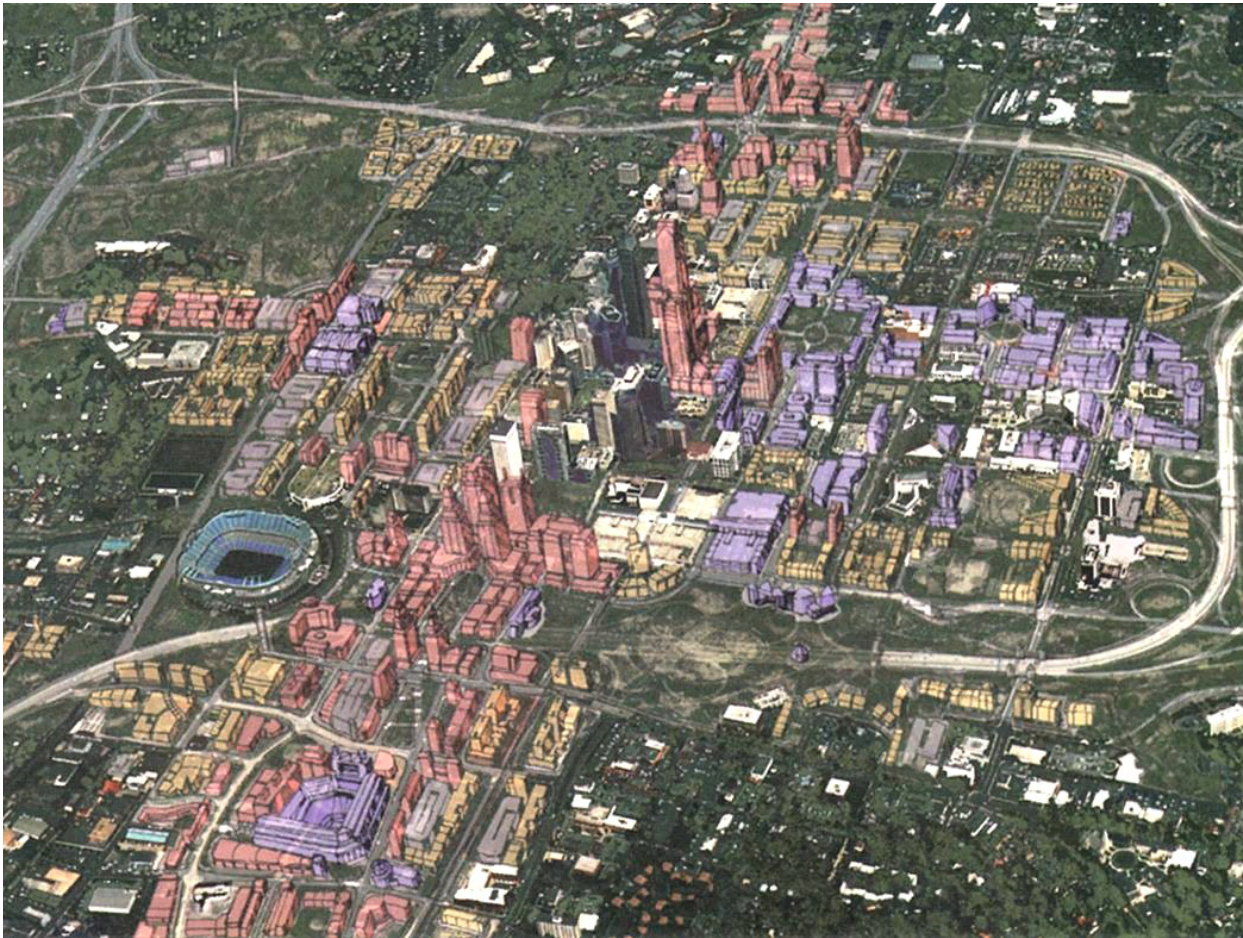
" . . . to create a livable and memorable Center City of distinct neighborhoods connected by unique infrastructure."

- *Center City 2010 Vision Plan*

This goal articulates the Center City vision. What would it mean to make this vision a reality? We look first at the plan's overall proposals, to understand







2010 Center City Vision Plan

the possibilities for the future sketched by the plan, and then focus in detail on the implications for the transportation system and this *Center City Transportation Plan*.

**“A Livable, Memorable Place”**

The *2010 Vision Plan* for Charlotte's Center City says it strives to create a “livable place, a memorable city.” A livable city means more neighborhood stores and services, open spaces and a wider range of housing options. This process is well underway. The revival of First Ward, the emergence of Gateway Village and the arrival of John-

son & Wales University signal the viability of Center City as a residential area invigorated by mixed uses and activities.

Charlotte's Uptown is becoming a great place to live. Can it also become “memorable?” Can it achieve distinctive features that readily identify Charlotte in the public mind? Some of the 2010 Vision Plan's boldest measures call for enhancing Center City's open space, and reclaiming more of it. Most notably, it recommends a major park near the federal courthouse that would become the “heart of a Center City park system.” The plan stretches the imagination and even envisions a cap built over part of the freeway and topped with a park.

**Distinct Neighborhoods**

Center City is more than an Uptown skyline. In fact, it goes beyond the original four wards and spills over (or under) the freeway to link Johnson C. Smith University with Central Piedmont Community College, and South End with North Tryon. Celebrating the unique characteristics of these varied neighborhoods is at the heart of the 2010 Vision Plan.

Inside the freeway loop, the plan emphasizes redeveloping the old Second Ward as a neighborhood with housing, a school, and a reconfigured Marshall Park; stimulating development of an “urban village” along North Tryon; and encouraging new development around a revitalized Little Sugar Creek. It promotes the emergence of new districts that consolidate government uses, continuing or higher education facilities, or sports and entertainment venues.

**Unique Infrastructure**

The role of transportation is central to this aspect of the *2010 Vision Plan*. The plan made much of a “network of green streets”







- literally, parkways along urban streets - to connect neighborhoods and parks in Center City. At the time of the plan's adoption, Charlotte was planning trolley, bus and light rail systems, and now it is examining a multi-modal station and a streetcar line. These infrastructure elements are a unique and important part of Charlotte's future plan for Center City.

**Transportation in the 2010 Vision Plan**

With that overall background, the 2010 Vision Plan's specific proposals related to transportation can now be summarized. The plan underscores the role of transportation facilities in accommodating the needs of a dynamic Uptown and supporting the land use recommendations that will help produce a memorable Center City.

*1. Streets*

The 2010 Vision Plan recognized a hierarchy of streets that would vary from traffic-carrying "workhorse" streets to pedestrian-friendly "green" streets. Regardless of their category, each of Center City's streets should support a comfortable and impressive walking environment.

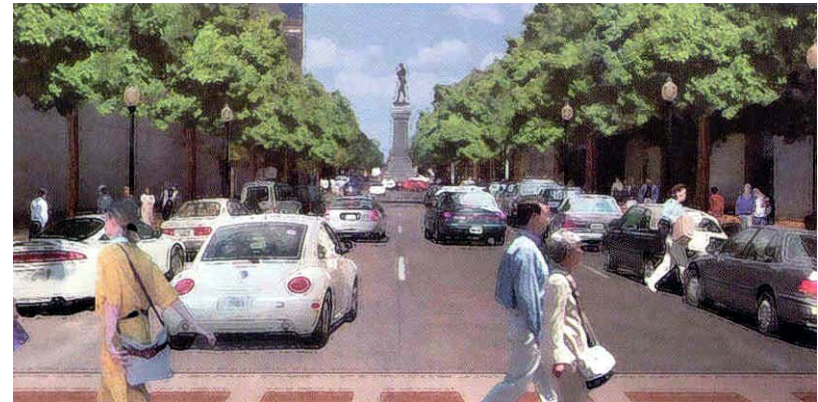
*"Workhorse" Streets*

Because of its preeminent role as a regional central business district, Center City must be accessible to the commuter. The private auto will be a major component of travel to work. Consequently, the plan says, the Uptown system should maintain key paired, one-way streets to accommodate roadway capacity requirements during peak hours.

The plan makes an important distinction about the role of Uptown streets, however. While these streets should deliver traffic to the city's business hub, they should not necessarily facilitate trips across Center City. In other words, while the importance of vehicular movement was stressed, it was also considered essential that a pleasant and safe pedestrian environment create comfortable paths from home and parking to office and other destinations.

*"Green" Streets*

An intriguing concept in the 2010 Vision Plan is the notion of "green" streets, a network of streets intended to connect neighborhoods and parks through Center City. These streets would be designed with

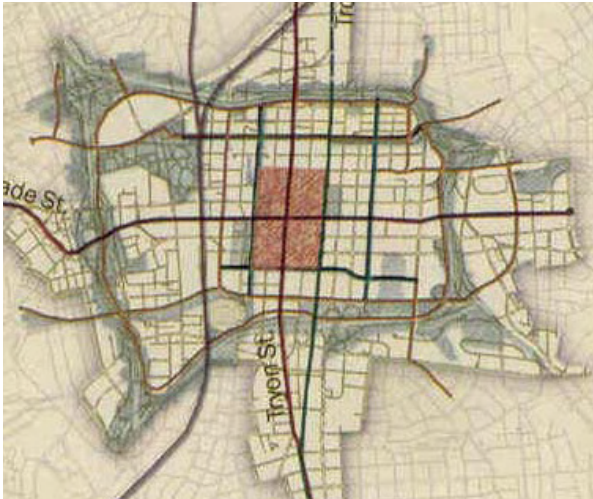


*Workhorse Streets*



*Green Street*





2010 Vision Plan Pedestrian Core



2010 Vision Plan Transit Corridor

narrow, two-way, local traffic only lanes. The road cross-section would include wide, park-like sidewalks for pedestrians and leisure activity, and on-street parking while still permitting lower volumes of vehicular access.

Green streets would serve a traffic-calming function by constraining vehicular speed and capacity. Distinctive entry features would reinforce the traffic limitations and signal to everyone that an “interesting” street lies ahead. These streets could be designed to accommodate a trolley circulator in the future, as well.

While the Center City Transportation Plan builds directly on the *2010 Vision Plan*, the terms “workhorse streets” and “green streets” have not been carried forward. The hierarchy of pedestrian-oriented streets results in far more streets functioning as “green streets” than proposed in the *2010 Vision Plan*. The retention of key one-way streets, and the focus of the vehicular way-finding system on them, is similar to the “workhorse” concept. However, the intent of the CCTP is to strengthen the emphasis on pedestrian circulation, which does not fit with the term, “workhorse.”

## 2. Pedestrians

The pedestrian theme is central to the *2010 Vision Plan*. It recommends a “pedestrian core” in the heart of Uptown - bounded by Seventh Street, Poplar Street, MLK Blvd. and the Light Rail Corridor - in which slower speed limits and signal timing adjustments should slow cars and protect sidewalk activity. Streets would be open to vehicular traffic, of course, but distinctive streetscape elements, landscaping and public art would be introduced throughout the designated area to emphasize the pedestrian ambiance.

## 3. Transit

Two years before the *2010 Vision Plan* was adopted, the *2025 Integrated Transit/Land Use Plan* had outlined a long-range plan for regional rapid transit corridors radiating from the Center City. *The 2010 Vision Plan* for Center City emphasized the need to functionally integrate the different rapid transit modes in the heart of the city. For transit to work well in the Uptown area, the plan stated, new bikeways and pedestrian amenities would help create a transit-supportive environment.





Furthermore, the 2010 Vision Plan recommended an east-west transit corridor to supplement the existing bus operations of the Transportation Center. This “transit street” would have numerous stops to deliver riders along a major east-west arterial, while still allowing vehicular and service traffic. The plan stressed that its design and character would be a critical issue.

4. Parking

It will be several years before the rapid transit system is fully operational in the Uptown area, and until that time parking will remain a major need. In the interim, says the plan, public and private attention should focus on shared parking and on designing facilities with greater regard to aesthetics, pedestrians, and air quality standards. At the same time, policies and plans should be put in place to minimize the future need for parking spaces to provide balance with the growth of the transit system as transit gains a greater share of commuting ridership.



CATS 2025 Transit System Plan

CATS 2025 Transit System Plan

This plan spells out more details of the rapid transit plans first unveiled in the conceptual 2025 Integrated/Transit Land Use Plan. The earlier plan was the basis of Mecklenburg County’s 1998 voter referendum on a half-cent sales tax increase for transit. The more recent CATS 2025 Transit System Plan was adopted in 2002, four years after the first transit plan and two years after the 2010 Vision Plan. It is important

because it carries forward the original plan with greater specificity, and therefore with greater utility for this *Center City Transportation Plan*.

The major features of the proposed rapid transit system are well-known. It will include five corridors extending beyond I-485 in order to intercept trips coming in and out of Mecklenburg County and improve regional connectivity. Two of the corridors, in fact, extend into adjacent counties (Iredell on the North Corridor, Cabarrus on the Northeast Corridor, and potentially York on the South Corridor). Future expansion into Gaston and Union counties is possible. Eventually, there will be 28 miles of bus rapid transit guideways, 21 miles of light rail transit, 11 miles of streetcar, 30 miles of commuter rail, and an expanded network of buses and other transportation services throughout the region.

Center City Improvements

The planned improvements for Center City are designed not only to serve the central business district, but also to provide connectivity with surrounding communities and institutions. These improvements will benefit the entire region by enabling the individual transit corridors and local services to function as an integrated system. Plans for Center City - most of which may be short-term improvements - include:

1. **Two major transit nodes** - the existing **Charlotte Transportation Center** (renovated to accommodate the South and Northeast light rail line) and the proposed multi-modal **Charlotte Gateway Station** on West Trade - are designed to complement each other. Work on these two passenger facilities is expected to be completed over the next 10 years.
2. **North Corridor Commuter Rail and NCDOT Rail:** CATS and the Rail Division of the North Carolina Department of Transportation (NCDOT) are undertaking related detailed engineering studies of modifications to the Norfolk-Southern Railway corridor that traverses Center City between Graham and Cedar Streets. Together, they will be reconstructing and widening the rail embankment, altering



operations at some street grade crossings and developing the Charlotte Gateway Station in the block bound by the embankment and Trade, Graham and Fourth Streets.

3. **A South-Northeast light rail transit (LRT) spine** was created along the trolley/railroad corridor. This South Corridor LRT line opened in 2007. It will be extended as the Northeast Corridor LRT over the next 20 years.
4. **An East-West pedestrian/transitway** along the Trade Street corridor will connect Johnson C. Smith University with CPCC and Presbyterian Hospital. Transit services in this corridor will include the Southeast and West mass transit corridors, and streetcar and bus operations.
5. **Streetcars** will provide unique circulation services connecting Center City districts not only with each other but also with areas just outside I-277. Streetcars on Trade Street will extend out Central Avenue to the east, and along Beatties Ford Road to the west. The Trade Street Streetcar will be implemented in conjunction with the rest of the improvements planned along this street. A full Center City Streetcar Loop is envisioned by 2025.

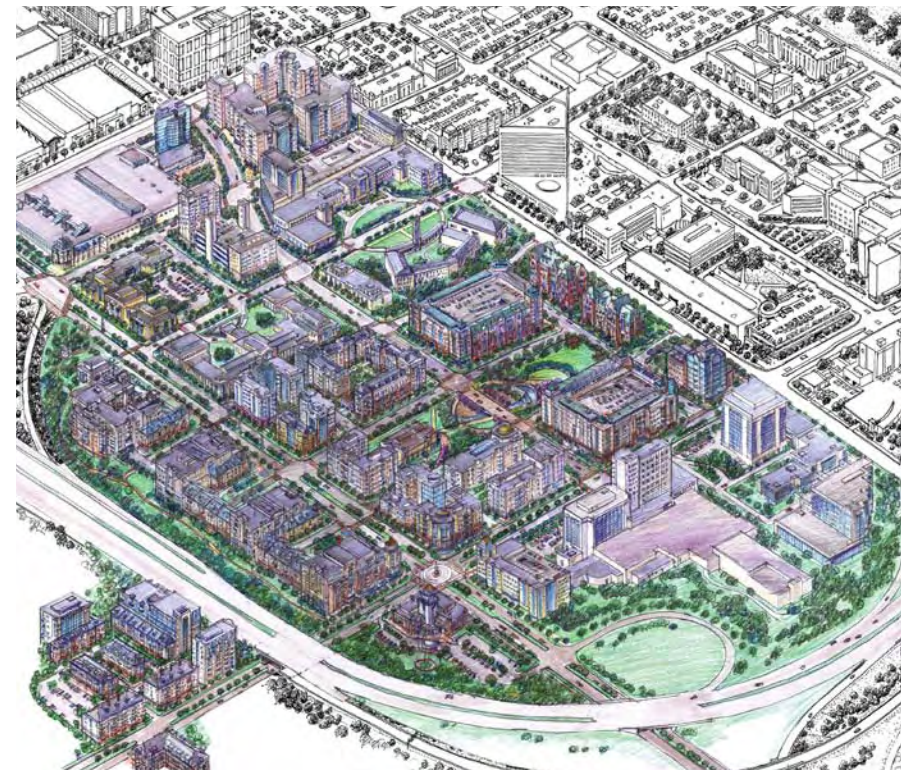
### Second Ward Neighborhood Master Plan

A rebirth of the historic Second Ward neighborhood is charted by this plan, which carries out the *2010 Vision Plan's* concept of unique Uptown neighborhoods with pedestrian-oriented, mixed use development. The 11-block area is largely a government office park today, but under the new plan the area south of Third Street would again become a predominantly residential community, as it was in the 1960s before urban renewal.

Over the next 25 years or so, roughly 2,400 housing units could be built. One visually dramatic proposal calls for rebuilding Marshall Park as a terraced "Great Lawn," flanked by mid-rise housing. Some of the existing institutional buildings may be relocated, while community-oriented facilities (such as a multi-story high school) will be added. These elements will cre-

ate a "new urban fabric," eventually including neighborhood stores and services and a network of parks and open spaces. According to the Second Ward Plan, the transportation system will contribute to this new neighborhood in these ways.

- The street grid would be reconfigured, breaking up the super-blocks into smaller and varying block sizes considered more "neighborhood-friendly." This smaller block pattern would create an internal street network that would not affect general circulation in Center City.
- Stonewall Street and McDowell Street would be enhanced as boulevard streets, with their intersection being designed with a "gateway" monument and special paving. These two major streets would continue to be the primary linkage to areas immediately outside the I-277 Loop, primarily the East Morehead and Midtown areas.



Second Ward Neighborhood Master Plan





- The *Second Ward Plan* carries through the 2010 Vision Plan recommendation for a pedestrian-oriented “green” street treatment for MLK Blvd. and Davidson Street; however, the use of a trolley or streetcar is not mentioned.
- The plan recommends a system of shared parking structures as part of a “neighborhood parking strategy” and discusses structures, quantities and parking ratios in detail.

The new plan for Second Ward fundamentally “re-defines” a key part of Charlotte’s Uptown. It will be a long-term transition, but an estimated 57 percent of the 82 “developable acres” are controlled by the City, County or School Board, improving the prospects for coordinated development.

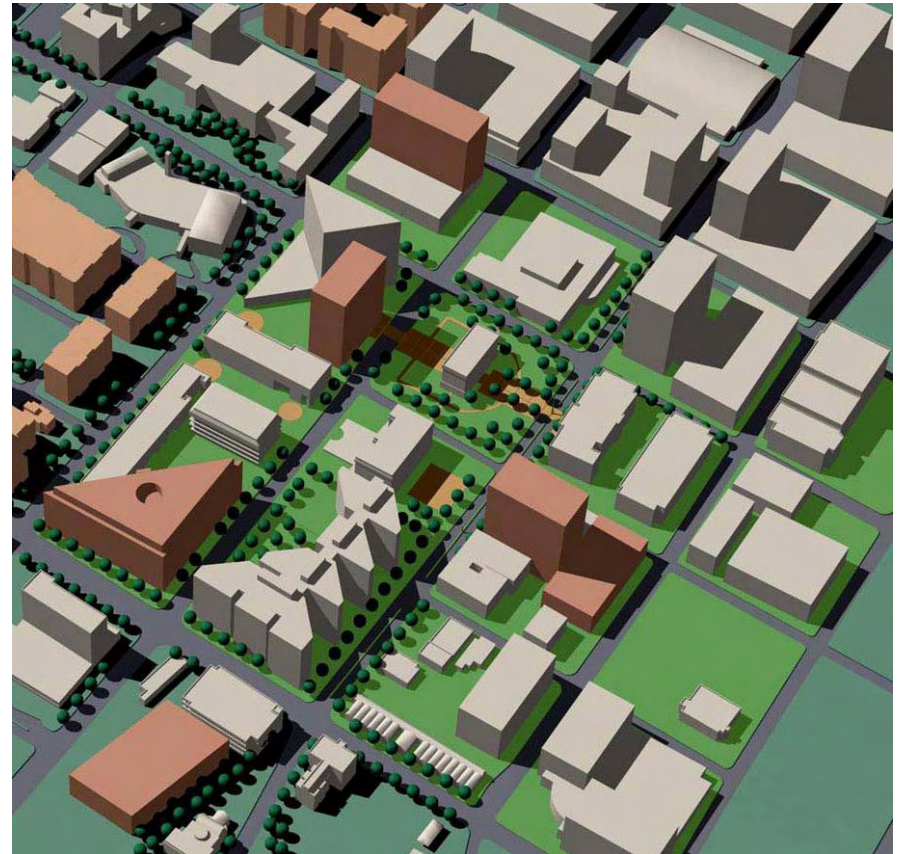
**Third Ward Vision Plan**

The Third Ward Vision Plan is another key public policy adopted since the *2010 Vision Plan* that has a bearing on this Center City Transportation Plan. A proposed Third Ward Park - called the “West Park” in the *2010 Vision Plan* - is sited in a largely undeveloped area. Eventually, the park is expected to be surrounded by new offices, restaurants and shops, and by mid-rise housing that overlooks the park. The vision plan provides extensive design guidelines and promotes pedestrian-oriented streetscapes, greenway extensions, and pedestrian linkages to surrounding neighborhoods and the proposed Multi-Modal Station nearby. Key recommendations would affect circulation in the Center City:

- MLK Blvd. should be extended to Cedar Street.
- Third Street would be modified to accommodate the park.
- The sections of MLK Blvd., Mint and Poplar Streets that are currently one-way would be converted to two-way (these modifications are consistent with the 2010 Vision Plan).

**Government District Facilities Planning**

Both the *2010 Vision Plan* and the *Second Ward Neighborhood Master Plan* proposed changes for the Charlotte-Mecklenburg Government Center area. For example, both plans proposed redevelop-



*Government Center Master Plan*

opment - for predominantly residential uses - of the Walton Plaza, the Charlotte- Mecklenburg Schools headquarters building, Metro School and the Mecklenburg Aquatic Center.

As a result, Mecklenburg County has coordinated a study of space needs for City, County and Charlotte-Mecklenburg Schools facilities. The review focuses on potential sites in the area bounded by Sixth Street, McDowell Street, Third Street and Caldwell Street. At this time, the principal development-related outcome of the plan has been the construction of the new County Courthouse at Fourth and McDowell, and an associated parking garage on the northeast corner





of the intersection. Related modifications to the intersection of Fourth and McDowell Street have been designed to enhance pedestrian circulation between the two facilities.

**Cultural Arts Master Plan**

The Arts and Science Council prepared a Cultural Arts Master Plan in 2003 which recommends the development and/or expansion in Center City of a variety of significant public facilities, including the expansion of Discovery Place, the Afro-American Cultural Center, and Spirit Square; the relocation of Mint Museum; and the development of two new theaters (seating 1,200 and 2,800 patrons), Second Ward High School Heritage Museum and the Bechtler Museum.

The emphasis that the plan places on Center City as the location for major cultural arts facilities suggests that the attraction of visitors to Center City, particularly during evenings and on the weekend, will expand the need for improved access and direction to parking facilities that have the primary function of serving daily office workers. This expanding need presents an income opportunity for the owners of parking facilities while, at the same time, increasing the need for coordinated management of and directional information for existing and future parking facilities. Additionally, the plan proposes a "Cultural District" Wayfinding System.

**Development Since The 2010 Vision Plan**

Since adoption of the *2010 Vision Plan* in 2000, several major facilities have been built or are under construction in Center City. Some facilities, such as the light rail transit line, were anticipated in the 2010 Plan. Others, such as the Arena, were proposed for a different site Uptown, and another, Johnson & Wales University, was not yet on the horizon. These developments are shaping, and in some cases reshaping, Center City and the *2010 Vision Plan*.

**South Corridor Light Rail**

The Charlotte Area Transit System (CATS) began light rail transit service in the Center City in November of 2007. The South Corridor LRT line includes four stations in the Uptown area: Seventh Street, Charlotte Transportation Center, Third Street/Convention Center and Stonewall Street. The full 15-station, 9.6 mile South Corridor extends from Uptown through South End to I-485.



South Corridor Light Rail Line

**Arena**

Charlotte's new Arena has been built on a two block site alongside the light rail alignment and directly across from the Charlotte Transportation Center. The LRT station and CATS' hub bus transfer station are well-positioned to serve many of these patrons, but the Arena - which seats between 18,000 and 20,500 - is a major traffic generator for vehicular traffic as well. NBA games will occupy the Arena 41 nights each year, and an estimated 150 to 200 events give the facility a full schedule, drawing thousands to Center City. Retail shops will also line the Arena's exterior on Trade Street.

**Brevard/Caldwell Street at the Arena**

To accommodate the building footprint of the Arena, it was necessary to create a single large block, modifying the street grid as follows:

- The section of Brevard between Fifth Street and Trade Street was removed.
- Fifth Street was rerouted between the LRT tracks and Caldwell Street.







- Brevard traffic, which is one-way southbound, was directed onto Fifth Street, which is one-way eastbound.
- Caldwell was made two-way between Trade and Fifth.
- Southbound Brevard traffic now follows a route eastbound on Fifth, southbound on Caldwell, eastbound on Fourth to the intersection of Fourth and Brevard, and returning to the southbound Brevard routing.

While this provided an adequate short-term solution to allow construction of the Arena, an improved long-term solution will be required.

#### ImaginOn

One block from the Arena - at the Seventh Street LRT station - "ImaginOn" draws more visitors to Center City. This joint effort of the Public Library and the Children's Theatre includes performance facilities, an early childhood education center, a teen center and a storytelling venue. The 102,000 square foot building features a large, multi-story public space that will contain interactive exhibits and serve as a public gathering and reception area. Development of the facility has included enhancements to the pedestrian space associated with the surrounding streets.

#### Johnson & Wales University

On the west side of Center City, the arrival of Johnson & Wales University has further energized the West Trade Street area where Gateway Village is located. The local campus of this national management and culinary university opened in 2004 with larger-than-expected enrollment of 1,200 students, and has grown to 3,000 students by 2007 (with projections for higher enrollment in future years).

Johnson and Wales' building program has created a major presence in Third Ward and its entire campus is within a half-mile of the proposed multi-modal Charlotte Gateway Station and located along the potential Trade Street Streetcar alignment. In the last two years, the school constructed a five-story main classroom building along West Trade Street, and two new dormitories on previously vacant land at Cedar Street and Fourth Street, adjacent to the Carolina Panthers practice field. The dor-



*Charlotte Sports Arena*



*Johnson & Wales University*



mitory complex will house 800 students, and another 550 students will reside in another student residence, City View Towers. An additional academic and administration building is planned for a site between Trade Street and Fourth Street, on the west side of the Norfolk-Southern embankment.

### New Mecklenburg County Courthouse and Judicial Center

The Judicial Center is comprised of the new courthouse, adjacent renovated facilities for agencies of the criminal justice system and a new parking deck. The eleven-story courthouse is at the intersection of Fourth and McDowell Streets, on the former site of the old court parking facility that was demolished in 2003.

A new parking deck for the courts facilities was constructed across McDowell Street, next to the parking deck that currently serves the Sheriff's Office and Mecklenburg County jail facilities. The new courts parking facility has a capacity of 1,100 to 1,200 vehicles, and will also have retail space on the ground floor, and a tree-lined outdoor plaza facing the new courthouse.

The intersection of Fourth and McDowell was redesigned and reconstructed to facilitate the safe and convenient movement of visitors between the garage and the courthouse. The south-bound right turn lane has been removed from McDowell Street. The redesign includes a new surface with walking paths, tighter turning radius to reduce the length of crosswalks, and new crossing lights.

### Little Sugar Creek Greenway

The Little Sugar Creek Greenway begins in the Optimist Park neighborhood north of Center City. It will run inside the I-277 Loop between the 10th Street underpass and 7th Street overpass, along the eastern segment of I-277 and eventually reach a point near the South Carolina state line. When fully developed, the greenway will provide pedestrian access and recreational amenities for residents of Center City and nearby neighborhoods. Portions of the greenway are under construction, while other areas - including those in Center City - are still under design consideration by the Mecklenburg County Park and Recreation Department.



*Little Sugar Creek Greenway*

### Trends: Development Plans Announced For Center City

The pace of change in Center City is likely to keep its momentum in the coming years. Some key projects are in the planning stage that will refine the evolving character of Center City in the last half of this decade - and increase the number of Center City intersections and pedestrians on the Uptown streets.

A multi-faceted, multi-modal Charlotte Gateway Station will integrate transportation services on West Trade Street. Office development, possibly with cultural facilities, is contemplated on South Tryon. Most notably, however, the next few years will see the advent of high-rise residential living in the heart of the Center City, with the announcement of six new residential towers, ranging from 16 to 53 stories, and the rehabilitation of a former office tower for condominiums.





The very strong Center City residential market is resulting in the development of many sites on Tryon Street and Trade Street that the *2010 Vision Plan* had anticipated would be office or employment sites. While the development activity has been positively received, the loss of sites on Tryon and Trade for office development could alter the employment growth dynamic in Center City, with fewer prime sites being available.

With the development of Johnson and Wales University, construction of the new Arena, development of an entertainment complex as part of the old convention center redevelopment, and the announcement of several residential projects on Trade Street, it can be said that Trade is emerging as an educational/entertainment/residential corridor, rather than a major employment street. While efforts are needed to encourage more development on Trade Street, this suggests that future employment could be concentrated more along the north/south Tryon Street corridor.

The following is a capsule summary of new development announced for Center City, as of early 2008.

#### West Trade Street Area

##### **CATS Multi-Modal Station: "Charlotte Gateway Station"**

The *Center City 2010 Vision Plan* proposed a "multi-modal facility" on West Trade Street that would bind Third Ward and Fourth Ward together and serve as a "catalyst for a renewed urban environment." The Charlotte Area Transit System is leading development of this Uptown station that will link local and regional transportation modes with inter-city rail and bus service. The station will be an Uptown stop on the CATS North Corridor rapid transit line and connect with local bus and streetcar service, as well as Amtrak and Greyhound Bus service.

- Early estimates indicate the station will serve 5,000 to 8,000 North Corridor rail commuters, 3,500 Greyhound patrons and 1,500 Amtrak passengers.
- The Trade Street Streetcar will offer connections to other Center City locations, as well as future service along Beatties Ford Road and Central Avenue.

- Light Rail Transit (LRT) and/or Bus Rapid Transit (BRT) service from the Southeast and West transit corridors, as well as express bus services, will focus on the station.

The station will be near the Johnson & Wales University campus and the Gateway Village employment and housing center. The site design will facilitate pedestrian use and access for bicyclists, and be integrated with the planned Third Ward Park nearby. A Charlotte Gateway Station Area Plan is being prepared to capitalize on the influx of passengers and pedestrians to help generate new development on the vacant and underdeveloped parcels nearby.

##### **Existing Federal Courthouse**

The Jonas Federal Courthouse on West Trade Street is expected to be replaced by a new courthouse at the corner of Trade Street and Caldwell Street, adjacent to the new Arena. All federal court uses and offices will be moved into the new courthouse upon its completion.

Proposals for reuse of the current courthouse site have considered cultural and civic purposes and, most recently in December, 2004, Queens University proposed opening a law school in the old courthouse building. At the same time, plans for the nearby Charlotte Gateway Station and Third Ward Park include development of office and commercial structures across Graham Street on the west side of the building, and across Fourth Street on the south or back side of the building.

#### East Trade Street Area

##### **New Federal Courthouse**

The new federal courthouse, to be located on Trade Street in the block east of the Arena, will shift and increase employment in the Trade Street corridor.

##### **Old Convention Center Redevelopment**

Charlotte's old convention center occupied a central Uptown block bounded by Trade,





College and Fourth Streets and the South Corridor LRT line. In June, 2005, the structure was imploded in preparation for redevelopment by a private developer. The site called "EpiCentre" will include a 53-story residential tower in combination with a retail and entertainment center. The complex will include a ten-screen movie theater, restaurants, bars, shops, offices and a hotel.

#### **Bank of America Mixed-Use Development**

In July 2005, Bank of America commenced development on a project on the east side of College Street between Trade and Fifth Street. The development includes a 15-story, 150 room Ritz Carlton Hotel, an office tower and an atrium that will be tied across College Street with the existing Founders Hall retail facility. The project also includes redevelopment of the Trade and College Street frontages of Founders Hall to create more street-level retail space.

#### **South Tryon Street Area**

##### **Wachovia Mixed-Use Development**

In May, 2005, Wachovia Bank unveiled plans for a new office tower of about 35 stories on South Tryon at First Street, with condominiums, two museums, the Afro-American Cultural Center, the Wake Forest University Business School and a theater as part of the mixed-use project. An attractive feature of the site for pedestrians is a proposed urban park that connects with the popular green space across the street at Ratcliffe Commons.

For the last decade the major thrust of office development and cultural facilities has been along North Tryon. This project promises to bring more balance to that geographic trend. It is expected to be the catalyst that will set in motion a number of other possible projects that have been discussed in recent years along South Tryon.

#### **North Tryon Street Area**

##### **Cultural Facilities**

North Tryon is currently the address of several significant arts and cultural facilities. The Cultural Facilities master Plan proposes strengthening of this district with expansion of Discovery Place, enhancements to the Main Library, redevelopment of Spirit Square and redevelopment of the Carolina Theater.

##### **Higher Education**

UNC-Charlotte has selected a location at Ninth and Brevard for an academic building that will make the university's program more accessible to working students and professionals living in Center City. The facility is expected to serve up to 7,500 students a day, and is readily accessible to the light rail line (which has the potential of providing a link to the main campus via the North Corridor LRT extension).

#### **South Brevard Street**

##### **NASCAR Hall of Fame**

Charlotte won a national competition for development of the Hall of Fame and an office building to house NASCAR's business operations. The complex is under construction, with completion projected for 2010, on a site bounded by MLK Blvd, Caldwell Street, Stonewall Street and Brevard Street. In concert with the Convention Center, with which NASCAR is to be connected, enhances the activity anchor at the south end of the Brevard Signature Pedestrian Street link to the Arena on the north.

#### **Center City Residential**

In a short period of time, during late 2004 and early 2008, various private developers announced dramatic plans for high-rise residential buildings - the first such towers in Center City. The first announcements were for sites close to the new Arena, and prospective buyers responded enthusiastically. Within a few months, more and larger plans were announced for locations in or near







the Uptown core, including the signature streets of Trade and Tryon. Some of the larger projects are mixed-use, with retail and/or office space on lower levels. If all high-rise projects are built, it would mean at least 1,680 new units in the next three years, a significant boost to the residential vitality of Center City. The announced high-rise residential tower projects include:

**First Ward**

- Courtside (Sixth and Caldwell) - 16 stories, 104 units, completed in late 2005.

**Second Ward**

- The Park (Third and Caldwell) - 21 stories, 107 units, planned for completion in late 2008.
- EpiCentre (on the former Old Convention Center site, described above) - 53 stories, 400 units, planned for completion in 2007.

**Third Ward**

- 230 South Tryon (Tryon and Third) - a rehabilitation of a 30-year-old former office building that, with 13 stories and 110 units, was completed in 2007.
- TradeMark (West Trade and Mint) - 28 stories, 162 units, was completed in late 2007.
- Novarre Group - redevelopment of the old Duke Power Building site with multiples high-rise residential buildings, a hotel, retail space and potentially office uses.

**Fourth Ward**

- Avenue (North Church and West Fifth) - 36 stories, 386 units, completed in 2007.
- The Vue (Pine and West Fifth) - 50 stories, 411 units, planned for completion in 2009.
- The Garrison (Graham Street at I-277) - a residential building with approximately 40 units.
- The Citadin (Graham and West Eighth) - a multi-building redevelopment of an existing apartment complex with buildings in the six to 20+ story range.

This surge in Uptown housing is indicative of a strong market interest in the Center City. While high-rise buildings have dominated the headlines, more low- and mid-rise housing have been constructed recently. The strong housing market will have the synergistic effort of supporting and stimulating retail Uptown. It also means more opportunities to walk to work, rather than commute. In sum, it underscores the need for creating a more walkable environment in Center City.

**New Charlotte Knights Baseball Stadium**

A set of complex land transactions involving the City, Mecklenburg County, the owners of the Knights and other private development interests is already affecting some properties and has the potential of affecting several others. At the present time, the prospective program involves the following major properties and activities, several of which will implement significant recommendations of this Plan:

- The original Third Ward Park site (two blocks bounded by Fourth, Mint and Graham Streets and MLK Blvd) will be the site of the new baseball stadium.
- The Third Ward Park is being designed for the site bounded by Mint, Third and Church Streets and MLK Blvd.
- These two developments will result in the following street modifications:
  - The closure of the Fourth to Third connector
  - The conversion of Fourth from one-way to two-way between Mint and Poplar
  - The closure of the Mint to Poplar connector
  - The conversion of Mint from one-way to two-way from Graham to Trade
  - The conversion of Poplar from one-way to two-way from Third to Sixth
  - The conversion of MLK Blvd. from one-way to two-way from Mint to College





- Redevelopment of Marshall Park and the current School Board office site to include:
  - A new Second Ward Park
  - Several multi-story residential buildings with some supporting retail uses
  - A new local street network similar to that proposed in the Second Ward Plan

### Future Aspirations: The Views Of Stakeholders

An early step in the preparation of this Plan involved consultation with Center City stakeholders to determine their perceptions of the Center City and their aspirations for its future. Interviews were held with 35 key stakeholders, including business and civic leaders, developers, City and County staff, and representatives of neighborhood groups, cultural organizations and educational institutions. The stakeholders made several important points, summarized below.

#### Employment Growth

Several stakeholders had reservations about the plan's forecast that calls for an increase in Center City employment of approximately 40,000 workers in the next 25 years. Such a large increase (from 55,000 today to 95,000 in 2030) was generally considered unlikely.

- The major Center City employment drivers - such as Bank of America, Wachovia, Duke Energy - expect their rates of growth to slow considerably in comparison to the 1980s and 1990s.
- The most likely source of future Center City employment growth will be from multiple smaller employers and smaller entrepreneurs that are responsive to the Center City's lifestyle.
- Indeed, there was some concern that some businesses may leave the congestion and higher tax rate in Center City and move to areas elsewhere in Charlotte or outside Mecklenburg.
  - The consensus was that greater efforts are needed for Center City to retain its position as the employment center of the region.

#### Residential

- Residential growth was seen by stakeholders as the major market for Center City development over the next seven to ten years.
- The new housing is likely to be at densities higher than recent construction (a view expressed prior to many of the recent high-rise project announcements).
- More mixed-income choices are needed to maintain a good demographic mix.
- Residential areas also need open space to maintain a sufficient balance of green space, but these do not necessarily need to be large parks.
- There was some skepticism regarding the potential of realizing the residential emphasis of the Second Ward Master Plan, due to the cost of relocating County facilities.

#### Government

Government is a major Center City employer that is often overlooked in estimates of Center City employment.

- Uncertainty about the County's plans was frequently mentioned as an impediment to moving forward with the Second Ward, Third Ward and Government Center plans.
- The County may keep most of its employees Uptown, but could move some of its functions out of Center City to neighborhood or regional service centers.
- Plans for the North Tryon village proposed in the Center City 2010 Vision Plan are in development following the County's successful sale of the Hal Marshall Center in 2007.

#### Entertainment

Center City is the entertainment and cultural center of the Charlotte region, but stakeholders believe it could be stronger. Uptown entertainment is seen as an economic driver for Center City, but it is viewed as being on a small scale, relative to cities of comparable size.





- The new Arena location is a major opportunity for retail, upscale restaurants and other entertainment venues.
- The vitality of the area between the Arena and the Convention Center NASCAR Complex is important. Shopping is the number one activity for conventioners who need to have an easily-navigated experience within the area.
- Johnson & Wales will be a major contributor to the entertainment mix, but there are other opportunities and special attractions that could help Charlotte compete with larger cities, such as the planned relocation of the Charlotte Knights baseball team.
- The Mecklenburg County Aquatic Center attracts regional as well as national sports events, on the scale of some conventions. The center could potentially be relocated to another site, possibly in the same complex as the baseball stadium.

#### Higher Education

Trade Street is developing into an “educational corridor,” from Central Piedmont Community College in the east, to Johnson C. Smith University and Johnson & Wales University in the west, and a proposal has been made for a Queens College law school in the current Federal Courthouse when it is vacated in the next few years. The influx of Johnson & Wales students is expected to have a significant and positive impact on Center City entertainment, housing and employment. UNCC’s interest in an expanded Center City presence and the potential of the Wake Forest Business School being a part of Wachovia’s South Tryon project will add to this array of educational offerings.

#### Transportation

Stakeholders made the observation that, although there is congestion on many of the roads coming into Center City, there are relatively few traffic problems once in the Uptown area.

The most recurring stakeholder perception was that there is not enough parking in Center City. Several other points were made by the stakeholders:

#### Streets and Highways

- The I-277 Loop is perceived by stakeholders as having both positive and negative aspects. It provides good circumferential access to Center City and a clear definition of Center City boundaries, but it is also a barrier to long-term expansion and to integration of adjacent neighborhoods. There are also a number of functional problems with I-277 that will need to be resolved as traffic increases.
- Stronger linkages are needed to surrounding neighborhoods and activity centers such as Johnson C. Smith University, CPCC, South End, Dilworth, Midtown, Cherry, West Morehead, Wesley Heights and others.
- Within the loop, traffic congestion on Center City streets is seen as minimal. The arterial congestion points tend to be at intersections, such as Randolph and Wendover, that are two miles and farther from Center City.
- Arena traffic - and how it will impact Uptown residential, entertainment, and business traffic - was the concern most often raised by stakeholders.
- One-way streets in Center City too often are not visitor-friendly, inhibit retail development and cause conflicts in residential areas.

#### Parking

- Availability was a concern frequently raised by stakeholders. Evening and weekend parking is plentiful (many garages are free during non-business hours), but the location is not necessarily near desired activity venues.
- Some felt the cost of parking was too high, but others suggested increasing the cost as a way to force or gain ridership on the new transit system. Several of the larger Center City employers currently pay for, or subsidize employee parking. Bank of America subsidizes the Gold Rush, partly to provide access for employees to less expensive parking.





- Wayfinding is inadequate, particularly for visitors and area residents who visit infrequently. A three-tiered wayfinding system was suggested to improve the ease of finding destination points for visitors, workers and residents. The inability of the owners of privately-owned parking facilities (the majority of existing parking) to direct motorists, especially visitors, to their facilities, was often stated as a related problem.

These views of Center City stakeholders - together with adopted plans and policies and with the developments under construction or now being planned - provide the background for this Center City Transportation Plan and its proposals for a growing and changing Center City.

### **Pedestrians and Bicyclists**

- Two views of pedestrian-friendliness were expressed. One view held that the traffic pattern is aimed at getting people in and out of Center City, and that objective conflicts with pedestrians. Others felt that Center City is very pedestrian-friendly and that this characteristic was often cited by out-of-town visitors.
- Surface parking lots, low-density building areas and the railroad embankment were all frequently cited as barriers to pedestrian movement.
- The growth of Johnson & Wales University is making West Trade Street a major pedestrian activity street.
- Bicyclists identified the shortage of safe access routes into Center City and across the I-277 Loop as their greatest concern.

### **Transit**

- The general perception was that buses are costly and generally stop in poor locations. The Gold Rush is popular, but does not serve Center City residential districts.
- There was almost universal support for the new rapid transit system, although many interviewees were not familiar with the specifics of the Center City proposals.
- There was some concern that the multi-modal Station could be too large, but it was also felt that it would be a positive stimulus for the area. The traffic relationship to Third Ward and Fourth Ward residential areas was a concern.







## IV. FRAMEWORK

Planning for Center City's future transportation system starts with an understanding of the vision or long-term direction desired for Center City Charlotte. The previous chapter sketched that vision, as it is found in adopted plans and policies, and as it is influenced by trends in public and private development. The purpose of the *Center City Transportation Plan* is to plan the transportation system that will support this vision.

That future transportation system will be a modification of the existing system, of course. Therefore, it is necessary to understand the characteristics of the existing system (and how it functions) as the background for the new plan. Furthermore, the new plan's framework is also shaped by the growth projections for Center City. Accordingly, this "Framework" chapter focuses on the existing transportation system and on population, housing and employment forecasts for the next 20 years.

### Existing Transportation System

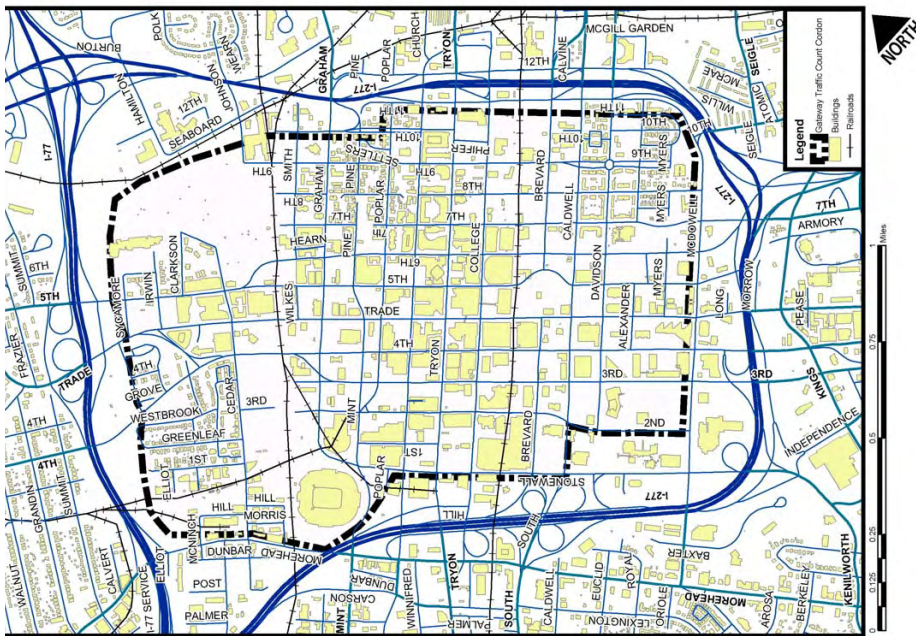
#### Existing Vehicular Network

While the street network serves pedestrian, bicyclist and transit users, the automobile is the predominant transportation mode. Therefore, an understanding of the existing transportation system begins with vehicular use and capacity of the street network.

A report prepared for the City in 2000 made these assumptions regarding travel to Center City in the morning peak hours:

- 85% of total Center City workers actually report to work in Center City on any given day;
- 78% of Center City workers arrive in the two-hour morning peak period;
- 80% of people traveling to Center City in the morning peak period are commuters destined to their jobs; the remainder are traveling for other purposes.





Gateway Traffic Count Cordon

- 6% of traffic entering Center City during the morning peak period consists of taxis, vans and commercial vehicles.

Based on data from the last decade, two significant observations can be made regarding traffic entering Center City Charlotte each morning:

Traffic volumes are well within the total capacity of the street system at the gateway locations - and have increased only slightly since 1995. The total volume of traffic entering Center City had grown significantly in the early 1990s, increasing 25 percent between 1991 and 1995. However, since the mid-1990s this volume has remained fairly constant, having grown less than two percent between 1995 and 2003. Table 3-1 charts the data on inbound peak hour traffic at entry points into Center City, over a 12-year period.

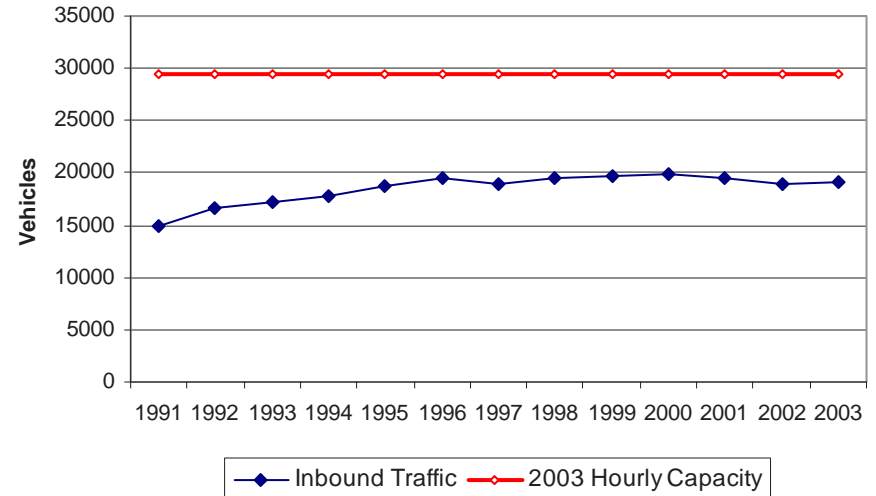


Table 3-1: Traffic Volumes, 1991-2003

(Morning Inbound Peak Hour Traffic at Gateway Locations)

The vehicle occupancy ratio has actually declined slightly over the last 12 years. In short, fewer cars entering Center City during the morning rush hour have more than one occupant. In 1991, the “vehicle occupancy ratio” (for non-transit vehicles) was 1.17. By 1995 it had decreased to 1.15, and in 2003 it was 1.11. While this decline is consistent with experience in metropolitan areas throughout the country, it is apparent that increases in vehicle occupancy are needed if the street system is to carry more people without expanding vehicular capacity.

On the whole, the street network functions well. An analysis of 2003 traffic data for the Center City Transportation Plan reached the following conclusions:

1. The streets leading into Center City - the “gateways” - are relatively uncongested during the morning peak commuter period.
2. Most intersections in Center City are also operating well within their potential capacity during this period. Only two intersections - Tenth and Graham, and Fifth and Graham - experience





“marginal” congestion, according to the criteria of the Charlotte Department of Transportation (CDOT).

3. While the street network operates acceptably during the morning and evening peak periods, congestion does exist on major approach routes to the Center City. In addition, selected exit ramps from the freeway loop to Center City are also congested during this period. These individual congested locations may, to some extent, be metering traffic that enters Center City at the gateways. In other words, drivers may be making individual adjustments as they seek routes to their destination that are less congested.
4. The number of vehicles entering Center City during the morning peak period has remained relatively constant over the past several years.
5. During the same time, the average number of people per vehicle declined slightly.

Traffic Conditions at Gateways

**Gateway Streets** are the streets entering Center City from or across the freeway loop that encircles Center City. The capacity of the transportation system at gateway locations is one of the key factors that could potentially affect the growth of Center City, since it creates a finite number of entry points into the Uptown street grid.

CDOT has used traffic counts at selected gateway locations to monitor performance at these locations over a number of years. This Center City Transportation Plan examined existing conditions by reviewing traffic counts performed in September, 2003. The reported peak-hours traffic volumes were compared with the hourly roadway capacities to derive an estimate of the overall performance both of the complete roadway system and of individual streets at these gateway locations. The analysis used a street capacity of 600 vehicles per lane per hour for two-way streets, and 750 vehicles per lane per hour for one-way streets. The results of the review are shown in Table 3-2.

Table 3-2: Traffic Volumes at Gateways (September, 2003)

Street	Location	Inbound Lanes	Capacity / Lane	Capacity	2003 Pk Hr. Vol.	2003 v/c Ratio
Graham	s. of 10th	2	600	1200	1081	0.90
10th	w. of Poplar	1	600	600	286	0.48
Church	n. of 10th	3	750	2250	1317	0.59
Tryon	n. of 10th	2	600	1200	704	0.59
Brevard	s. of 11th	3	750	2250	1111	0.49
Davidson	s. of 11th	1	600	600	422	0.70
<b>Total</b>	<b>north</b>	<b>12</b>		<b>8100</b>	<b>4921</b>	<b>0.61</b>
8th	w. of McDowell	1	600	600	93	0.16
7th	w. of McDowell	2	600	1200	1179	0.98
6th	w. of McDowell	2	750	1500	776	0.52
Trade	w. of McDowell	2	600	1200	588	0.49
4th	w. of McDowell	4	750	3000	2270	0.76
2nd	w. of McDowell	2	600	1200	612	0.51
<b>Total</b>	<b>east</b>	<b>13</b>		<b>8700</b>	<b>5518</b>	<b>0.63</b>
Stonewall	e. of Caldwell	2	600	1200	1276	1.06
Caldwell	s. of Stonewall	3	750	2250	1530	0.68
College	s. of Stonewall	3	750	2250	1658	0.74
Tryon	s. of Stonewall	2	600	1200	298	0.25
Mint	s. of Stonewall	2	600	1200	756	0.63
<b>Total</b>	<b>south</b>	<b>12</b>		<b>8100</b>	<b>5518</b>	<b>0.68</b>
4th	w. of Sycamore	2	600	1200	370	0.31
Trade	w. of Sycamore	2	600	1200	1647	1.37
5th	w. of Sycamore	2	600	1200	852	0.71
Cedar	n. of Morehead	1	600	600	389	0.65
<b>Total</b>	<b>west</b>	<b>7</b>		<b>4200</b>	<b>3258</b>	<b>0.78</b>
<b>Total Cordon</b>		<b>44</b>		<b>29100</b>	<b>19215</b>	<b>0.66</b>

The results of the analysis are consistent with those used by CDOT in previous gateway analyses. Two observations about the overall network are apparent from the most recent data:

**Roadways leading into Center City operate well within capacity during the morning peak hour, as indicated by the overall volume compared with capacity.** This measure is expressed in the table as a “v/c ratio.” For all locations, the composite ratio is 0.66, implying that the system overall is operating at approximately a two-thirds capacity.





Each major direction of approach to Center City is operating at a roughly comparable level, with volume-capacity ratios ranging from 0.61 to 0.78. One explanation for this balance is likely to be the existence of the I-277 Loop, which encircles Center City and allows for traffic approaching it to be redistributed to a number of streets that enter Center City from all directions.

An examination of individual streets leads to these conclusions:

Four intersections are operating at or near capacity, including two (portions of Stonewall and West Trade) that exceed theoretical capacity:

- Trade Street, west of Sycamore (volume-capacity ratio of 1.37)
- Stonewall Street, east of Caldwell Street (1.06)
- Seventh Street, west of McDowell Street (0.98)
- Graham Street, south of Tenth Street (0.90)

The four streets listed above represent the four major directional approaches to Center City. Each of these gateway locations is immediately adjacent to a freeway off-ramp (with the exception of Seventh Street on the east side), suggesting that these locations are being disproportionately affected by traffic approaching Center City by the freeways.

Not all gateways that are close to freeway off-ramps are equally congested. This may occur because of capacity limitations on the off-ramps or simply because these gateways are not as attractive as approach routes to the Center City because of other constraints.

Most other gateway locations are operating well within their potential capacities, with the volumes on the following streets being significantly below capacity.

- Eighth Street, west of McDowell Street (volume-capacity ratio of 0.16)

- Tryon Street, south of Stonewall Street (0.25)
- Fourth Street, west of Sycamore Street (0.31)

Traffic Conditions within the Center City

Once inside the expressway loop, past the gateway entry points, the principal streets that carry commuter traffic are performing well. Primary commuter streets are those intended to provide high capacity from the freeway loop to the Uptown core. They represent about half of the gateway capacity for inbound traffic into Center City and, in fact, do carry about half of the traffic entering Center City in the morning peak hours. The data in Table 3-3 indicate:

- All of these primary commuter streets function at an adequate level of service, and
- Furthermore, none of the streets operating at or above capacity are primary commuter streets.

Table 3-3: Traffic Volumes for Primary Commuter Streets at Gateways

Street	Location	Inbound Lanes	Capacity /Lane	Capacity	2003 Pk Hr. Vol.	2003 w/c Ratio
Church	n. of 10th	3	750	2250	1317	0.59
Brevard	s. of 11th	3	750	2250	1111	0.49
Total north		6	1500	4500	2428	0.54
6th	w. of McDowell	2	750	1500	776	0.52
4th	w. of McDowell	4	750	3000	2270	0.76
Total East		6	1500	4500	3046	0.68
Caldwell	s. of Stonewall	3	750	2250	1530	0.66
College	s. of Stonewall	3	750	2250	1658	0.74
Total South		6	1500	4500	3188	0.71
4th	w. of Sycamore	2	600	1200	370	0.31
5th	w. of Sycamore	2	600	1200	852	0.71
Total West		4	1200	2400	1222	0.51
Total Commuter		22	5700	15900	9884	0.62
Commuter/All Gateways		50%		54.60%	51.40%	







Existing Pedestrian Environment

In conjunction with the Center City Transportation Plan, CDOT staff undertook a detailed analysis of the pedestrian condition of every block face in the study area. The results provide baseline data for the existing pedestrian system in Center City. The analysis plays a key role in preparing the new transportation system plan by helping define plan standards for streetscape design and other improvements in the infrastructure supporting pedestrian use.

Rating Existing Conditions

The plan used the width of sidewalks as the primary measure of pedestrian quality in a city block. Numerous other factors contribute to the quality of the pedestrian environment, of course, including street furniture, trees, tree grates, landscaping, art, wayfinding signage - even the quality of the pavement, itself. However, width, or space, is seen as the foundation upon which pedestrian capacity, comfort and other qualitative attributes are achievable.

The pedestrian quality of each block face in Center City was classified in one of five categories:

Existing Quality Rating System

Quality Rating	Criteria
1. High Quality	Pedestrian space at least 22 feet wide (based on mall improvements to Tryon Street and the 100 block of Trade Street)
2. Medium-High	Medium-High Pedestrian space between 16 and 21 feet wide
3. Medium	Pedestrian space between 12 and 15 feet wide
4. Low-Medium	Pedestrian space at least 4 feet wide, with no specific separation from the curbline
5. Low Quality	Pedestrian space containing no sidewalk, a sidewalk of less than 4 feet, or a sidewalk of 4 feet or less but containing major intrusions such as utility poles or signs.

The result of the study is a complete atlas of pedestrian environment conditions on all blocks within Center City. There are a number of blocks in which two or more of these conditions apply to portions of the block face, and these conditions are noted in the atlas. The sample photographs on these pages illustrate the rating levels for existing sidewalks.

The quality assessment was supplemented by a “walkability analysis.” This analysis chronicled various needs and objectives to improve Center City walkability that are incorporated in the new transportation system plan presented in the next chapter.

Rating Enhancement Potential

Given these existing conditions, what is the possibility of improving them? In addition to evaluating existing quality, each block was assessed for the potential of expanding the width of the pedestrian space and thereby enhancing the quality of the space. This expansion could be done either:

- (a) *inside the curb line*, by using some of the existing pavement,
- (b) *outside the curb line* in unused right-of-way or on adjacent property.

Combining the existing quality and potential enhancement ratings produces a composite score for each block face. For example, a block face with a composite score of “3-High” would mean that the particular block has a medium quality rating but has high potential for improvement.

The overall evaluation was tabulated with the streets listed alphabetically and the blocks arrayed by address range and flanking streets. In addition to the qualitative rating, a photograph was taken to represent the condition of each block face (with multiple photographs where more than one condition was present). This planning resource is available from the Charlotte Department of Transportation.





### Potential Enhancement Rating System

Inside the Curb Line (using some existing pavement space)	
High	Clear excess pavement width
Medium	Possible excess pavement width
Low	No possible excess pavement width
Outside the Curb Line (in unused right-of-way or adjacent property)	
High	Clear excess right-of-way or land that is vacant, a surface parking lot, and/or small one- or two-story buildings that lack historical significance
Medium	Some potential for expansion, but more likely not to occur without or until any future redevelopment
Low	Significant expansion obstacles, such as taller, newer buildings, or parking structures, historic buildings, or churches, at or very near the sidewalk

### Existing Bicycle System

The development of a bicycle circulation system for Center City is in its infancy. The City’s adopted Charlotte-Mecklenburg Bicycle Transportation Plan (1999) identifies nine primary marked bicycle routes leading into Center City, but also notes there are major impediments to safe and convenient bicycle commuting.

The major impediments are associated with the I-277 Loop. Narrow street widths on approach streets outside the loop, constrained widths in the underpasses and overpasses, and the volume and speed of peak hour traffic in these locations, all affect development of a viable bicycle circulation system. The plan’s selection of routes attempts to minimize these constraints, but those that involve expressway overpasses and underpasses will require modifications at those locations before commuting conditions are improved.

These streets have been designated by the city-wide Bicycle Transportation Plan as “marked bicycle routes” for entry into Center City:

- Trade Street / Elizabeth Avenue
- West Fourth Street
- West Fifth Street
- East Tenth Street
- McDowell Street
- Kenilworth Avenue
- Mint Street
- West Morehead Street
- Johnson Street (to be connected to a proposed pedestrian/bicycle overpass when the rail crossing at Ninth Street is closed)

In addition to designated routes, elements of a bicycle system include marked bicycle lanes, bicycle trails, and bicycle parking.

### Bicycle Lanes

The only actual marked bicycle lanes in Center City are portions of Fourth and Third Streets.

An additional bicycle lane has been built on Kenilworth Avenue as part of an overall improvement to that street as it enters Center City and becomes Stonewall Street. Bicycle lanes have been provided on both sides of Kenilworth/Stonewall, from Independence Boulevard to McDowell, improving access under the expressway loop.

### Bicycle Trails

In constructing the trolley line from South End to Ninth Street, CATS provided a combination bicycle and pedestrian trail that parallels the tracks. With the coming of the South Corridor Light Rail Transit line along the same right-of-way, combination bicycle and pedestrian trails will be provided on both sides of the tracks, except





for the crossing of I-277. The South End Bicycle Pedestrian Connectivity Study evaluated other alternatives for connections between Uptown and South End.

While the trail will be an attractive and useful amenity for Center City pedestrians and bicyclists, it is more suited for casual cyclists than for commuters. The trail presents a number of obstacles for commuters: it does not go through the Convention Center, forcing bicyclists to find alternate routes; the trail becomes part of the train platforms, where concentrations of pedestrian traffic will hinder cyclists; and the sections between the platforms are too narrow to facilitate higher speeds that commuting cyclists prefer. However, other alternatives are planned between Center City from the South End over or under I-277.

### Bicycle Parking

Convenient parking is a significant factor in stimulating the use of bicycles for commuting. Two recent initiatives will help increase the availability of parking:

- CDOT has installed several “inverted U-style racks” along the Tryon Street corridor. There is moderate funding to continue this effort.
- Charlotte City Council has approved a significant amendment to incorporate bicycle parking requirements in the City’s zoning code. The new provisions require all future parking structures to provide bicycle racks.

### Existing Transit

The hub of the Charlotte Area Transit System (CATS) bus services in Center City is the Charlotte Transportation Center, which occupies the block defined Trade and Fourth Streets, the South Corridor Light Rail Transit line and Brevard Street. The Center has 20 off-street passenger platforms, as well as passenger-boarding locations on Brevard, Fourth and Trade Streets for express routes.

An estimated 1,000 express bus riders arrive in Center City during the morning peak period. Throughout the day, an estimated 15,000 persons get off or on CATS buses at the Transportation

Center. The Center’s two pavilions include transit information services, a bank branch, postal services, retail businesses and fast food restaurants.

The most heavily used east-west transit corridor is Trade Street. Each hour, 92 buses traverse Trade Street each way between College Street and Brevard Street, 61 buses pass through the intersection of Trade and Tryon, and 43 buses proceed west of Church Street.

The north-south corridor buses are evenly divided among Tryon, College and Church Streets, with approximately 20 to 30 buses on each street during the morning peak hour.

### Existing Parking

An estimated 46,000 off-street parking spaces are available for commuters in Center City, and over 1,000 on-street parking spaces are available for shorter-term parking.

- The off-street inventory includes 22,897 parking deck spaces (excluding residential decks), identified in a 2004 CDOT study. In addition, 23,370 spaces are available on surface parking lots, based on information from Central Parking, a private firm.
- The on-street spaces are those in the Uptown core that are generally available to employees and visitors. The estimate, by Park-It, does not include on-street spaces in the residential wards, which are generally restricted for residents or by time.

Nearly all off-street parking in Center City is privately owned and operated. There is no overall parking management entity to provide the visiting public clear parking information.

The City of Charlotte manages on-street parking through Park-It, a CDOT program that subcontracts with a private company for meter collection and maintenance. The City does own two parking decks: the Government Center deck (799 spaces) and the Police Station deck(918 spaces). The Government Center deck provides some public access parking; the Police deck provides none.







Cultural, sports and entertainment events usually occur on evenings or weekends, and use available on-street and off-street spaces. Many office building decks are open evenings and weekends without charge. However, the lack of an information and directional system can make it difficult for visitors to easily locate and use the parking decks.

Charlotte's Uptown Mixed Use District (UMUD) zoning district in Center City requires certain new office and commercial uses to provide parking - those uses that contain more than 20,000 square feet of gross floor area and are located on lots with a street frontage greater than 40 feet on any single street. UMUD requires parking to be provided at the following rates:

- 0.50 spaces for each 1,000 sq. ft. up to 200,000 square feet of gross floor area;
- 0.75 spaces for each 1,000 sq. ft. over 200,000 sq. ft. up to 500,000 sq. ft.;
- spaces for each 1,000 sq. ft. over 500,000 sq. ft., up to 800,000 sq. ft.;
- 1.25 spaces for each 1,000 sq. ft. over 800,000 sq. ft.

These requirements are well below the parking ratios that office development and the financial sector typically expect or seek. Most recent office developments have provided more than the minimum number of required parking spaces.

## Growth Forecasts

In addition to the existing transportation system, the number of people and jobs in Center City - and how much those numbers are likely to change in the future - determines the framework for developing a new Center City transportation plan. Forecasts for population, housing and employment provide an indication of the magnitude of growth expected in Center City over the next 25 years, through 2030.

Over the course of the Center City Transportation Plan, two studies were undertaken related to employ-

ment and population growth and attendant traffic and parking related forecasts. First, the CCTP consulting team prepared forecasts based using a 2025 forecast year. Second, in work related to the Long-Range Transportation Model, CDOT staff prepared forecasts utilizing a 2030 forecast year. While the 2025 forecasts covered more topics, the 2030 studies yield forecast data that place Center City in a consistent framework as the balance of the Mecklenburg-Union Metropolitan Planning Organization (MUMPO) planning area.

Therefore, in the following review of forecasts, where the 2030 studies cover the topic under consideration, those data are used. Otherwise, the 2025 studies are reported. Since there are differences in source data and forecast methods, any attempt to adjust these 2025 data to 2030 would not be reliable. Given the 20 to 25-year horizon that is involved, the respective data adequately support the conclusions that are being drawn.

### Population

Forecast: 30,200 total population by 2030

Existing: 7,840 persons (2002)

Net Increase: 22,360 additional persons

Center City's population is expected to reach 30,200 by 2030. The projected 2030 population would mean increasing the area's 2000 population of 5,220 persons. By 2002, the resident population inside the expressway loop had grown to 7,840 persons and that number has increased in the last three years with the construction of more new housing, especially in First Ward.

### Housing

Forecast: 17,000 households by 2030

Existing: 4,200 households (2002)

Net Increase: 12,800 additional households

Most of the Center City population will continue to live in multi-family units. Many of these units have been constructed in recent





years. Between 1998 and 2002, building permits were issued for 1,722 residential units (including 1,615 multi-family units). By 2002, the area had an inventory of 3,550 multi-family units and 650 single family homes.

Demand is expected to support approximately 5,150 additional units in Center City by 2025, bringing the total number of units to 9,350 in that year. (The recent announcements for seven high-rise towers alone would meet one-third of the projected increase, if all are built.) The estimates of market potential, based on recent building permit activity and recent inventory growth, suggest that these additional units would include 4,830 multi-family units and 320 single family units.

Employment

Forecast: 95,000 employees by 2030

Existing: 55,000 employees (2004)

Net Increase: 40,000 additional employees

The current employment base in Center City is estimated to be approximately 55,000 workers, and the forecasts expect that total number to increase to 95,000 by 2030. The sector components of this forecast - office, government and retail - are described below.

**Office Employment Growth Forecast (2025)**

Mecklenburg County employment forecasts for 2025 (the 2030 forecasts do not provide a comparable analysis) call for 19 million square feet of additional office space by that year, including 15.4 million square feet of growth in the financial and service sectors.

Center City Charlotte is expected to capture 38.3 percent of that new office growth - the same share it had during the period between 1996 and 2002. Based on that assumption, demand would be sufficient to fuel an increase of approximately eight million square feet of occupied office space in Center City - or an average of approximately 350,000 square feet annually. Center City's share of employment growth has actually grown over its

proportionate share of county growth in years prior to 1996. In fact, it reached 50 percent in 1998, 2001 and 2002. However, the explosive growth of those years may not be sustained on a consistent basis and, therefore, the more conservative figure of 38.3 percent is used in the forecast.

The forecast assumes employees will each require approximately 225 square feet of space. If Center City is expected to add eight million total square feet, dividing that number by the space utilization factor of 225 square feet per employee yields the estimate of about 35,500 additional office employees by 2025.

**Government Employment Growth Forecast (2025)**

The forecast of new government employees that will work in Center City includes 1,000 prospective City of Charlotte employees, 600 Mecklenburg County employees, and 500 Charlotte-Mecklenburg Schools employees.

**Retail Employment Growth Forecast (2025)**

Retail spending by new Center City residents and employees will generate demand for new retail services and expansion of existing retail space - and, in turn, new retail employees.

The forecast uses standard "retail space sales productivity" and "employee space utilization rates" for that industry to estimate the quantity of new retail space that can be supported by the expenditures of new workers and residents. The resulting figure is 300,800 square feet of additional retail space by 2025 - or approximately 12,000 square feet of occupied space annually.

This new space in turn is estimated to be capable of supporting approximately 900 additional employees during this period - or an average of 36 new retail employees each year between 2000 and 2025.

The outlook for growth in Center City over the next 25 years, then, is for 22,400 additional residents; 12,800 new households; and 40,000 additional employees (almost all in the office sector).



