

I. EXECUTIVE SUMMARY

The Future

Over the next 20 to 25 years, Charlotte's Center City employment is expected to increase from 55,000 to 95,000. More than 30,000 people will choose to live in Center City, supporting a 24-hour environment. New cultural facilities and entertainment venues will be built, more exciting restaurants and specialty shopping will open, one or more major parks will be created, and events at the Arena, Convention Center and other venues will grow - all of which will attract additional visitors to Center City.

Whether people drive, take transit, ride bicycles or walk to Center City, everyone becomes a pedestrian once they arrive Uptown. That concept is fundamental to this plan. Those who commute by car will park and walk to their job. Rapid transit riders will arrive at their station and walk to their destination. A growing number of people will leave their homes in Center City and walk to work.

This Center City Transportation Plan provides a strategy, policies and implementation actions that will make these forms of transportation function smoothly in a dynamic Uptown environment. As the future unfolds, Center City's streets, sidewalks and parking will be transformed to support a pedestrian-friendly, transit-oriented, employment, cultural and entertainment center of the region. This is the strategy that can facilitate this transformation.

The study area of this Plan is defined in the most part by the I-77-/I-277 freeway Loop and Twelfth Street which serves as a service street on the north side of the Loop. A few facility recommendations outside the Loop that relate strongly to transportation functions inside the Loop are also incorporated. These include removal of the Caldwell Street - Brevard Street connector, the extension of Fifth Street to Kings Road, and the connection of Davidson Street or another street to Euclid Avenue.

Primary Themes

 Make Center City more pedestrian-friendly.
 Sidewalks will generally be wider and more aesthetically pleasing, with street trees, street furnishings and attractive paving.



It will be easier to cross streets, with fewer right-turn and left-turn lanes. There will be a coordinated system of wayfinding information to help people find their way around Center City on foot and by car, for easier access to destinations, services, transit stops and available parking. Center City, with the largest concentration of employment in the region and extensive residential, retail and entertainment facilities, provides the greatest opportunity to reduce mid-day use of automobiles, thus offering a substantial benefit to air quality.

 Integrate the new transit system with the street network and sidewalks.

When the five-corridor rapid transit system is complete, nearly every business, cultural attraction and entertainment destination in Center City will be within a five-minute walk from a transit stop or station. Once they get off the train or bus, every transit rider will become a pedestrian. The streets will be made more pedestrian-friendly to enhance the riders' walk to and from their destinations.

 Make the walk from transit stops and parking facilities easier and more attractive.

The transit journey doesn't end upon getting off the train or bus. The walk from the transit stop to the destination is a big part of the trip. A comfortable and attractive walk will encourage more people to use the transit system on a regular basis. This plan proposes a system of Pedestrian Street Design Standards that specify sidewalk construction standards and amenity guidelines for three levels of streets in Center City. Furthermore, every driver and their passengers will become pedestrians once they park; these same standards will also make the same sidewalks easy and attractive for commuters and visitors.

Make more streets two-way, so Center City is easier to navigate.

One-way street systems can be confusing. They can lead to unnecessarily longer driving in the search for parking or a destination. They can be confusing to visitors and to people who are unfamiliar with Center City. Changing some one-way streets to two-way will help these

infrequent visitors as well as reduce congestion, air pollution and pedestrian conflicts.

 Keep some streets one-way to get rush hour traffic to and from parking efficiently.

Most commuters and visitors will still drive to Center City. The street system needs to get them to a parking space as efficiently as possible while minimizing traffic congestion and air pollution. Indeed, the location of existing parking decks will necessitate keeping some one-way pairs. To move traffic into and out of Center City as efficiently as possible, the main one-way streets of Third, Fourth, Fifth, Sixth, Church and College will remain one-way. These one-way streets will provide efficient access to and from Center City; the two-way streets will provide ease of circulation within Center City.

 Encourage more traffic to use I-277 and an internal circulator route, instead of driving across Center City.

In most cases, there is no need to drive across Center City. The need is to drive into Center City, then park and become pedestrians. Drivers approaching Center City on a major thoroughfare should use the exit nearest their destination. Several I-277 access points have "short weave" movements that can be unsafe, and this plan proposes modifications to make I-277 more serviceable. Furthermore, when feasible, drivers approaching on the street network should use an internal circulator route – consisting of McDowell, Stonewall, Graham and the 11th/12th Street couplet – as an alternative to using internal Center City streets. The traffic analysis for this plan found that streets within the freeway loop are functioning adequately and will continue to do so as Center City grows. But using these approaches will enhance circulation and reduce congestion as traffic volumes increase.

 Make it easier to find parking spaces, especially for occasional visitors and major events.

Once drivers have arrived in Center City, four "parking loops" will direct drivers to available parking decks along and near Tryon and Trade Streets. Electronic message signs will provide drivers directions to parking decks on these loops, and dis-



play real-time information on the availability of spaces in each deck. A Collaborative Parking System will allow businesses, merchants and restaurants to validate parking in any of the participating facilities. When the drivers and their passengers become pedestrians, a pedestrian signage system along the sidewalks will help them find their way to their destinations and back to their parking space.

This strategy for Center City transportation will:

- make transit trips to Center City more accessible, thereby encouraging more riders;
- make driving trips more efficient, thereby reducing congestion and air pollution; and
- make the pedestrian environment more attractive, encouraging people to come more often and stay longer and, most importantly, leave their automobiles parked for longer periods.

A Guide to this Center City Transportation Plan

Part One: Introduction (Pages 1-4)

This plan implements the transportation recommendations of the Center City 2010 Vision Plan and related plans developed since 2000. Part One sets the stage by giving the reasons for this new plan, listing basic assumptions and outlining how the plan will be applied.

Part Two: Vision (Pages 5-20)

This part spells out the vision that guides the transportation plan. 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, by trends in public and private development, and by the views of stakeholders and workshop participants consulted during this plan's development.

Part Three: Framework (Pages 21-30)

The Framework consists of two major elements that make up the starting point for planning the new Center City transportation system: the existing system and growth forecasts.

Existing System: This section describes the characteristics of the existing street network, pedestrian environment, and the transit, bicycle and parking facilities. Two special analyses were undertaken. One analyzed the pedestrian condition of every block face in the Uptown study area; this comprehensive atlas of baseline data played a key role in the new transportation system by helping define standards for streetscape design and other improvements supporting pedestrian use. A second analysis, focusing on automobile traffic, reached these conclusions:

- The streets leading into Center City the "gateways" are relatively uncongested during the peak commuter period.
- Most intersections in Center City are also operating well within their potential capacity.
- While the street network operates acceptably during morning and evening peak hours, congestion does exist on the major approach routes well outside the Center City.
- The number of vehicles entering Center City during the morning peak has remained relatively constant over the past several years.
- During the same time, the average number of people per vehicle has declined slightly.

Growth Forecasts are another factor that determines the framework for the new plan. These are the basic forecasts for Center City over the next 25 years.

- **Population: 30,200** total population by 2030 (a net increase of 22,400 persons)
- Households: 17,000 households by 2030 (net increase of 12,800 additional households)
- **Employment: 95,000** employees by 2030 (net increase of 40,000 additional employees)



Part Four: Transportation Plan (Pages 31-87)

This is the heart of the Center City Transportation Plan. This section describes the strategic approach and presents recommendations for each transportation system component.

Strategic approach. The transportation system has certain "structural" features - The Square, the I-277/I-77 expressway loop, the street network, rapid transit stations, major pedestrian destinations, and major pedestrian streets. Against this structural backdrop are the moving pieces, the major transportation modes - vehicular, pedestrian, transit and bicycle. The plan focuses on how these modes interact with the streets, stations and destinations to assure an efficient transportation system. Seven important concepts guide this plan:

- 1. Everyone is a pedestrian.
- 2. Major destinations will be a five-minute walk from a transit station.
- 3. The key pedestrian streets support a direct walk from transit.
- 4. The key pedestrian streets also link neighborhoods and open space.
- 5. New office building locations should reinforce the concept of a walkable Uptown.
- 6. Center City can be a "park once" location, especially if motorists find a pleasant, walkable environment between their parking deck and destination.
- 7. Moving traffic into Center City efficiently means getting motorists to their parking destination more directly.

Plan Recommendations

The plan makes specific recommendations about land use and urban design, and then presents specific proposals for each of the four modes - pedestrian, bicycle, transit and vehicular - as well as for a collaborative parking system and a comprehensive way
finding system. The recommendations are listed

below.

Land Use

- 1. Use transportation and parking strategies to support growth and intensification of various land uses, with emphasis on office employment.
- 2. Provide multi-modal transportation solutions to support land use recommendations that will produce a memorable, vibrant Center City.

Urban Design

- **3. Promote pedestrian vitality** through the design of Center City streets by enhancing human scale and street-level features.
- **4. Apply the Street Enhancement Standards Map** which is recommended for adoption.
- 5. Apply the framework of vehicle and pedestrian/transit gateways and memorable streets described in the Center City 2010 Vision Plan.

Vehicular Circulation

- **6.** Complete the proposed modifications to the I-77/I-277 Loop. These nine projects would resolve specific problems (such as those stemming from short weave segments) and, in general, make the freeway loop more effective in distributing Center City traffic a prerequisite to assuring smooth traffic flow within Center City.
- 7. Convert selected one-way streets to two-way streets to improve vehicular circulation within Center City. Nine conversions are proposed. Most notably, the remainders of Caldwell and the two segments of Brevard would be made two-way streets. This conversion enables Brevard to become a Signature Pedestrian Street with unique development opportunities between the Arena and the Convention Center, as well as to the north of the Arena.
- **8. Retain selected one-way streets,** including the primary commuter streets in and out of Center City during peak morning and afternoon hours. These designated streets include Third, Fourth, Fifth, Sixth, College, Church, Eleventh and Twelfth.

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- **9.** Construct new streets or street segments to improve connectivity and meet special needs. These new or modified streets include those in the vicinity of Gateway Station and Third Ward Park, an overpass over I-277 from Second Ward to Dilworth (Davidson or Alexander to Euclid), street extensions in First Ward and neighborhood residential streets in the future redevelopment of Second Ward.
- 10. Convert travel lanes on streets with excess lane capacity and/or lane width to use for increased sidewalk widths, on-street parking, and/or bicycle lanes. These street segments are identified.
- 11. Modify turn lanes and intersections where turn lanes are unnecessary for the estimated volume of turning traffic or where safety or pedestrian crossing conflicts are a concern. Eight intersection configurations are identified.
- **12. Modify or close rail grade crossings** where made necessary by expanded rail service to Center City. Five crossings are identified.

Parking

- 13. Create a "Collaborative Parking System" for the management of private and public parking facilities. The intent is to organize and unify private and public parking assets in Center City through an entity that provides such services as a parking guidance or "wayfinding" system.
- **14.** Expand the On-Street Parking system managed by the City, by increasing the number of on-street spaces, expanding hours of operation, and offering payment options.
- 15. Develop an Off-Street Parking Policy framework for City participation in the parking component of mixed-use projects. This policy would establish conditions for financial participation by the City in providing joint parking solutions for appropriate mixed use development, and consider such measures as "payment-in-lieu" of building new parking.

Wayfinding

16. Continue to expand the Pedestrian Wayfinding System, are developed for the light rail transit line, and expand it throughout

- Center City to provide kiosks and directional signs that orient and inform pedestrians.
- 17. Develop a Vehicular Wayfinding System, in conjunction with the Collaborative Parking System, to direct motorists into Center City, guide visitors in navigating the street network, and help all locate the most readily accessible parking closest to their destination. The vehicular system will utilize dynamic signs to provide real-time information on available spaces in parking facilities, and will be coordinated with the pedestrian wayfinding system that will orient pedestrians once they have parked their car.

Transit

- 18. Capitalize on the synergies created by the new Charlotte Gateway Station which serves as a multi-modal transit center, a pedestrian focal point, and a generator of office employment on West Trade Street.
- 19. Complete the North Corridor commuter rail and AMTRAK spine along with the associated closing of the at-grade crossings at Ninth, Smith and Church Streets, modifications of the at-grade crossings at Brevard and Davidson Streets, extension of Martin Luther King, Jr. Boulevard (MLK, Jr. Boulevard), and construction of a pedestrian/bicycle overpass at Ninth Street.
- **20.** Complete the north-south LRT transit spine by extending the South Light Rail Transit (LRT) Corridor (and its related pedestrian and bicycle amenities) through Center City to become the Northeast LRT Corridor.
- 21. Establish an east-west transit way along Trade Street that (a) includes pedestrian-friendly streetscape improvements; (b) carries LRT or Bus Rapid Transit (BRT) services from the West and Southeast Corridors; (c) connects West and East Charlotte via streetcar service; (d) provides local bus stops; and (e) links the two major transit nodes the existing Charlotte Transportation Center and the future Charlotte Gateway Station.
- **22.** Introduce east-west streetcar service, first in Center City along the Trade Streettransit way and, later, connecting with neighborhoods in East and West Charlotte; the Streetcar system should also



circulate within Center City and connect residential areas inside and outside the Loop with key Center City destinations.

Pedestrian Circulation

- **23.** Adopt the Streetscape Standards and codify the standards in the UMUD and UR zoning districts and the Uptown Streetscape Design Guidelines.
- **23a. Apply the Hierarchy of Pedestrian Streets** based on the Uptown Streetscape Standards
- **23b. Update the Uptown Streetscape Design Guidelines** to incorporate these standards for the Center City.
- **24.** Adopt the Street Enhancement Standards Map which identifies appropriate pedestrian and vehicular enhancements and serves to regulate their implementation at the time of private redevelopment or public infrastructure improvements.

Bicycle Circulation

- 25. Implement bicycle circulation improvements and integrate bicycle system with the adopted Charlotte-Mecklenburg Bicycle Transportation Plan. This includes bicycle lanes, signed bicycle routes and off-street routes; improvements to express-way underpasses and overpasses; and bicycle parking facilities.
- **25a. Bicycle Lanes, Signed Bicycle Routes,** and Off-Street Routes should be designated in accordance with the city-wide bicycle plan
- **25b.** Improvements to expressway underpasses and overpasses that improve bicycle access to Center City should be done in conjunction with vehicular and pedestrian improvements outlined in this Center City Transportation Plan.

25c. Bicycle parking facilities will be expanded through the recently amended zoning code requirement for new parking structures; through the street furniture element of the Pedestrian Street Standards in this document; and through project funding as it becomes available.

Part Five: Implementation (Pages 87-90)

The final chapter describes various tools and funding mechanisms that will help implement the recommendations of the *Center City Transportation Plan*. Key recommendations include a "General Annual Improvement Program", the 2030 Long Range Transportation Plan, the CATS 2025 Transit System Plan, and Charlotte's five-year Capital Investment Plan, as well as various State and Federal intergovernmental grant sources.

There are other means, as well. Revenue from the City's on-street parking program could help fund the proposed parking and way-finding systems, or other projects. The City's ongoing economic development efforts will generate activity that advances Charlotte's economic growth and contributes to Center City's vitality.

Finally, some of the key proposals of this plan - including the Street Enhancement Standards Map and the Pedestrian Street Standards - will be codified directly as well as through amendments to the zoning ordinance and streetscape standards. Future development in Center City will need to meet the standards. In many cases, new projects are already meeting many of those standards.

