

Parking Strategies in Transit Oriented Development The Charlotte Parking Collaborative

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Abstract

The Charlotte Parking Collaborative is currently being implemented with a real time Parking and Wayfinding System that overcomes the perception that parking is not readily available in Charlotte's CBD. The project conveys the feeling of a parking "system", helps visitors find venues and parking more easily, and will facilitate balancing the parking supply with growing transit service while providing congestion mitigation and air quality benefits.

Center City has over 40,000 parking spaces and a wide variety of options for multiple venues at different consumer price points. Most of the parking is privately owned. A mechanism to coordinate and communicate parking information was needed to better leverage the parking assets of Center City and meet the goals of the Center City Transportation Plan.

Introduction

Many cities view parking as an economic development tool that can accelerate development and growth of a downtown area. Most lending institutions also believe an ample parking supply is necessary to ensure return on investment. Indeed, there is a philosophical approach among many cities across the United States to leverage their parking resources to support economic development. The common goal of these cities is to ensure that the right amount of parking is available to users, that all visitors can find parking, and that the public and private sectors work together for this mutual benefit.

A transit-sensitive parking model has not replaced traditional predictive or decision models in many cities, and zoning requirements often reflect more traditional approaches to parking. Charlotte has responded to our transit operator's 2025 Transit Corridor Systems Plan with transit-oriented development zoning standards that discourage excessive parking. Charlotte's uptown parking supply is 95% privately owned, located in decks designed and built to support our employment base, but not visitor-friendly. The Charlotte Parking Collaborative is a marketing, branding and standards model designed to overcome disadvantages of multiple ownerships, varied signage, and no common branding.



Vehicular wayfinding sign to Charlotte venues

Charlotte conducted a Center City Transportation Study in 2004 – 2005 then adopted transportation and parking policies in 2006 as part of its Center City Transportation Plan. Key parking policies include:

- Balance parking supply with transit service
- Implement Vehicular Wayfinding System to efficiently direct motorists to the parking supply available on a real-time basis
- Utilize financial strategies to support parking as incentive for employment and retail development
- Create a Collaborative Parking Management System

Parking Collaborative Study and Peer Cities Review

A booming economy and significant rezoning and development interest in 2006 prompted City staff to initiate steps to create a Collaborative Parking Management

System. As a first step, the City initiated a Parking Collaborative Study, and conducted a Workshop with business stakeholders in 2006. The workshop panelists, peer city reviewers, developed recommendations for a Parking Management Collaborative using best practices and successful district parking management strategies. The workshop focused on organizational structure options and management programs and strategies to enhance parking and downtown access. City leaders and stakeholders were presented with strategies in use in comparable situations throughout the US, examining the roles of effective downtown parking and transportation systems and their ability to support broader community strategic goals and objectives. Panelists presented the value of collaborative strategies to address downtown parking and access issues. City leaders used this opportunity to build upon the principles identified in the recently adopted Center City Transportation Plan, exploring opportunities for cooperation and partnership between the City, County, Charlotte Center City Partners (our downtown development district), private parking operators, Center City stakeholders and other interested entities.

Together, the workshop participants identified parking management organizational models that have demonstrated success in supporting and promoting economic viability and sustainability, effective planning and operational program development and that contribute to community education and marketing related to parking and transportation options in support of downtown as a local and regional destination.

Peer city experts in 2006 identified these parking challenges through interviews with stakeholders:

- Uptown visitor parking not supported as well as monthly employee parking
- Lack of parking guidance or information signs
- Parking supply is not operated like one system
- No common marketing
- Inadequate signage
- Confusing rate structures
- Ownership and management are private and fragmented
- Future demand needs to be balanced with transit investments and intersection capacity
- Visitors experience confusion in finding parking, whether from out-of-town or this region. There is little information and direction provided for the “visiting” public on where to park, rates, etc.
- The off-street parking system is fragmented and under numerous ownership and management models with little uniformity in signage, hours, or design standards.
- Parking demand and users change throughout the day and the week.

Focus group research conducted by the City in 2006 also supported efforts to identify the parking supply and allay concerns that parking is generally absorbed by monthly parkers working Uptown and not available to visitors.

The Parking Supply

The analysis of parking space needs during the Center City Transportation Study suggested the number of off-street parking spaces will increase by nearly 50 percent in the next 20 to 25 years. Private facilities will meet most of that demand, but for the Center City transportation system to function effectively as a whole, and to assure the area's continued economic viability, it is important that the Uptown parking system be accessible, well-managed and user-friendly.

The need to accommodate employment is the primary determinant of the off-street, non-residential parking supply in Center City. The 2005 evaluation determined that 36,000 off-street parking spaces are used on weekdays by Center City employees.

For operational efficiency, parking decks and lots generally accommodate a maximum of 85 percent of their total capacity. Thus, accommodating 36,000 occupied parking spaces requires approximately 41,400 spaces – which is less than the estimated current total supply of 46,000 off-street parking spaces available for daily commuters in Center City.

How will that number change in the future? In the next 25 years – by the time the new rapid transit system is complete – an additional 40,000 employees are expected in Center City, bringing the total work force to 95,000 employees, according to growth projections. By that time a greater percentage of commuters will be using the new transit system, but the majority of Center City employees will still drive to work and will need parking. About 20,000 new parking deck spaces (in addition to the existing 38 parking decks shown in the parking map below) will be constructed in Center City over the next 20 to 25 years to accommodate the forecasted growth in employees and to offset displaced surface parking lots as a result of development.

Maximizing the efficiency of the entire public and private parking system increases the value of the parking assets, reduces development costs, stabilizes user costs, and supports efficient use of the transportation system, including transit. From the public policy standpoint, it is in the interest of an economically viable Center City to have parking facilities and access systems that are designed and managed to support pedestrian-oriented streets, transit development objectives, and efficient use of facilities.

The transportation objective is to use the parking supply as efficiently as possible, balanced with transit services, and to support it with a vehicular wayfinding system and a parking guidance system that enables people to find parking as easily as possible.

Managing Off-Street Parking: A Collaborative Parking System

This is the aim of a proposed policy approach – a collaborative public-private approach – to meet the current and future parking needs of employees and visitors in Center City. It was the recommended choice among four possible options for the City of Charlotte:

1. Allow the existing fragmented approach to continue;
2. Adopt parking maximums or impose a ceiling on the number of spaces;
3. Begin constructing its own parking structures; or
4. Facilitate a collaborative parking system.

From a land use perspective, a collaborative system including a parking guidance system and a common branding program would be a more cost-effective approach for meeting parking needs than would complete reliance on new parking deck construction. The Center City Transportation Plan recognizes that it is not necessary or desirable to build a parking space for each additional future employee in a central business district supported by transit and with a growing residential population. In part, this is because more employees will live in Uptown and walk to work, and more people will be riding the rapid transit system.

Another basic tenet of the collaborative approach is to efficiently use existing facilities by coordinating available parking deck spaces to meet demand as it shifts during the day. It also works on a longer-term basis; for example, if one building has an over-supply of spaces because more employees are using transit, the building or parking management can make these spaces available through the parking collaborative system and gain new users. A collaborative system is a cost-effective alternative to construction.

The *Center City Transportation Plan* recommended a policy approach to improving management of the off-street system. It should be emphasized that the objective of “changes in management of the parking system” does not refer to changes in management of specific facilities, but is aimed at unifying the parking system so that it looks, feels and is perceived as a system to users, rather than a fragmented series of parking opportunities.

The Policy Recommendation was to create a “Collaborative Parking System” for the management of private and public parking facilities. The intent of the Collaborative Parking System (CPS) is to organize the public and private parking assets in Center City to provide parking that is perceived by the various users as a unified and coordinated system.

Elements of the system include:

- common branding and advertising;
- parking guidance or “wayfinding” system;
- known pricing;
- common validation process;
- consistent specialized parking (van and car pooling);
- consistent design and quality standards.

A Collaborative Parking System will provide opportunities for owners and operators to more effectively market their parking facilities based on support provided by the Collaborative’s marketing and branding. Dynamic wayfinding and parking guidance signs to direct parkers to their facilities are key components of the collaborative system.



Parking Guidance Signs in Advance of Parking Decks

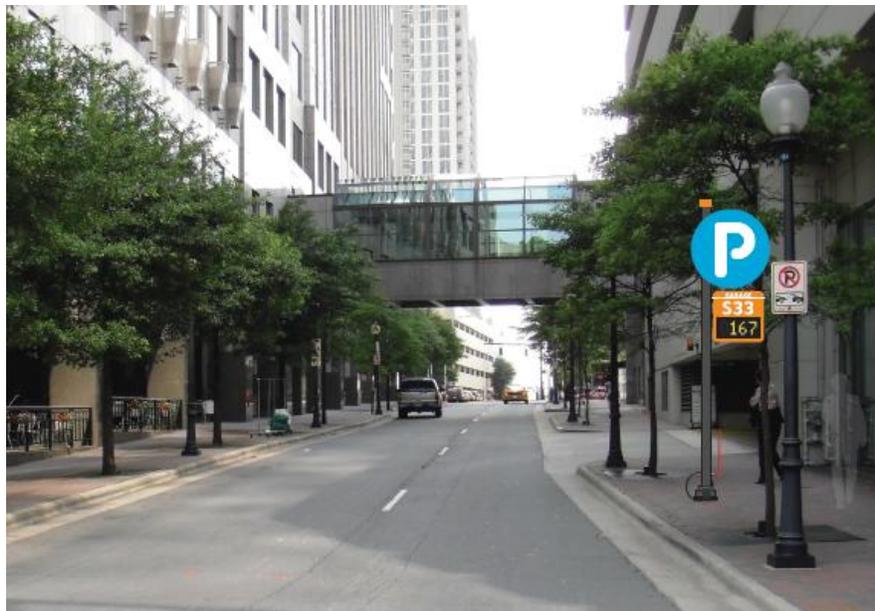
Benefits to owners and operators should include higher revenues from increased utilization, the potential for subsidies by the collaborative to expand operating hours (and, ultimately, generate new revenue), and financial and infrastructure support for new technology costs.

A collaborative approach can also dispel the perception that parking demand is not balanced with parking supply. This perception probably comes more directly from the lack of clear information and directions on where and how to park.

Real-Time Parking Information

While it may seem counter-intuitive to invest in programs in support of private vehicle use in a transit-oriented CBD, we acknowledge the choices of motor vehicles, bicycles, pedestrians or transit to access employment and entertainment. The project goals are expected to reduce the time spent by motorists searching for parking, as well as reduce fuel consumption and queuing at parking facilities.

In the photo below, the prominent “P” parking sign has both a garage identification number and a real-time parking supply field. Available parking supply data comes directly from the deck operators’ revenue control system with frequent updates. This information is routed to the parking deck sign, the City’s Traffic Control Center, a “Find Your Way” website, dynamic gateway signs at primary portals to the CBD, and eventually to personal digital assistants or next generation personal information devices.



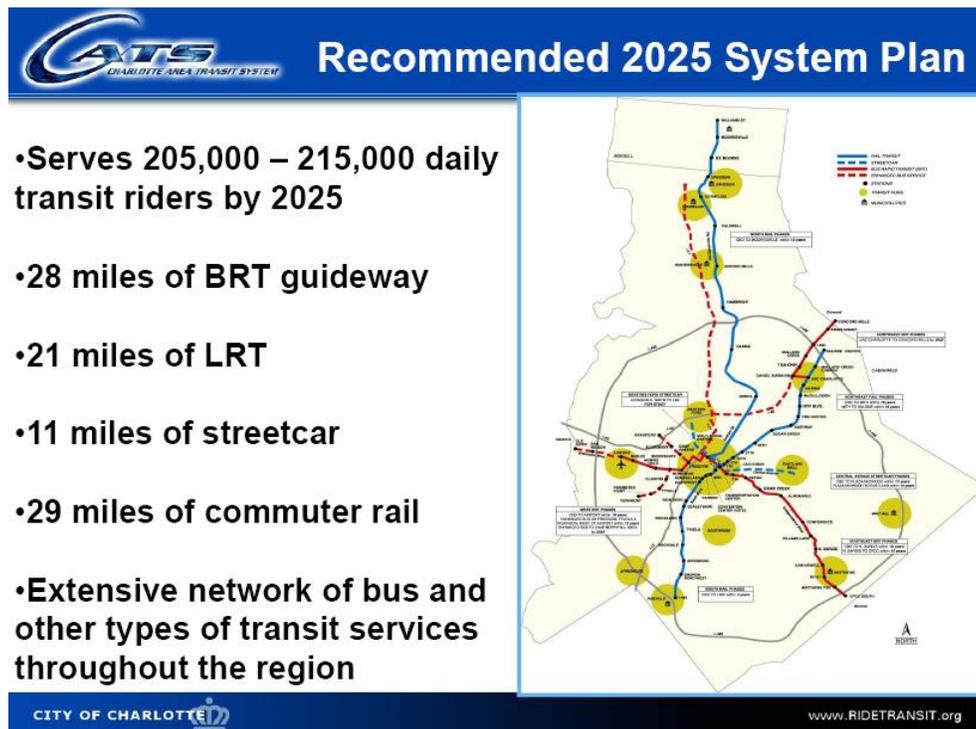
Each Parking Deck Displays Real-Time Parking Supply

Benefits and Challenges in a Transit-Oriented Development Environment

A well-organized system of parking, regardless of ownership, can result in better utilization of existing facilities and reduce the perceived need for additional parking to accompany investments in office or mixed use developments. An important benefit is avoidance of an oversupply of parking that could compete with a growing transit system. The Center City Transportation Plan traffic analysis assumes a 25% reduction in vehicular traffic in Uptown upon full implementation of the Charlotte's 2025 Transit System Corridor Plan.

As parking demand increases over the next 25 years, there will be many opportunities for the City of Charlotte to partner with the private sector in providing parking solutions as part of new mixed-use development projects. The recommended model is the development of mixed-use projects that serve needs for shared parking, transit accessibility and multiple trip destinations. This model – with the City as a partner in jointly addressing parking needs – can result in efficient, effective and sustainable development that has positive impact on development as a whole in Charlotte.

The *2025 Transit System Plan* reflects developing rapid transit service in five corridors. It is in Center City that the five corridors converge and then radiate out to the rest of the system. The Center City improvements will enable these individual corridors to function as an integrated system.



These improvements will also provide services for the Uptown area and connectivity with surrounding neighborhoods; specifically,

- < **Two major transit nodes** – the Charlotte Transportation Center and the multi-modal Charlotte Gateway Station – are designed to complement each other even though they are located several blocks apart.
- < **A north corridor spine** will add commuter rail and inter-city rail services to the existing Norfolk-Southern Railway embankment that runs between and parallel to Graham and Cedar Streets.
- < **A north-south transit spine** will provide light rail transit service along the trolley and former railroad corridor between Brevard and College Streets.
- < **A new east-west transit corridor** will have a pedestrian/transit way along Trade Street that connects Johnson C. Smith University on the west, with Presbyterian Hospital on the east. Ongoing route studies may result in locating part of the east-west transit service on Fourth and/or Fifth Streets.
- < **Circulation services**, including a Center City streetcar line, will connect Center City residential and commercial districts with each other and with areas just outside the I-277/I-77 expressway loop.

Balancing the parking supply with transit service is a key policy of the Center City Transportation Plan, however there is a growing need for a new paradigm for economic development that incorporates transit into the financing model historically used by banking/lending institutions.

Parking Requirements

Charlotte TOD zoning principles and parking requirements are being implemented both to the north and south of Center City through transit station area plans for the “Blue Line” light rail service. Some of the TOD parking provisions include:

1. Shared parking is encouraged; if a shared parking agreement is executed, parking maximum's may be exceeded by 20%
2. If all parking spaces are located behind the building and are not visible from the public right-of-way, parking maximums may be exceeded by 10%.
3. If driveway and access points are shared by at least two adjacent properties, parking maximums may be exceeded by 10%.
4. If a provision is made for combining or interconnecting adjacent parking lots and pedestrian access points, parking maximums may be exceeded by 10%.
5. A 25% parking reduction in the minimum number of parking spaces required is allowed if located within 800 feet of a parking facility available to the public.

Program Summary

The Charlotte Parking Collaborative creates an umbrella management system for parking that is privately owned. Goals are to create common branding/advertising, develop facility design standards, reduce vehicle miles of travel by creating a clear, concise directional wayfinding and signage system, & encourage optimal use of existing facilities. This program addresses conditions similar to many US cities that have not invested in significant public parking programs.

Capital funding from the Federal Congestion Mitigation and Air Quality Program and an Energy Efficiency and Conservation Block Grant was granted based on project goals to reduce vehicle miles of travel by creating a clear, concise directional wayfinding & parking signage system. Improved air quality is a direct benefit of this system.

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