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### Executive Summary

#### Purpose

The Woodlawn Transit Station is the tenth station heading south from Center City along the South Corridor Light Rail Transit (LRT) line, also known as the LYNX Blue Line.

The Woodlawn Transit Station Area Plan is the third of a series of plans for areas around the stations south of South End. The *Introduction to the South Corridor Station Area Plans* lays the foundation for the station area plans. This plan builds on that document. It analyzes current conditions in the area around the station, detailed in the Appendix.

The Concept Plan makes recommendations to bring the right mix of development to complement the transit investment, and to optimize the land use and infrastructure within the wider surrounding area. The Concept Plan is the only section of this document to be adopted by City Council.

#### Study Area

The plan examines the area within approximately 1/2 mile of the Woodlawn Transit Station. The actual station is along Old Pineville Road south of Woodlawn Road. However, the study area for the plan covers a much larger area, extending from I-77 to the Collingwood and Madison Park neighborhoods, for several blocks on either side of Woodlawn Road. It is mostly in a Growth Corridor, as envisioned by the City's Centers, Corridors and Wedges growth framework, but also includes a portion of the adjoining neighborhoods, in a Wedge.

#### Opportunities & Constraints

Through examination of existing conditions in the Woodlawn study area (see Appendix), opportunities to build upon and constraints to overcome were identified. The Woodlawn study area has a strong existing office market. It has good vehicular access from I-77, and a park-and-ride facility to take advantage of that access. The station is challenged by its Old Pineville Road location with little visibility or connection from South Boulevard. There is no residential use in the station area. Existing warehouse and industrial uses do not generate transit activity. The station area has a relatively poor pedestrian environment, and a disconnected street network.

Vision
The desir

The desired future for the study area is highlighted in the following vision statement:

The Woodlawn study area will become one of a series of vibrant, high density transit villages along the South Corridor. Within its boundaries, there will be three distinct areas:

- Transit Station Area: The core of the study area will transform into a pedestrian-oriented urban district. The area west of the light rail line will have a strong office orientation while the area to the east will include a mix of moderate to high intensity office, residential, and neighborhood serving retail.
- General Corridor Area: The remainder of the Growth Corridor, located between I-77 and the neighborhoods to the east, will include a range of uses appropriate for a Growth Corridor. The existing retail and industrial uses which characterize Woodlawn are expected to remain in the near term, but will redevelop over time.
- Wedge Neighborhood Area: The residential character of the existing Madison Park and Collingwood neighborhoods will be maintained.

#### Land Use and Community Design

The plan contains a number of recommendations related to Land Use and Community Design within each of the three areas noted in the vision statement, The recommendations, shown on Map 3, include:

#### Transit Station Area

- Promote mix of transit supportive land uses in Transit Station Area, generally within 1/2 mile of the station;
- Provide active, ground floor, non-residential uses such as retail or office, at key locations.
- Support more intense development of CATS Park-&-Ride lot.
- Create urban plazas near the Transit Station.

#### General Corridor Area

- Maintain locations for office, light industrial and warehouse uses at appropriate locations.
- Allow a mixture of retail, office, and residential uses at appropriate locations along South Boulevard.
- Ensure that new development provides a good transition to adjoining neighborhoods.

#### Wedge Neighborhood Area

- Maintain the single family character of the Collingwood and Madison Park neighborhoods consistent with existing zoning.
- Recognize the opportunity for redevelopment of the single family parcels fronting Woodlawn Road, under specific criteria.

#### Transportation and Streetscape

Transportation recommendations address proposed new streets and enhancements to existing streets to make them more pedestrian and bicycle friendly. The recommendations, shown on Map 4, include:

- Provide new street connections at key locations. Maintain and enhance existing street network as redevelopment occurs.
- Realign streets in the area northwest of Woodlawn Road and Nations Crossing Road.
- Eliminate sidewalk system gaps in Transit Station Area, and in sidewalk connections to the residential areas.
- Improve sidewalk system along major thoroughfares, and in General Corridor Area.
- Enhance pedestrian and bicycle crossings at key locations.
- Extend bicycle lane on Woodlawn Road.
- Site new development to allow for future addition of bicycle lanes on thoroughfares.
- Consider replacement of existing private driveway rail crossing off Old Pineville Road with new street.
- Install Pedestrian Lighting in key locations.

#### Streetscape Cross-Sections

The standards in this section supplement requirements in TOD zoning districts, as well as TS, PED, UMUD, MUDD, NS, UR, and other urban zoning districts that may be established. This section recommends future cross sections for streets, and identifies building setbacks and streetscape standards based on the ultimate curbline location. The standards will be met by developers who undertake new development or major renovation in the study area.

Based on the City's *Urban Street Design Guidelines*, future cross-sections have been determined for streets, as well as the rail frontage, within the study area. Map 5 shows the location for each type. The following street types are recommended for the plan area:

- Avenue: 4-lane divided and 2-lane undivided
- Office/Commercial Street- wide
- Local Residential Street- wide
- Rail Frontage/Multi-Use Trail

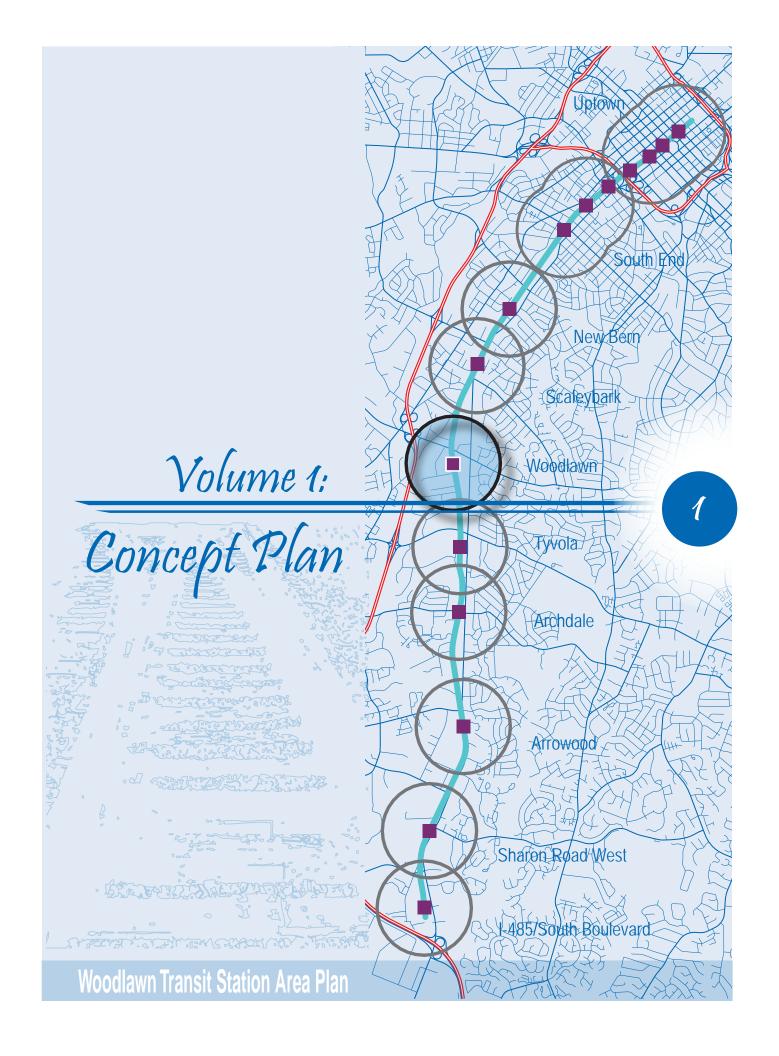
#### Infrastructure and Environment

The core of the study area includes older built-out industrial area as well as some strip commercial. Its infrastructure may require augmentation for more intense new uses. The plan recommendations include:

- Evaluate adequacy of infrastructure.
- Encourage burying of overhead utility lines.
- Encourage small urban open spaces in Transit Station Area.
- Make street trees a feature of all streets, and reduce impervious surfaces.
- Design new buildings to reduce stormwater runoff and improve water quality; protect and enhance watersheds.

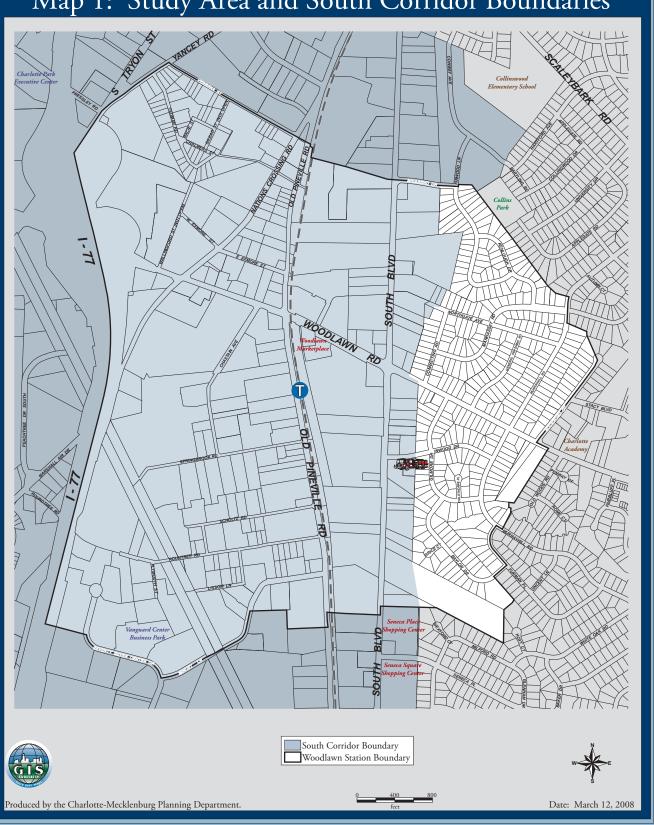
#### Implementation Plan

The Implementation Plan recommends projects to implement the policy recommendations of the Concept Plan. Because the Implementation Plan is not adopted by elected officials, it is a guide, not a commitment. The Implementation Plan recommends a number of sidewalk improvement and street connection projects, as well as corrective rezonings as shown on Map 6.



### Woodlawn Transit Station Area Plan

Map 1: Study Area and South Corridor Boundaries



# Study Area Context

The Woodlawn Transit Station is the tenth station heading south from Center City along the South Corridor Light Rail Transit (LRT) line, also known as the LYNX Blue Line. The Woodlawn Station is located near the middle of the corridor, with the Scaleybark Station to the north and the Tyvola Station to the south.

This document is the third of a series of plans for the station areas extending south from South End. The plan is divided into the Concept Plan, the Implementation Plan, and an Appendix containing a thorough review of existing conditions. The Concept Plan is the only section of the plan adopted by City Council. The Concept Plan:

- Defines the growth and development vision for the area surrounding the Woodlawn LRT station;
- Makes recommendations for land use, transportation, urban design, and other development-related topics;
- Updates the Centers, Corridors and Wedges boundaries for the plan area from those initially outlined in the Transportation Action Plan; and
- Serves as the official streetscape plan for the station area once the Concept Plan is adopted.

#### **Planning Process**

Initial planning for the Woodlawn study area began in conjunction with planning for the South Corridor LRT line. A community planning and urban design consulting firm and an interdepartmental staff team, led by Planning Department staff, held public meetings to gather initial input from area residents and property owners. The staff team and consultants developed plan recommendations based on citizen input, the area context, and guidance from a number of City Council adopted policies.

Prior to adoption of the plan, staff will hold additional public meetings with area residents and property owners to present the plan recommendations and to receive feedback. The next step of the process will be presentation to the Planning Committee of the Charlotte-Mecklenburg Planning Commission who will hear citizen comments and make a recommenda-

tion to the Charlotte City Council. The City Council will also hear citizen comments and make a final decision concerning adoption of the plan.

More detailed information on the background, purpose and process for developing this, and other, station area plans can be found in the companion document, *Introduction to the South Corridor Station Area Plans*.

#### Plan Boundaries

The Woodlawn transit station is located on the South Corridor light rail line on Old Pineville Road, south of Woodlawn Road. Unlike the transit stations to the North, the Woodlawn station has more visibility to Old Pineville Road than to South Boulevard. The Woodlawn Station is classified as a Regional Station based on its location near the regional roadways of Woodlawn Road and I-77. It is designed to serve an area of 5 miles or greater, with the assistance of bus connections and the 382-space park and ride facility located directly across Old Pineville from the station platform.

This plan addresses the properties within approximately ½ mile of the Woodlawn Transit Station. For contextual purposes, the boundaries of the Woodlawn Transit Station Area Plan cover an area larger than the transit station area, defined as the properties recommended for TOD and located within a ¼ to ½ mile walk of the station.

The plan area is bisected by the light rail line. It is bounded on the west by I-77, and also includes major streets such as Woodlawn Road, Old Pineville Road, and South Boulevard. The larger plan area falls primarily within the South Growth Corridor but also includes a portion of a Wedge as defined by the Centers, Corridors and Wedges growth framework. The boundaries are shown on Map 1; they follow existing zoning and block configurations.

The Transit Station Area is the primary focus of this plan. This area will be the most influenced by - and have the ability to influence - the success of the LRT line. The plan also addresses portions of the Collingwood and Madison Park neighborhoods which are to the east of the Woodlawn Transit Station, as well as areas within the South Growth Corridor that extends west to I-77.



The Woodlawn Transit Station Platform.



The Woodlawn station area has a strong existing office market, although at low suburban densities.

#### Opportunities and Constraints

Review of the existing conditions reveals a number of opportunities and constraints to transforming the core of the study area into a transit supportive environment. Success will depend upon effectively dealing with the constraints and capitalizing on opportunities, described below.

For a complete discussion of existing conditions, see the Appendix of this document.

#### Opportunities

- Office Potential: A strong existing office environment exists on Chastain Avenue with the Woodlawn Green Office Park at over 250,000 square feet. There is the potential to add more office development, as a part of transit oriented development, within the station area.
- Housing Diversity: Unlike many other stations, the Woodlawn area has little diversity in its housing stock with only the single family neighborhoods in the eastern portion of the study area. The opportunity exists to maintain the existing stable neighborhoods while increasing the diversity in housing stock by adding some multi-family development at the core of the station area.

- **Stable Residential Neighborhoods:** The Collingwood and Madison Park neighborhoods provide a strong residential element to the station area. Protection of these neighborhoods will be especially important as new higher, intensity development is added to the station area.
- Major Interstate Access: Woodlawn Road offers convenient access to Interstate 77 and I-85 via Billy Graham Parkway. Within this station, there are opportunities for moderate to high intensity development, especially office development, that can be served by both transit and vehicular access.
- Improved Transportation Environment: The Woodlawn Road and South Boulevard intersection improvement/redesign makes the area safer, more attractive, and offers better access for pedestrians, cars, and bikes. As development occurs, additional transportation improvements should include similar facilities to accommodate a variety of users.
- Redevelopment Potential: The Woodlawn station area has a number of factors that make it desirable for redevelopment. These include excellent access to I-77 and a large amount of vacant or underutilized land within the core of the station area.

#### Constraints

- Station Visibility: The Woodlawn Transit Station is located on Old Pineville Road. Consequently, those traveling along the study area's major thoroughfares are less likely to see the station, and its location may be an obstacle to transit oriented development.
- **Ridership Base:** The Woodlawn study area has a relatively small number of residents, and the residential neighborhoods in which they live are more than a ½ mile walk from the station. As a result, most boarding the train at the Woodlawn station will arrive by automobile.
- Assembled Land: Most of the properties close to the Woodlawn station are small sites in individual ownership. This will make transit oriented development more difficult because land assembly will typically be required to create parcels large enough for this type of development. Further from the station, much of the property is in larger parcel ownership.
- Major Industrial Land Use: The vegetable oil refinery creates a barrier for pedestrian access and redevelopment in the southern portion of the station area and could be a disincentive to new residential development.
- Improved Environment: Currently, the core
  of the study area has few trees and minimal
  landscaping. As the study area redevelops,
  there will be significant need to improve the
  quality of the environment by planting additional trees and landscaping.

- Park/Open Space: Currently, there is no existing park or open space in the station area.
- Existing Land Use, Density and Design: The heart of the station area does not currently contain the type of uses, density or site design to support transit. Warehouse and industrial uses do not provide the services or environment desired by transit riders and densities are too low to cultivate a critical mass of people.
- **Street Network:** The Woodlawn plan area currently has a largely disconnected street network that is not consistent with a higher density transit oriented development future.
- East-West Mobility: Woodlawn Road is an important east/west connection through the station area. However, it is the only east/west crossing of the rail line.
- Pedestrian Environment: Many of the streetscapes in the industrial and commercial districts of the study area are uninviting to pedestrians. With intermittent narrow sidewalks, absent planting strips and street trees, multiple curb cuts, and poor lighting, the streets are currently more oriented to vehicular travelers than pedestrians.



Existing retail shopping centers and industrial uses pose challenges in maximizing the potential of the Woodlawn station area.



The Woodlawn Station (at right in photo) is located on Old Pineville Road, south of Woodlawn Road..

#### Vision

The Woodlawn study area will become one of a series of vibrant transit villages along the LYNX Blue Line. Within its boundaries, there will be three discrete areas:

- Transit Station Area: The core of the plan area will transform into a pedestrian-oriented, urban district. The area west of the light rail line will have a strong office orientation while the area to the east will include a mix of moderate to high intensity office, residential, and neighborhood serving retail.
- General Corridor Area: The remainder of the Growth Corridor, located between I-77 and the neighborhoods in the eastern part of the plan area, will include a range of uses appropriate for a Growth Corridor. The existing retail and industrial uses which characterize Woodlawn are expected to remain in the near term, with some redeveloping over time.
- Wedge Neighborhood Area: The residential character of the existing Madison Park and Collingwood neighborhoods will be maintained, and these neighborhoods will remain a vital part of the plan area.

Map 2 illustrates the development concept for the Woodlawn plan area.

The intersection of South Boulevard and Woodlawn Road recently got a streetscape makeover.

#### Goals

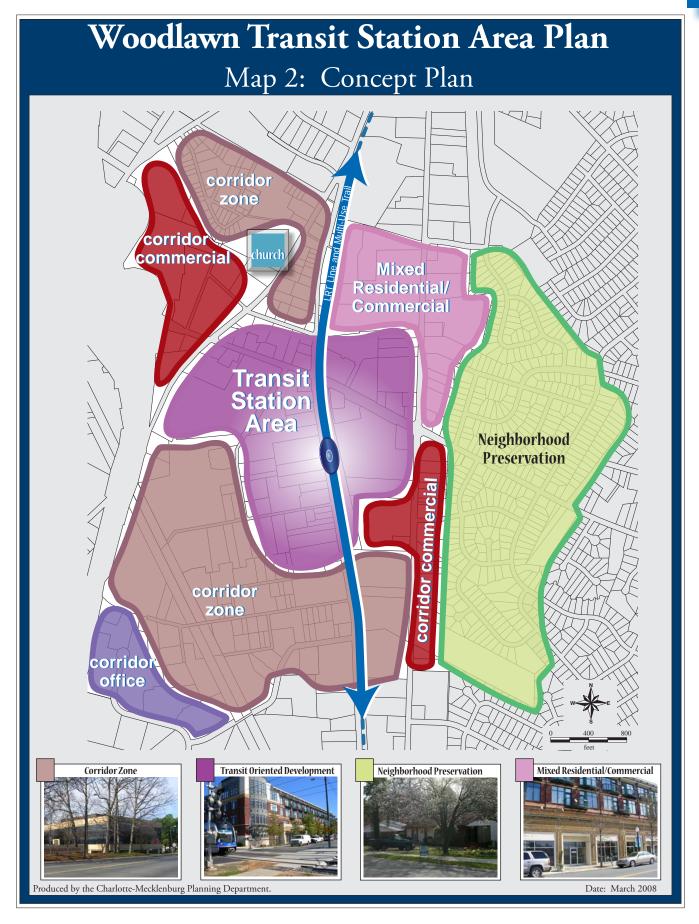
To achieve this vision, the following goals have been identified for the Woodlawn study area. The goals draw on adopted, or in-progress, City policies, many of which were discussed in the *Introduction to the South Corridor Transit Station Area Plans*.

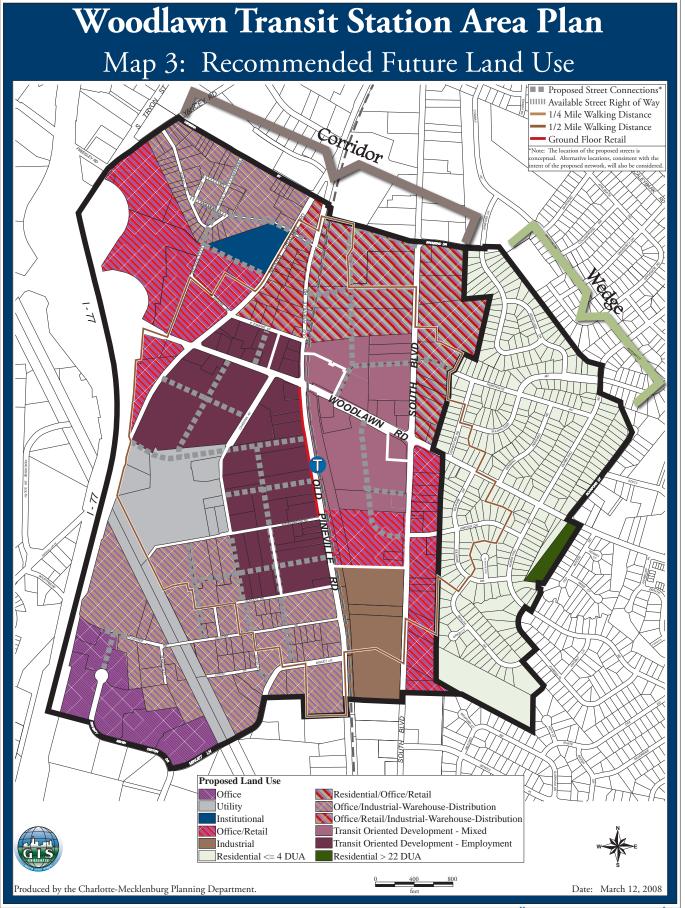
- 1. **Land Use:** Promote moderate to high density uses that are served by the high capacity transportation facilities in the Growth Corridor, while protecting the fabric of residential neighborhoods in the Wedge.
- Community Design: Create a high quality urban environment by enhancing the identity of the station area, creating attractive streetscapes, building on the synergy of recent public infrastructure investments, and respecting the character of the neighborhoods.
- 3. **Transportation:** Improve the area's transportation system by providing new street connections within the Growth Corridor and by improving the pedestrian and bicycle facilities throughout the plan area.
- 4. **Infrastructure/ Public Facilities:** Provide the infrastructure and public facilities needed to support growth in the Corridor.
- 5. **Environment:** Improve the quality of Woodlawn's environment, focusing on enhancing the tree canopy, improving water quality from stormwater run-off, and providing open space for the station area.

The vision and goals serve as the basis for the recommendations in the chapters that follow.



The multi-use trail near New Bern Station will extend into the Woodlawn plan area.





# Land Use and Community Design

This chapter sets forth land use and community design recommendations to achieve the vision and goals for the Woodlawn plan area. An overview of the proposed street network is also included.

This chapter divides the 602-acre area into three distinct districts:

- Transit Station Area, the portion of the South Growth Corridor that surrounds the Woodlawn light rail station;
- General Corridor Area, which includes interchange and general land use areas of the South Growth Corridor; and
- Wedge Neighborhood Area, which is a part of the Wedge area just east of the South Growth Corridor.

The land use recommendations are shown on Map 3. The general location for each recommendation is noted on the map extracts within each section, using the item numbers below. The recommendations also are cross referenced using the item numbers in the Implementation Section of this plan.



Map 3.1: Transit Station Area Recommendations
Woodlawn Transit Station Area Plan

#### **Transit Station Area**

The Transit Station Area is located at the heart of the larger study area. The station area is home to a wide array of industrial, retail and office uses. The following recommendations are designed to allow this lower intensity, suburban area to transform, over time, into a higher-intensity urban district.

#### Land Use and Community Design

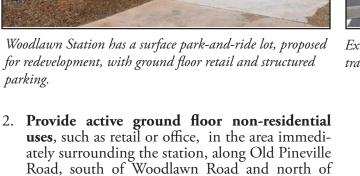
- 1. **Promote transit-supportive land uses** (residential, retail, civic, office) within the Transit Station Area. The area west of the light rail line is recommended for employment based transit oriented development. The development should be primarily office oriented, with limited residential and/or retail. East of the rail line, a greater mixture of transit oriented uses is planned, with residential, office and a limited amount of supporting retail being appropriate.
  - New development within the Transit Station Area should have uses, intensity, site and facade design, and transportation elements that are consistent with the Transit Station Area Principles outlined in the *Introduction to* South Corridor Station Area Plans.
  - Design new development to support pedestrian activity.



Higher density transit supportive development such as this is appropriate in the Transit Station Area.



for redevelopment, with ground floor retail and structured parking.



Springbrook Road. These uses should be designed

- to support both the transit users and surrounding residents and employees. Design of these ground floor uses should include clear glass windows and doors as well as entrances that front on and connect to the sidewalk system. Encourage redevelopment of the CATS Park-
- and-Ride facility to integrate a mixture of transit-supportive land uses (residential, retail, civic, office). Development should include ground floor retail that wraps a parking facility to create an active streetscape while providing complimentary land uses in the transit station area.
- Create urban plazas or parks near the transit **station**. An open space should be incorporated into redevelopment of the park and ride facility. Additionally, open space should be included in redevelopment of the Woodlawn Marketplace site at South Boulevard and Woodlawn Road.

#### Supporting Street Network

5. **Provide new street connections** needed to create typical block lengths of 400 feet desired or 600 feet maximum, as shown on Maps 3 and 4. These connections are the highest priority for the plan area. Specifically, construct the following streets:



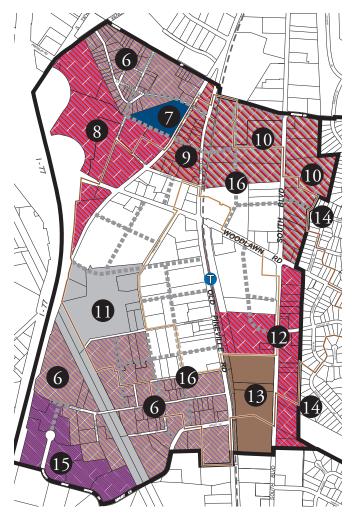
Existing development just east of the Woodlawn station is traditional suburban retail.

- Conversion of Sterling Drive to a public street;
- A new "L" street from South Boulevard at Inwood Drive to Woodlawn Road;
- A new east-west street from South Boulevard to the new "L" street, with a pedestrian connection to the Woodlawn Transit Station;
- A new east-west street from the southern terminus of Nations Crossing Road to Old Pineville Road;
- Extension of Chastain Avenue from Springbrook Road to Rountree Road;
- A new east-west street following parallel property lines roughly 500 feet north of Springbrook Road from Old Pineville Road at the transit station to Chastain Avenue;
- A new east-west street following parallel property lines roughly 500 feet south of Springbrook Road from Old Pineville Road to future Chastain Avenue extension; and
- A new north-south street following property lines roughly 600 feet west of Old Pineville Road from Minuet Lane to the future eastwest street linking Old Pineville Road with the southern terminus of Nations Crossing Road.

It should be noted that this map provides a representation of the desired street network and may require adjustments to address site conditions. An alternate but comparable network, consistent with the intent of providing connectivity, will also be considered.

#### General Corridor Area

With the exception of the Transit Station Area, the portion of the study area between I-77 and the neighborhoods east of South Boulevard is classified as a General Corridor Area. It has interstate access from Woodlawn Road and includes a range of commercial and industrial uses designed to take advantage of its interstate access. These include restaurants, hotels, an array of commercial/retail development in the Woodlawn Marketplace, and a major industrial use, the C&T Refinery.



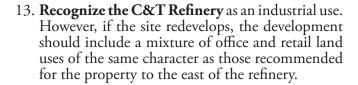
Map 3.2: General Corridor Areas Recommendations Woodlawn Transit Station Area Plan

#### Land Use and Community Design

- 6. Maintain locations for low to moderate intensity office and industrial/warehouse distribution uses. The properties just south of Verbena Street and west of Nations Crossing Road currently have a mixture of office and light industrial uses. The area west of Old Pineville Road and south of the Duke Energy facility has a similar mix of uses. The plan supports maintaining a mixture of office and industrial/warehouse uses at low densities, typically 0.25 floor area ratio (FAR) or less.
- 7. **Maintain the Woodlawn Baptist Church** as an institutional/civic use within the study area.
- 8. For the area around the I-77 and Woodlawn Road interchange, maintain low to moderate intensity retail and office uses.
- Accommodate a mixture of low intensity industrial, office and retail uses in the area north of
  Exmore Street between Nations Crossing Road
  and Old Pineville Road.
- 10. Allow a mixture of residential, office and retail land uses along South Boulevard between the more intense TOD developments surrounding the Scaleybark and Woodlawn transit stations. This area is envisioned to accommodate a mixture of pedestrian-oriented uses, similar to transit oriented development, but at a lesser intensity. Development may be single use or include a mixture of uses. New development plans also should be consistent with the appropriate design guidelines in the General Development Policies. Building heights should not exceed four (4) stories or 40' in height in this area.
- 11. Recognize the existing Duke Energy facility as a utility use.
- 12. Provide an opportunity for a mixture of retail and office land uses for the properties to the east and to the north of the C&T refinery. This area is envisioned to accommodate a mixture of pedestrian-oriented uses, similar to transit oriented development, but at a lesser intensity. Development may be single use or include a mixture of uses. New development plans also should be consistent with the appropriate design guidelines in the *General Development Policies*. Building heights should not exceed four (4) stories or 40' in height in this area.



The C&T Refinery is an active industrial facility in close proximity to Woodlawn Station.



- 14. Ensure that development adjacent to the Madison Park and Collingwood neighborhoods provides a good transition from the low scale neighborhoods to the taller buildings at the core of the station area.
- 15. Maintain the existing office uses in the Vanguard Center Office Park which is a predominantly low intensity office development oriented toward Tyvola Road.

#### Supporting Street Network

- 16. **Provide new street connections** needed to create typical block lengths of 600 feet desired, or 650 feet maximum, as shown on Maps 3 and 4. Specifically, construct the following streets:
  - A realigned and improved Chalmers Street from Old Pineville Road to Yeoman Road;
  - An opened and improved Wallingford Street from West Exmore Street to Chalmers Street;
  - An opened and improved Gilead Street from Chalmers Street to Verbana Street;
  - A new east-west street along parallel property lines roughly 700 feet north of Exmore Street from future opened Wallingford Street to South Boulevard via a converted at-grade LYNX crossing off Old Pineville Road;



Vanguard Center office park is at the edge of the station area, accessible from I-77, generally from Tyvola Road.

- A new north-south street along a parallel property line roughly 500 feet west of Old Pineville Road from East Exmore Street to Woodlawn Road;
- An extension of Briarbend Lane from South Boulevard to Sterling Drive;
- An extension of Northgate Avenue to South Boulevard;
- An extension of Chastain Avenue, from Springbrook Road to Lissom Lane;
- A new north-south street running parallel to and roughly 600 feet east of Chastain Avenue:
- A new north-south street running parallel to and roughly 600 feet west of the future extension of Chastain Avenue from Springbrook Road to Rountree Road;
- A new connection between Lissom Lane and Minuet Lane; and
- The extensions of both Seventy Seven Center Drive and Rountree Road to a shared "T" intersection.

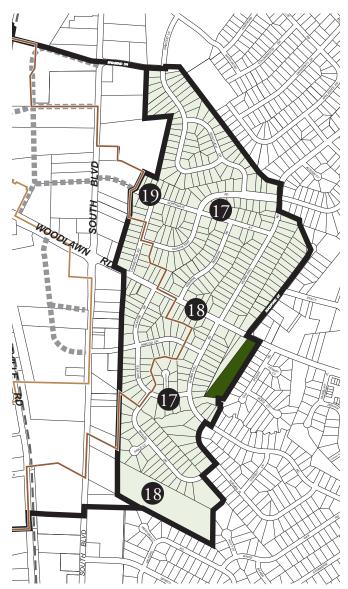
It should be noted that this map provides a representation of the desired street network and may require adjustments to address site conditions. An alternate but comparable network, consistent with the intent of providing connectivity, will also be considered.

### Wedge Neighborhood Area

The Madison Park and Collingwood neighborhoods are located in a Wedge, on the east side of the Transit Station Area and include primarily single family housing. The following recommendations are designed to protect the low density residential character of the neighborhood, while allowing for redevelopment in selected locations along Woodlawn Road.

#### Land Use and Community Design

17. Maintain the single family portion of the Collingwood and Madison Park neighborhoods at a density up to 4 dua, consistent with existing land use and zoning.



Map 3.3: Neighborhood Area Recommendations

Woodlawn Transit Station Area Plan

18. Recognize the opportunity for redevelopment of the single family parcels fronting Woodlawn Road to residential up to 8 dua. This recommendation is intended to provide land use guidance should the area redevelop in a similar pattern to residential properties east of the study area approaching Park Road. New development should incorporate multiple parcels. Development should be oriented to the public street with parking to the side or the rear of buildings. A townhome style of development is recommended with residential units having individual entrances. Heights should be limited to two stories to maintain compatibility with the single family homes in the neighborhood.

One parcel on the east side South Boulevard, at the south end of the study area, is zoned and used for business purposes, but extends deep into the neighborhood. This property is not proposed for corrective rezoning at present. However, when redeveloped, the segment that extends into the neighborhood is proposed for residential use at a density of 8 dua, designed to maintain compatibility with the adjoining neighborhood.

#### Supporting Street Network

19. Maintain the existing street network for the Madison Park and Collingwood neighborhoods and enhance the network by extending Northgate Avenue to South Boulevard in conjunction with redevelopment along South Boulevard, as shown on Maps 3 and 4. It should be noted that this map provides a representation of the desired street network and may require adjustments to address site conditions. An alternative but comparable network consistent with the intent of providing connectivity will also be considered.



The single family neighborhoods in the study area should be preserved.

## Transportation and Streetscape

Transforming the existing streets into an attractive and functional multi-modal street network is critical to the success of the plan area, especially the area around the LRT station where transit-oriented development is planned. Providing a well-connected street network is important throughout the study area to facilitate mobility choices and minimize congestion.

In conjunction with the establishment of the LRT line, the City made a number of improvements to the Woodlawn street network through the South Corridor Infrastructure Program (SCIP). This chapter recommends additional transportation improvements for the plan area for new streets, street cross-sections and streetscape elements.

### Transportation/Street Design Recommendations

This section outlines transportation recommendations addressing both proposed new streets and enhancements to existing streets to make them more pedestrian and bicycle friendly. These include both City sponsored capital improvements, as well as improvements that will be required in conjunction with new development and redevelopment.

The general locations of the recommendations are noted on Map 4. The recommendations also are cross referenced using the item numbers in the Implementation section of this plan.

#### Street Network

- 20. Provide new street connections in the Transit Station Area, as discussed in item 5 in the Land Use Section. Street connections in the Transit Station Area are the highest priority for this Plan, as these are needed to support high density development and to provide additional travel routes.
- 21. Provide new street connections in the General Corridor Area, as discussed in item 16, to support additional density development and provide new travel routes.

- 22. Realign and improve streets in the area northwest of Woodlawn Road and Nations Crossing Road in the General Corridor Area. This area has a mix of winding, narrow and unopened streets. This plan recommends connecting Wallingford and Gilead Streets, closing Macie Street and part of Yeoman Road, realigning Yeoman Road with Chalmers Street and extending Chalmers Street to Old Pineville Road.
- 23. Maintain the existing street network for the Madison Park and Collingswood neighborhoods and enhance the network by extending Northgate to South Boulevard in conjunction with redevelopment along South Boulevard.

#### Sidewalks

- 24. Eliminate gaps in the sidewalk system within the Transit Station Area. While sidewalk improvements have been made through the City sponsored South Corridor Infrastructure Program (SCIP), many sidewalk gaps remain in the Transit Station Area. To handle the level of pedestrian activity anticipated in the station area, gaps in the sidewalk system, particularly those along Chastain Avenue, Springbrook Road, and Nations Crossing Road should be eliminated as new development occurs. New sidewalks and planting strips should be built to the specifications of the streetscape cross-sections on the following pages.
- 25. Eliminate gaps in the sidewalk system leading from the residential areas to the Transit Station. The existing residential areas of Collingwood and Madison Park neighborhoods to the east of the Woodlawn Transit Station Area provide a base of potential transit riders. Gaps in the sidewalk system which leads to the transit station, as well as the commercial area along South Boulevard, should be eliminated to promote pedestrian travel. Specific sidewalk projects include Northgate Avenue and Murrayhill Road. The boundaries are shown on Map 4.



The pedestrian system along South Boulevard typically lacks a planting strip, and the sidewalk width is inadequate.

- 26. Widen sidewalk system along thoroughfares. Currently, Woodlawn's major thoroughfares have sidewalks on both sides of the streets. However, many of these sidewalks are only 5 feet wide, which is not consistent with the recommended width found in the Streetscape Standards on subsequent pages. Additionally, planting strips which separate pedestrians from vehicular traffic are often lacking. This plan recommends widening the sidewalks and adding planting strips along Old Pineville Road, Woodlawn Road, and South Boulevard within the study area boundaries, in conjunction with new development.
- 27. Improve the sidewalk network in the General Corridor Area. As the streetscape cross-sections recommend, new development and redevelopment should install sidewalks on all streets. All new streets will include new sidewalks.

#### Pedestrian Crossings

28. Enhance pedestrian and bicycle crossings on major thoroughfares. Woodlawn's major thoroughfares are difficult for pedestrians and bicyclists to cross due to factors such as traffic volume, traffic speed, width of lanes, frequent turning movements, and distance between signalized cross walks. While SCIP resulted in the signature enhanced intersection of Woodlawn Road and South Boulevard, other intersections of these two major thoroughfares still have room for improvement. This plan recommends adding enhanced crossings, as shown on Map 4. In the station area, these include:



Recent streetscape improvements have been made in portions of the study area.

- Woodlawn Road at Nations Crossing Road;
- South Boulevard at Inwood Drive; and
- South Boulevard at Briarbend Lane.

Enhanced crossings may include a combination of vehicle traffic signals, pedestrian countdown signals, painted or textured cross walks, ADA curb ramps, and pedestrian refuge islands in the median.

29. Consider a pedestrian crossing of the LRT line at the station if the spur line serving the C&T refinery is eliminated. If a pedestrian crossing is not feasible when the Woodlawn Marketplace site is redeveloped, install a pedestrian pathway parallel to the tracks, consistent with the multi-use trail shown in the streetscape standards section.

#### Bicycle Accommodations

- 30. Extend designated bicycle lanes on Woodlawn Road. To tie into recently added bicycle lanes provided by SCIP (shown on Map 4), bicycle lanes are recommended along the entire length of Woodlawn Road, including their extension west of Old Pineville Road.
- 31. Site new development to allow future addition of bicycle lanes on South Boulevard. This plan recommends the long-term installation of bicycle lanes in the station area along South Boulevard as shown on Map 4.



Many streets in the Station Area are lacking in basic streetscape amenities, such as sidewalks.



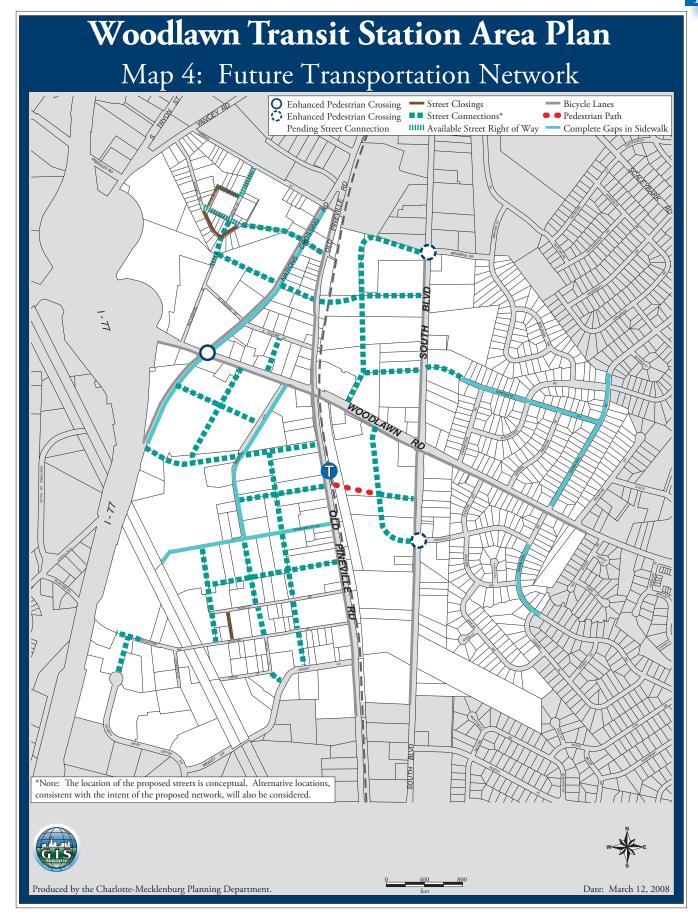
Woodlawn Road, approaching the light rail overpass, has no planting strip, narrow sidewalk, and parking lots along the street frontage.

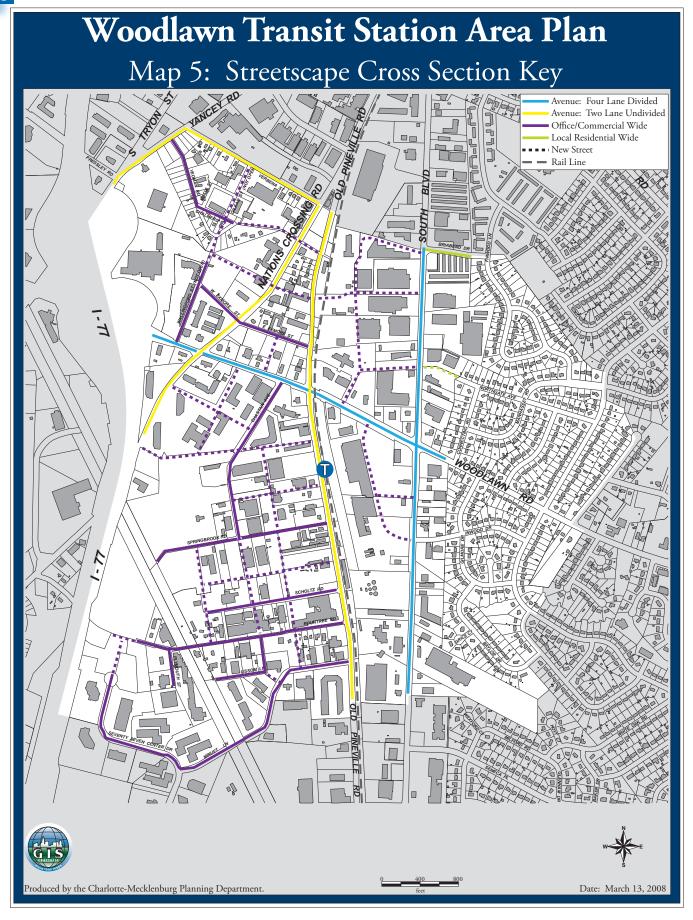
#### Improved LYNX Crossings

32. Consider replacement of current private driveway crossing with new street connection. Currently, a private driveway along Old Pineville Road crosses the LYNX tracks north of Woodlawn Road. This plan recommends reutilizing this existing at-grade crossing for a connecting public street, if and when the area redevelops. Combined with the existing grade-separated LYNX crossing of Woodlawn Road, the traveling public will have more route choices between Old Pineville Road and South Boulevard. Potential rail crossings should be thoroughly studied to assess the impact on the LRT line, the transportation system, and the area's economic development potential.

#### Street Lighting

33. Install pedestrian scale lighting in key locations. Typical streetlights illuminate the roadway, but do not provide significant lighting for the pedestrian area of a street. Pedestrian scale lighting is shorter in height than streetlights and focuses on lighting sidewalk areas. It should be installed in the public right-of-way, with special attention to streets between Chastain Avenue and South Boulevard.





#### Streetscape Standards

Streets are more than just pathways to and through a place. Streets are one of the most highly visible types of urban places. As the entrance and exit to a community, streets have the ability to set the tone for the surrounding environment.

The streetscape cross-sections on the following pages are essential to "setting the tone" for the type of setting desired in the plan area. The cross sections have been developed in accordance with the *Urban Street Design Guidelines* (USDG), adopted by City Council in October 2007. The cross-sections set forth:

- Building setback requirements,
- Streetscape, sidewalk, and street tree requirements, and
- Future character of the streets regarding the number of lanes, bicycle, pedestrian and transit accommodations and provisions for on-street parking.

When this plan is approved, the streetscape standards specified herein will become the official "Streetscape Plan" for the study area, as referred to in the zoning standards for a number of the City's urban zoning districts. As such, all new development on sites zoned TOD, TS, PED, UMUD, MUDD, NS, UR, or other urban zoning districts that may be established must be designed in accordance with these standards. The specifications in the cross-sections are based on typical conditions and may vary based upon further study and in unique circumstances.

Note that these cross-sections are not plans for immediate road improvements, but many are recommended long-term changes. Improvements such as on-street parking, streetscape enhancements, and sidewalk installation typically will be implemented through private redevelopment, although the City may fund minor improvements. New streets also typically will be implemented through private development, while major improvements to existing streets generally will be constructed by the City.

#### **Street Cross-Sections**

Based on the City's *Urban Street Design Guidelines*, the future cross-sections have been determined for streets, as well as the rail frontage, within the Woodlawn study area, with the exception of the single family neighborhood areas, where little change to existing streets is expected. The following street types are recommended for the plan area:

- Avenue Four-Lane Divided
- **Avenue -** Two-Lane Undivided
- Office/Commercial Street Wide
- Local Residential Street Wide

Map 5 shows the desired location for each of these street types. Consult this map to identify the recommendation for a specific street, then refer to the matching cross-section on the following pages. Streets within neighborhood areas slated for preservation are intended for preservation as well, so new cross sections for these areas are not provided.

#### Avenue - Four-Lane Divided

**Description**: The Avenue is the most common (non-local) street type in Charlotte, providing access from neighborhoods to commercial areas, between areas of the city, and, in some cases, through neighborhoods. It is designed to provide a balance of service for all modes of transportation, including accessibility for transit, pedestrians, and bicyclists in addition to carrying significant automobile traffic.

A short segment of Woodlawn Road, from Nations Crossing Road to I-77, technically qualifies as a Boulevard. Boulevards are intended to move large numbers of vehicles from one part of the city to another. Thus, the modal priority shifts toward motor vehicles, while still accommodating pedestrians and cyclists as safely and comfortably as possible. For simplicity in reading and interpreting this plan, this segment is included in this cross section. Note that the plan calls for additional widening for turn lanes as required by CDOT standards at major intersections.

**Land Use**: The land use will vary; within the plan area the desired uses will be typically medium to high density mixed use and retail/office use.

(Avenue - Four-Lane Divided, continued)

**Situation**: The major thoroughfares in the study area are classified as Avenues. The four lane divided type is recommended for South Boulevard and Woodlawn Road. The proposed cross-section will allow these streets to continue to perform an important mobility function for motorists, as well as to support safe and comfortable pedestrian and bicycle travel.

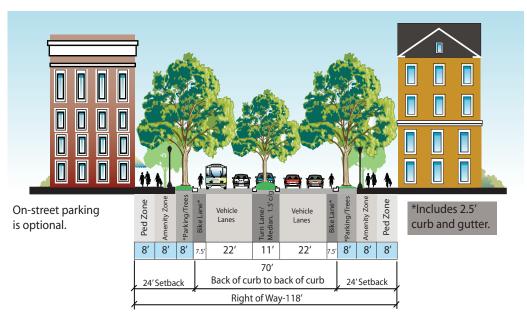
**Existing Condition**: These streets typically have two lanes in each direction; some parts are widened for left turn lanes near intersections. Right of way is typically 60 feet, although it varies.

**Proposed Curb to Curb**: Recommended width is 70 feet from back of curb to back of curb; right of way is 118 feet.

- Two travel lanes and bike lane in each direction.
- Continuous center lane for left turns and pedestrian refuge; to include mid-block landscaped pedestrian refuge islands in some locations.
- Additional widening for turn lanes may be required in some circumstances, such as the Woodlawn/I-77 intersection, in accordance with CDOT standards.

**Behind the Curb**: Minimum building setback is 24 feet from back of (unrecessed) recommended curb. Tree planting is required with spacing, irrigation, subdrainage, and adequate soil space for roots per the Charlotte Tree Ordinance.

- Planting strip or recessed on-street parallel parking serve as buffer from traffic to pedestrians on sidewalk. Planting strip with trees is the standard expectation, with recessed on-street parking available as an option per zoning and CDOT standards, and with intermittent planter islands to break up parking into bays no more than 100 feet in length. South Boulevard south of Woodlawn, and Woodlawn Road west of South, are designated as state highways, and current state regulations do not permit on-street parking. If circumstances change in the future such that on-street parking would be allowable, the on-street parking option would be available there.
- Amenity zone provides supplemental tree planting location. Trees in the amenity zone should be planted in curbed planters. The amenity zone also provides additional paved area for street furniture, paved access to onstreet parking, and merchandising purposes.
- Ped zone is the usual location for the clear sidewalk. Where there is no on-street parking and planting strips are in place, the clear sidewalk can be pushed into the amenity zone location and the ped zone can be used for landscaping, sidewalk dining, or paved merchandising purposes. Encroachments into the ped zone for features such as steps and open porches are allowed in accordance with the zoning ordinance, but encroachments at grade may not reduce the clear sidewalk to less than 8 feet.



#### Avenue - Two Lane Undivided

**Description**: The Avenue is the most common (non-local) street providing access from neighborhoods to commercial areas, between areas of the city, and, in some cases, through neighborhoods. It is designed to provide a balance of service for all modes of transportation, including accessibility for transit, pedestrians, and bicyclists in addition to carrying significant automobile traffic.

Land Use: The land use will vary; within the plan area the desired uses will include medium to high density mixed use and residential; and some office, industrial, warehouse, and distribution uses.

**Situation**: This Avenue cross section is narrower than the four-lane divided version used on other streets in the study area. It is recommended for Yancey Road, Old Pineville Road, and Nations Crossing Road. The proposed cross-section will allow this street type to continue to perform an important mobility function for motorists, as well as to support safe and comfortable pedestrian and bicycle travel.

**Existing Condition**: This street has two lanes in each direction, without turn lanes or landscaped median. Right of way is generally about 60 feet, but varying more and less.

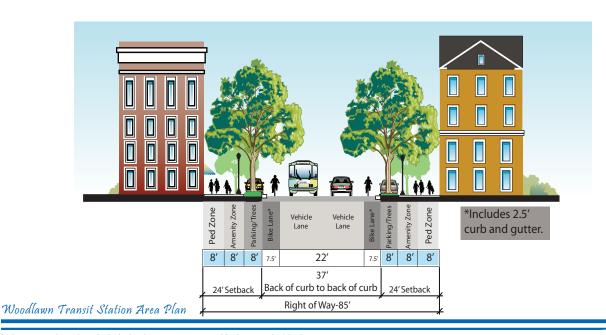
**Proposed Curb to Curb**: Recommended width is 37 feet from back of curb to back of curb; right of way is 85 feet.

One travel lane and bike lane in each direction.

 Widening for left turn lanes may be required in some circumstances in accordance with CDOT standards.

**Proposed Behind the Curb**: Minimum building setback is 24 feet from back of (unrecessed) recommended curb. Tree planting is required with spacing, irrigation, subdrainage, and adequate soil space for roots per the Charlotte Tree Ordinance.

- Planting strip or recessed on-street parallel parking serve as buffer from traffic to pedestrians on sidewalk. The recessed parking is required in all locations feasible under CDOT standards, with intermittent planter islands to break up parking into bays no more than 100 feet in length. Planting strip with trees is required in all other situations.
- Amenity zone provides supplemental tree planting location. Trees in the amenity zone should be planted in curbed planters. The amenity zone also provides additional paved area for street furniture, paved access to onstreet parking, and merchandising purposes.
- Ped Zone is the usual location for the clear sidewalk. Where there is no on-street parking and planting strips are in place, the clear sidewalk can be pushed into the amenity zone location, and the ped zone can be used for landscaping, sidewalk dining, or paved merchandising purposes. Encroachments into the ped zone for features such as steps and open porches are allowed in accordance with the zoning ordinance, but encroachments at grade may not reduce the clear sidewalk to less than 8 feet.



#### Office / Commercial Street - Wide

**Description**: Local streets provide access to residential, industrial, commercial, or mixed-use development. The majority of Charlotte's streets are classified as local streets and are typically built through the land development process.

Land Use: In the study area, the land use along these streets is typically office, warehouse/industrial, and retail development with an auto orientation. It may include medium density mixed use development.

**Situation**: The office/commercial streets are recommended in the portion of the Ttansit Station and General Corridor Areas that is intended primarily for non-residential uses. Office/commercial streets are appropriate because they provide basic pedestrian amenities while allowing for reasonable vehicular access and speeds.

**Existing Condition**: These streets have one lane in each direction; some have on-street parking. Right of way is typically 50 feet.

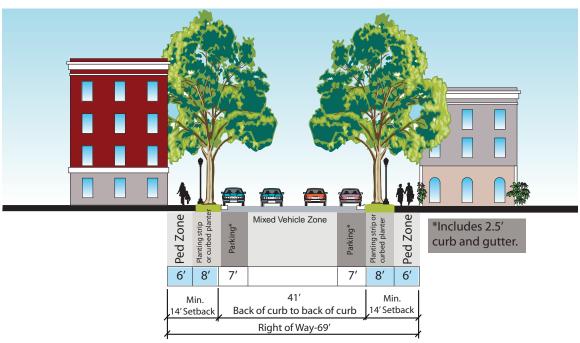
**Proposed Curb to Curb**: Recommended width is 41 feet from back of curb to back of curb; right of way is 69 feet.

One travel lane in each direction shared with bicyclists.

- On-street parking on both sides. Curb extensions may be used to narrow street width at intersections and other locations where onstreet parking is not appropriate.
- Widening for left turn lanes onto South Tryon Street may be required in accordance with CDOT standards.

**Proposed Behind the Curb**: Minimum building setback is 14 feet from back of (recessed) recommended curb, or 21 feet from back of any extended curb. Tree planting is required with spacing, irrigation, subdrainage, and adequate soil space for roots per the Charlotte Tree Ordinance.

- Planting strip provides buffer from traffic to pedestrians on the sidewalk, and a landscaping opportunity. In locations with retail frontage or other high density applications, tree planting in curbed planters, with paved amenity zone for street furniture, paved access to onstreet parking, and merchandising purposes should be substituted for the planting strip.
- Ped Zone is the usual location for the clear sidewalk. Encroachments into the ped zone for features such as steps and open porches are allowed in accordance with the zoning ordinance, but encroachments at grade may not reduce the clear sidewalk to less than 6 feet.



#### Local Residential Street - Wide

**Description**: Local streets provide access to residential, industrial, commercial or mixed-use development. The majority of Charlotte's streets are classified as local streets and are typically built through the land development process.

**Land Use:** The land use is typically medium to high density residential, with some mixed use development.

**Situation**: Local residential streets are recommended in portions of the study area where residential uses higher in density than single-family are in place or expected. They also are recommended in portions of the transit station area off of the main thoroughfares where a predominance of residential development is expected. Redevelopment is anticipated, and with that high-quality neighborhood street design is desired. The local residential street cross-section is designed for low traffic speeds and a comfortable walking, cycling and living environment.

**Existing Condition**: These streets have one lane in each direction. Some have on-street parking. Right of way varies widely, but is typically 50 feet.

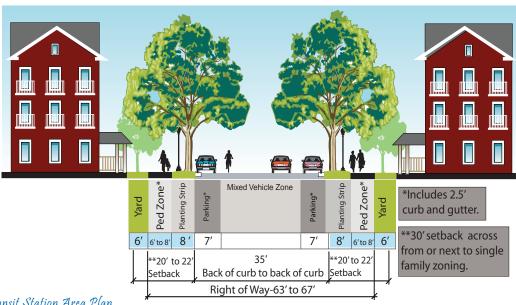
**Proposed Curb to Curb**: Recommended width is 35 feet from back of curb to back of curb; right of way is 63 to 67 feet, depending on the sidewalk require-

- One travel lane in each direction shared with bicyclists.
- On-street parking on both sides. Curb extensions may be used to narrow street width at intersections and other locations where onstreet parking is not appropriate.

Widening for left turn lanes onto South Tryon 23 Street or South Boulevard may be required in accordance with CDOT standards.

Proposed Behind the Curb: Minimum building setback is 20 to 22 feet from back of (recessed) recommended curb, or 27 to 29 feet from back of any extended curb, depending on the sidewalk width requirement. Tree planting is required with spacing, irrigation, subdrainage, and adequate soil space for roots per the Charlotte Tree Ordinance.

- Planting strip provides buffer from traffic to pedestrians on the sidewalk, and a landscaping opportunity. In locations with retail frontage or other high density applications, tree planting in curbed planters, with paved amenity zone for street furniture, paved access to onstreet parking, and merchandising purposes should be substituted for the planting strip.
- Ped zone is the usual location for the clear sidewalk. For streets located within 1/4 mile of the transit station, the minimum sidewalk width is 8 feet. Elsewhere in the plan area the minimum width is 6 feet.
- The Yard area is intended to provide additional landscaping, and a buffer between sidewalk and residential uses. Encroachments for features such as steps and open porches are allowed in accordance with the zoning ordinance, but encroachments at grade may not reduce the clear sidewalk to less than the required width.
- Parcels located on streets that have existing single-family zoning designations (R-3, R-4, R-5, R-6, and R-8) either across the street, or abutting on the same side of the street, shall have a minimum setback of 30 feet.



#### Rail Frontage / Multi-Use Trail

**Description**: The rail line is the centerpiece of the station area. The City has constructed a multi-use path in some areas running parallel to the rail line, typically on the west side. To spark activity along this pathway, adjacent development is required to front it. New development is required to enhance the path where it exists adjacent to the development site. Where the trail does not exist or is across the tracks, new development will be required to construct the trail.

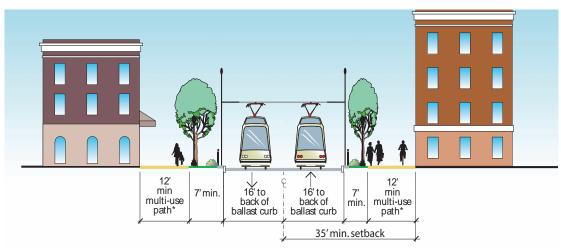
**Land Use**: In the study area, the land use along these streets is typically office and retail development with an auto orientation. It may include medium density mixed use development.

**Existing Condition**: An asphalt multi-use path has been constructed along the right-of-way in stations to the north. Right of way varies, but is typically 130 feet wide. Rail corridor frontage circumstances vary widely, and generally reflect the warehouse/industrial uses presently and formerly occupying the adjoining property.

**Proposed Cross-Section**: The innermost portion of the right of way is reserved for light rail tracks. A land-scaped buffer and multi-use trail are planned beyond the tracks on both east and west sides. The multi-use trail is to run from the north boundary of the station area to Woodlawn Road. The trail is for use by pedestrians and bicyclists.

- The ballast curb for the light-rail line typically extends 16 feet from the center line in each direction. A decorative fence should be located adjacent to the ballast curb/trackway.
- A minimum of 7 feet outward from the ballast curb is reserved for a landscaped buffer to the

- track. Tree planting is required with spacing, irrigation, subdrainage, and adequate soil space for roots. Trees must be a columnar form, planted a minimum of 5 feet out from the ballast curb, and approved by CATS. Tree spacing should be consistent with spacing for street trees, as required by the Charlotte Tree Ordinance. Decorative pedestrian scale lighting also should be provided.
- The multi-use trail is required from the north boundary of the station area to Woodlawn Road. Where the rail line abuts Old Pineville Road, the sidewalk and bike lane requirements for the street will replace the need for the multi-use trail on that side of the rail line. The trail is to be a minimum of 12 feet wide, and should be constructed beyond the landscaped buffer. The trail location may be required to be more than 7 feet from the back of the ballast curb due to site features such as topography, drainage, and CATS equipment. The location of this trail must be approved by CATS. The trail material must be approved by Planning and CDOT. The trail can be widened to allow emergency fire access, but should not be used as a driveway for adjacent development.
- The minimum setback from the centerline of the tracks is 35 feet or the location of the right of way line, whichever is greater. However, where the right of way line extends beyond the minimum setback required, development may be allowed to encroach into the right of way as a method of encouraging development which is consistent with the City's land use vision and if the required written agreements with CATS are completed to occupy portions of the right-of-way.



\*Material of multi-use trail to be approved by Planning CDOT

\*Location of multi-use trail to be approved by CATS

### Infrastructure and Public Facilities

The core of the Woodlawn study area includes an older built-out industrial area, as well as auto-oriented commercial, that are recommended for higher density redevelopment. Its infrastructure, while sufficient and appropriate for its former uses, may require capacity increases for more intense new uses. The following recommendations are intended to address needs for additional or expanded infrastructure and public facilities.

### Public Facility/Infrastructure Recommendations

- 34. Conduct an infrastructure study to evaluate the adequacy of infrastructure (water, sewer, storm drainage) in the station area. The ability of the station area's infrastructure to support high density redevelopment and capacity of the other utility systems is not known. To ensure that the station area will be able to support the new, higher-density development recommended by this plan, a detailed infrastructure analysis is recommended.
- 35. Encourage the burying of utilities. Overhead utility lines detract from the appearance of the station area, which in turn may impact the economic competitiveness of a project. Overhead lines also may impact development density due to required clearances from the lines. As redevelopment occurs, opportunities to relocate or bury utility lines should be pursued.

A major electric utility facility is located within the general corridor area.

# Park and Greenway Recommendations

36. Encourage urban open spaces in the Transit Station Area. New developments in the area are encouraged to provide usable urban open spaces, either on-site or off-site within the station area. Desirable types of urban open spaces include pocket parks, plazas, and community gardens.



New urban open space amenities in the vicinity of the station are needed.

### Environment

The Woodlawn study area includes a substantial area of present and former industrial development, much of which is expected to be redeveloped in the coming years. The environmental recommendations focus on means to improve air, water and land quality through the redevelopment process.

It should be noted that the establishment of dense transit oriented development within station areas is intended to improve the environment of the region by concentrating growth where it can be supported by transit and other infrastructure, by relieving the pressure for growth on outlying greenfield locations, and by reducing vehicular trips and trip lengths that otherwise would extend to the outer edge of the metropolitan area.

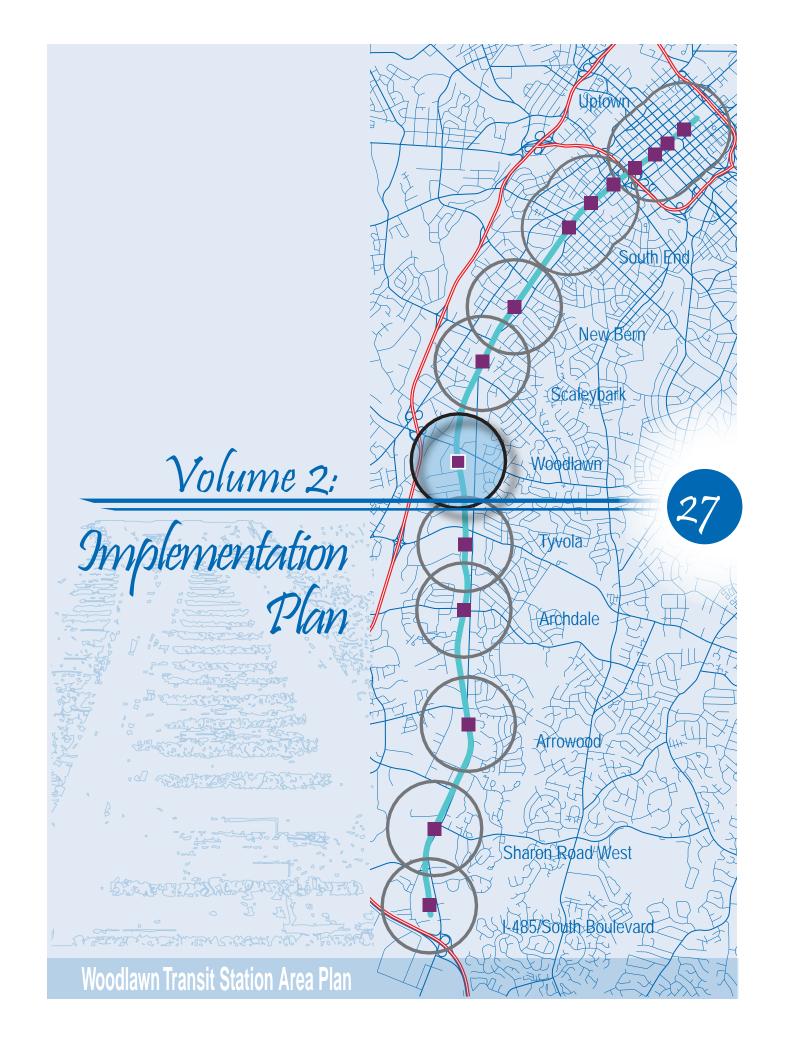
#### **Environmental Recommendations**

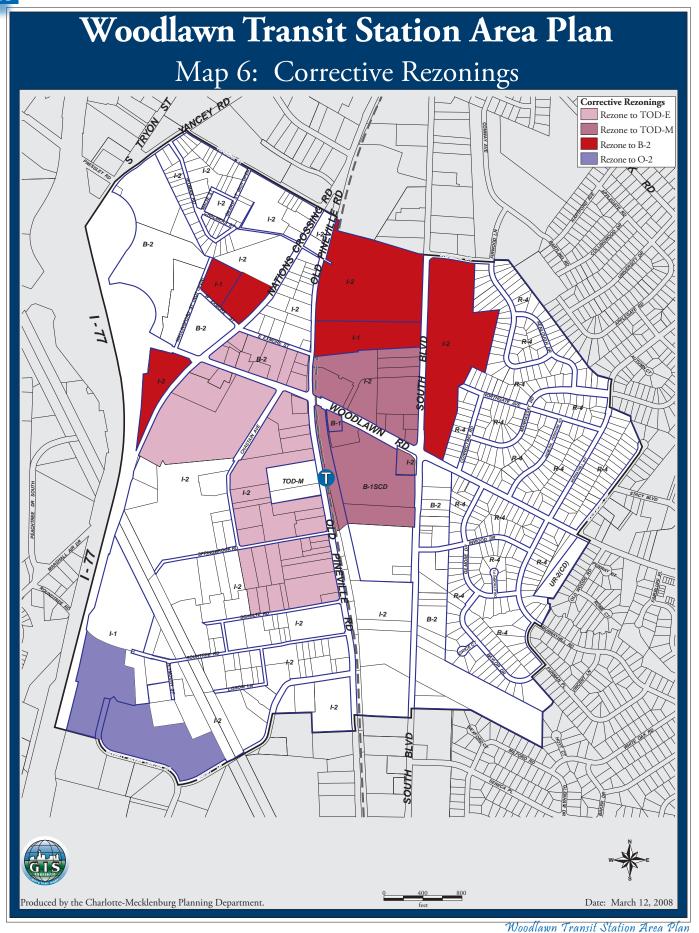
- 37. Make trees a key feature of all of the plan area. Woodlawn's residential neighborhoods are made distinctive by their mature tree canopy. A large portion of the residential areas contained within the study area has a significant tree canopy. Trees could become an identifying feature for the entire study area if they are added to streets in the Transit Station and Corridor Areas. In addition to their aesthetic value, trees help to reduce stormwater run-off, slow soil erosion, absorb air pollutants and provide shade. Where street trees currently exist in the station area, they should be maintained and replaced as necessary. In parts of the station area where street trees do not currently exist, they should be planted as part of any new development or redevelopment in accordance with the streetscape cross-sections.
- 38. Design site plans for new buildings and renovations in the station area to improve water quality for stormwater run-off. Over the last decade, innovative design solutions have been developed to address the water quality of stormwater runoff. These best practices in on-site stormwater management include the use of bioswales or rain gardens, rooftop rain capture, and pervious parking areas. Because of the large amount of impervious surface area and the proximity of nearby creeks, new developments and redevelopments in the station area are encouraged to incorporate design features that improve the quality of stormwater leaving their site, consistent with the Council adopted Post Construction Controls Ordinance.

- 39. Protect or enhance the watersheds when possible. The Woodlawn station area sits on a ridgeline that divides the Upper Little Sugar Creek watershed to the east and the Irwin Creek watershed to the west. Both the Upper Little Sugar Creek and Irwin Creek basins are listed as "Impaired" by regulating agencies. Further degradation to either creek would be a negative impact to the community. Any development or redevelopment in the area will have a goal to improve the quality of runoff, reduce flooding impacts, and reduce runoff if possible. This will primarily be achieved with the provisions of the Post Construction Controls Ordinance.
- 40. Assist property owners with remediation of sites known or perceived to have contaminated soil. Soil contamination poses an obvious hazard to the environment; however, it can also serve as an obstacle to development. Since contamination is a potential issue in the transit station area, property owners should be encouraged to participate in the funding programs offered by the City of Charlotte to financially assist with the clean up of contaminated sites.



The tree canopy in existing neighborhoods of the plan area is an amenity to be preserved and emulated in new development.





### Implementation Plan

The recommendations of the *Woodlawn Transit Station Area Plan* will be implemented in a number of ways. First and foremost, all of the recommendations in the plan, once adopted, are City policy. As such, the recommendations will guide future decision-making in the study area, such as requests for rezoning and updates to the Zoning and Subdivision Ordinances.

This Implementation Plan outlines the strategies to help implement the land use, community design, transportation, and other development-oriented recommendations contained in the adopted Concept Plan. Implementation Strategies are listed on the following pages. The number of each action corresponds to the number for the recommendation in the Concept Plan. The responsible agency and possible time frame also are included.

These Implementation Strategies will not be approved by elected officials as part of the Concept Plan adoption. The strategies that require City Council approval will be brought forward on a case by case basis after the Concept Plan has been adopted and the public has had an opportunity to give input.

Because this Implementation Plan is not adopted by elected officials, the public sector sponsored items listed on the following pages are ideas for implementation, not a commitment. The projects may be revised over time; as such this Implementation Plan should be updated periodically to reflect changes and progress.

### **Public Sector Responsibilities**

With input from the community, the public sector will provide the policy framework for land development and will be responsible for making a number of infrastructure improvements. In addition, the Charlotte-Mecklenburg Planning Department in consultation with other City and County departments is responsible for initiating and guiding the corrective rezoning process and monitoring and reviewing rezonings proposed for the plan area to ensure that future development meets the required standards and reflects the intent of the adopted policy.

#### Private Sector Responsibilities

The private sector will be responsible for developing and redeveloping properties within the plan area consistent with the vision, policies, and recommendations included in the Concept Plan. Ensuring that the infrastructure required in conjunction with development is provided will be part of these development responsibilities.

#### **Corrective Rezonings**

The Planning Department will initiate corrective rezonings to implement the land use vision and recommendations adopted as part of the Concept Plan. The proposed rezonings are shown on Map 6. The rezoning process will occur after the adoption of the Concept Plan.

The proposed rezonings to TOD-M may be initiated in one or more groups, or may be proposed on a case-by-case basis in order to insure that new streets and other recommendations of this plan are provided by new development.

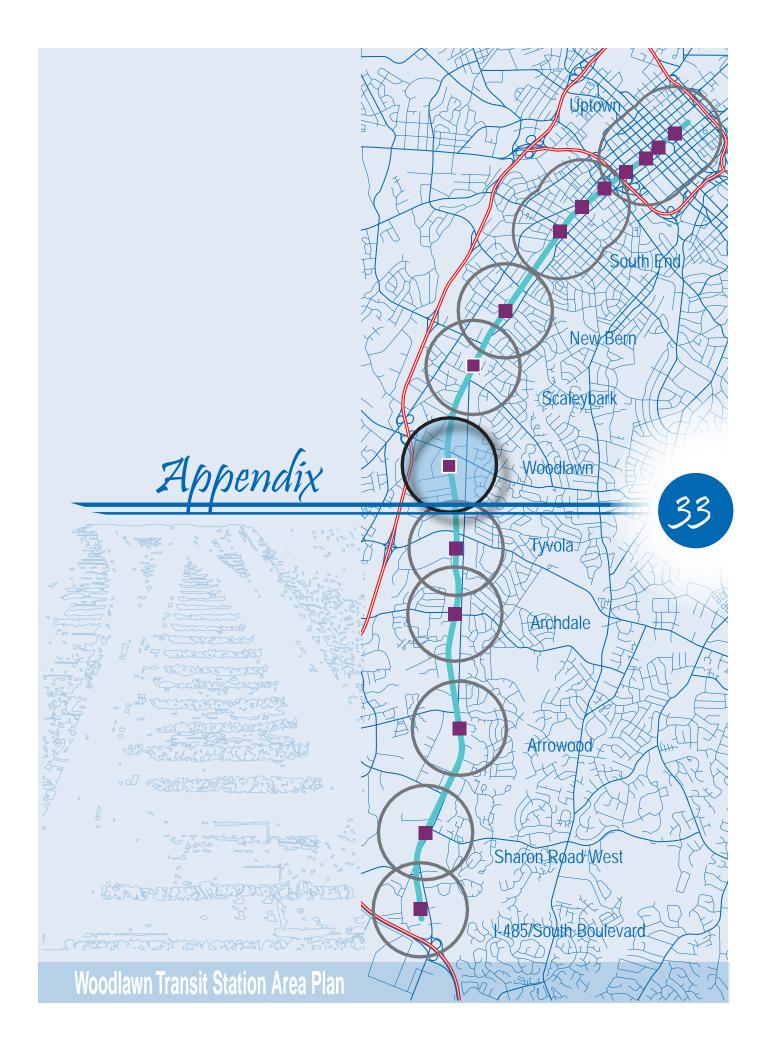
### Implementation Strategies

The number of each action corresponds to the number for the recommendation in the Concept Plan.

	Action Item	Type	Lead Agency	Priority
	Land Use and Community Design			
1a	Rezone area recommended for transit oriented development to TOD-M and TOD-R per Map 6.	Zoning	Planning	Short (0-5 yr)
1b	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
2	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
3	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
4	Create urban plazas or park on park and ride site when site redevelops. Station.	Park	Park & Rec/ CATS	as devel occurs
5	New street connections - Provide new street connections needed to create typical block lengths of 400 feet desired, or 600 feet maximum, as shown on Map 4.	Transp.	CDOT	as devel occurs
6	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
7	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
8a	Rezone area recommended for office/retail to B-2 per Map 6.	Zoning	Planning	Short (0-5 yr)
8b	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
9	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
10a	Rezone area recommended for residential/office/retail to B-2 per Map 6.	Zoning	Planning	Short (0-5 yr)
10b	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
11	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
12	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
13	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
14	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs

	Action Item	Туре	Lead Agency	Priority
15a	Rezone area recommended for office to O-2 per Map 6.	Zoning	Planning	Short (0-5 yr)
15b	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
16	Provide new street connections in the General Corridor Area.	Transp.	CDOT	as devel occurs
17	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
18	Use land use recommendations to guide and evaluate development proposals.	Zoning	Planning	as devel occurs
19	Maintain existing street network for the Madison Park and Collingswood neighborhoods.	Transp.	CDOT	as devel occurs
	Transportation and Streetscape			
20	Provide new street connections in the Transit Station Area.	Transp.	CDOT	as devel occurs
21	Provide new street connections in the General Corridor Area.	Transp.	CDOT	as devel occurs
22	Realign and improve streets in the area northwest of Woodlawn Rd. and Nations Crossing Rd.	Transp.	CDOT	as devel occurs
23	Maintain the existing street network for the Madison Park and Collingswood neighborhoods.	Transp.	CDOT	as devel occurs
24	Eliminate gaps in the sidewalk system within the Transit Station Area.	Transp.	CDOT	as devel occurs
25	Eliminate gaps in the sidewalk system leading from the residential areas to the Transit Station.	Transp.	CDOT	Short (0-5 yr)
26	Widen sidewalk system along thoroughfares.	Transp.	CDOT	as devel occurs
27	Improve the sidewalk network in the General Corridor Area.	Transp.	CDOT	as devel occurs
28	Enhance pedestrian and bicycle crossings on major thoroughfares.	Transp.	CDOT	Medium (5-10 yr)
29	Consider a pedestrian crossing of the LRT line at the station.	Transp.	CDOT/ CATS	Long (10+ yr)
30	Extend designated bicycle lanes on Woodlawn Rd.	Transp.	CDOT	Medium (5-10 yr)
31	Site new developments to allow future addition of bicycle lanes on South Blvd.	Transp.	CDOT	as devel occurs
32	Replace current private driveway crossing with new street connection.	Transp.	CDOT/ CATS	Medium (5-10 yr)

	Action Item	Туре	Lead Agency	Priority
33	Install pedestrian scale lighting in key locations.	Transp.	CDOT	Medium (5-10 yr)
	Infrastructure and Public Facilities			
34	Conduct and infrastructure study to evaluate the adequacy of infrastructure.	Utilities	E&PM / CMU	Medium (5-10 yr)
35	Encourage the burying of utilities.	Utilities	Planning	as devel occurs
36	Encourage urban open spaces in the Transit Station Area.	Park	Planning / Park & Rec	as devel occurs
	<u>Environment</u>			
37	Make trees a key feature of all of the plan area.	Zoning / Tree Ord.	Planning / E&PM	as devel occurs
38	Design site plans for new buildings and renovations in the station area to improve water quality for stormwa- ter run-off.	Storm-water	E&PM	as devel occurs
39	Protect or enhance the watersheds when possible.	Storm-water	Planning / E&PM	as devel occurs
40	Assist property owners with remediation of sites known or perceived to have contaminated soil.	Brownfield	Econ. Dev.	as devel occurs



# Existing Conditions

This chapter examines existing demographic, environmental, land use, design, transportation and infrastructure conditions in the Woodlawn plan area. It provides a framework for understanding the opportunities and constraints identified in the Concept Plan.

### **Demographics**

According to the 2000 U.S. Census, the Woodlawn study area is home to approximately 835 residents. The majority of these residents are white (80%) and about ten percent (10%) are black. Hispanic residents comprise eight percent (8%) of the area's population.

The age of the residents in the study area varies. Nineteen percent (19%) of the Scaleybark residents are below the age of 18, while fourteen percent (14%) are over the age of 65. The remaining 67% are working age adults.

Approximately forty-four percent (44%) of residents in the study area have a household income of less than \$35,000, compared to the median income of \$47,000 for households in Charlotte overall.

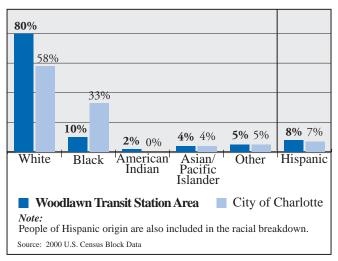
The highest level of educational attainment for most residents in the study area is split between high school graduation (22%) and some college education (26%). Graduates with bachelor's degrees are eighteen percent (18%) while masters/professional degrees are only five percent (5%).

The differences in educational levels may contribute to the diverse industries in which residents work. About thirty-two percent (32%) of employed residents work in the management/professional industry while another twenty-eight percent (28%) of residents work in the sales/office industry.

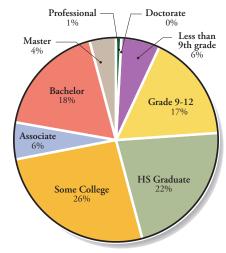
Although the work industry is diverse within the area, the mode of transportation to work among residents is very similar. 92% of the working population travel to work by car, truck or van; 5% use public transportation and the other 3% are split between motorcyclists and individuals who work at home. The average travel time to work is approximately 19 minutes.

#### Issues/Opportunities

The LYNK Blue Line can provide an alternative mode of transportation for area residents.

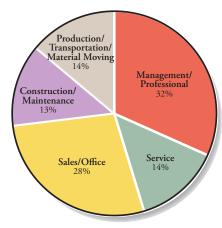


Population Characteristics for Woodlawn and Charlotte



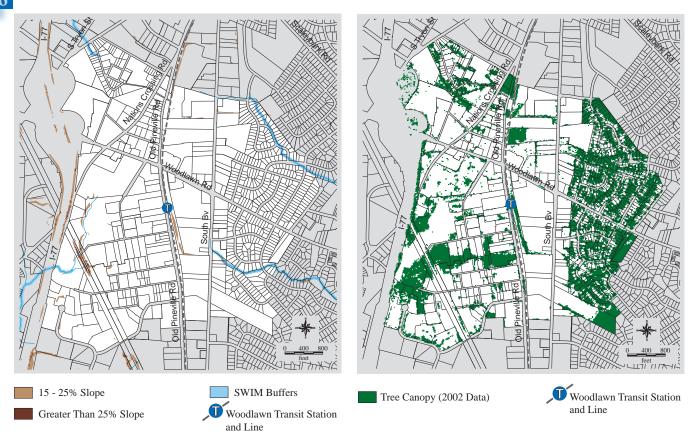
Source: 2000 U.S. Census Block Group Data

Educational Level for Woodlawn Station Area Plan



Source: 2000 U.S. Census Block Group Data

Employment Industry for Woodlawn Station Area Plan



### **Environment**

#### **Natural Features**

The Woodlawn station area, like most station areas along the South Corridor, sits upon a natural north-south ridge. Consequently, it does not have many sensitive natural features. Tributaries of Irwin Creek flow to the east and west of the ridge leaving the land around the station well-drained and without wetlands or floodplains. Topography is relatively gentle with a few steep slopes along the edge of the creeks and along I-77.



Tree canopy in the single family neighborhoods is an element to be preserved, and duplicated in redeveloping areas.

#### **Tree Cover**

The tree canopy is the most plentiful natural feature in the Woodlawn plan area. Trees shade approximately thirty percent (30%) of the study area, primarily in the residential neighborhoods.

Issues/Opportunities

Currently, the core of the study area has few trees and minimal landscaping. As the study area redevelops, there will be a significant opportunity to improve the quality of the environment by planting additional trees and landscaping.

### Land Use and Design

The existing land use pattern within the Woodlawn station area is different than most areas located along existing rail corridors. Historically, the predominant land uses around rail corridors are industrial, warehouse or distribution uses. However, the Woodlawn station area has a mixture of commercial and residential land uses, in addition to industrial.

#### **Existing Land Use and Design**

#### Industrial

Most of the industrial land uses in the station area are located west of Old Pineville Road and east of I-77. Most industrial buildings are single story and vary in square footage. However, there is one industrial use that stands out. The C&T refinery is a major industrial facility that is prominently located on South Boulevard on a site of over 15 acres.

#### Retail

Most retail uses in the station area are single story out par strip retail and out-parcels focused along South Boulevard and Woodlawn Road. The shopping center at Woodlawn Road and South Boulevard anchored by Home Depot is one of the larger retail centers, with over 150,000 square feet of retail space.

#### Office

The Woodlawn station area has a large office park within the ½ mile walking distance of the station platform. The Woodlawn Green office complex was built in the early 1970s and offers over 250,000 square feet of office space in a campus style setting. Other office uses are scattered throughout the station area, mostly located off of Old Pineville Road in single story suburban office buildings or converted houses and industrial buildings.

#### Residential

The Collingwood and Madison Park neighborhoods provide a residential base on the east side of the station area. These two neighborhoods make up a large residential district. However, only a portion of the neighborhoods are in the plan area.

#### Issues/Opportunities

Over 250,000 square feet of office space exists in the Woodlawn Green Office Park with available land for addition space.

Multi-family housing is a desirable use in a transit station area. However, the Woodlawn station area has no multifamily housing.



The C&T refinery between South Boulevard and Old Pineville Road is a large industrial use in the southern portion of the station area.



A number of automobile-oriented retail centers are located in the plan area.

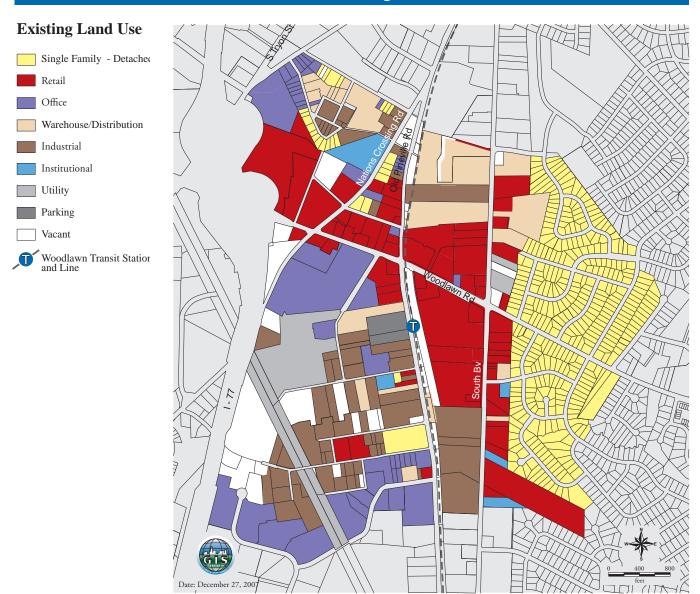


Woodlawn Green is a large office complex close to the light rail station.



A majority of the original housing stock in the Woodlawn plan area was built in the 1950s and 1960s.

### Woodlawn Existing Land Use

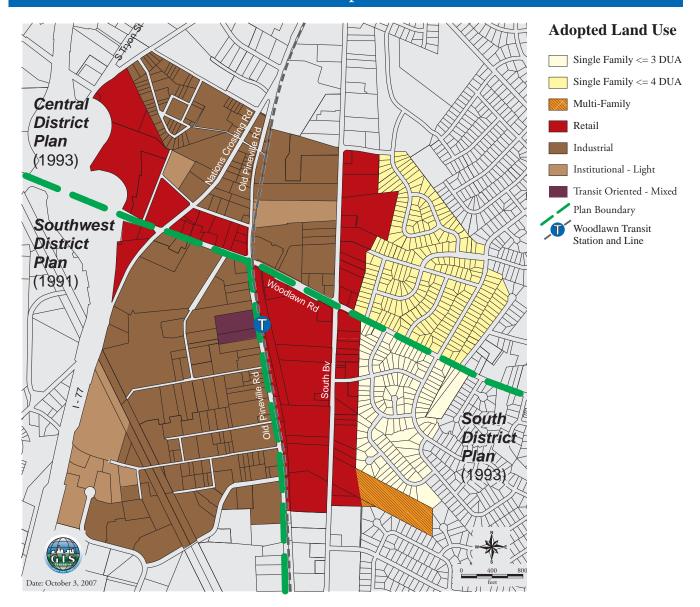


(Issues/Opportunities, continued)
Most uses in the plan have an automobile-oriented design, generally considered incompatible with transit oriented development.

Industrial/warehouse uses are the predominant types closest to the station. However, these uses are typically not very transit supportive, unless they have a significant number of employees.

The existing C&T refinery could be a disincentive to new residential development close to this facility.

### Woodlawn Adopted Land Use



#### **Adopted Land Use Plans**

Prior to the adoption of this plan, the Charlotte City Council-adopted *Central District Plan* (1993), *Southwest District Plan* (1991), and *South District Plan* (1993) – all as amended by council-approved rezonings – provided the governing land use policy for the Woodlawn plan area. The map above shows which areas have been covered by each policy document.

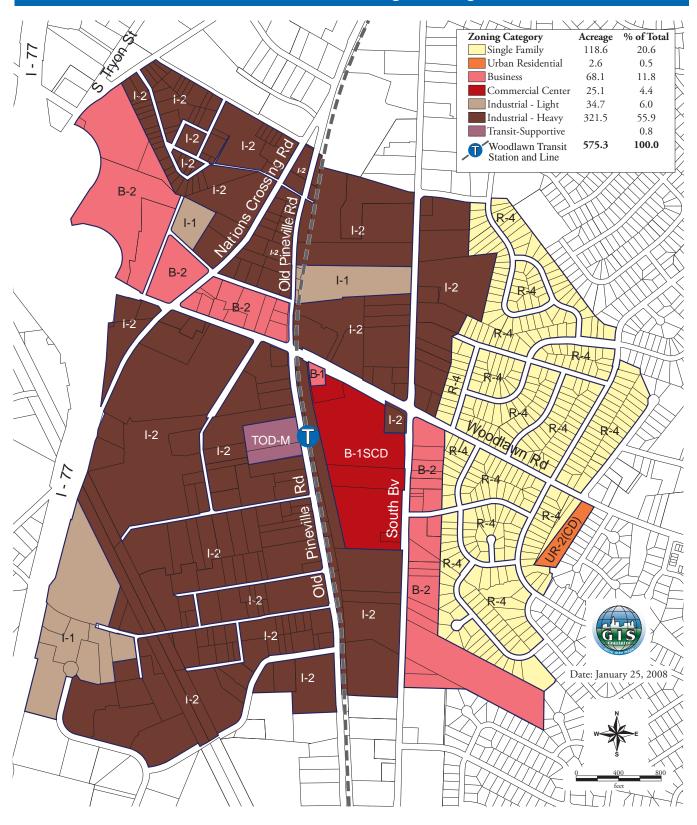
The Central District Plan and South District Plan recommend retail and residential in the areas east of South Boulevard. All three adopted plans recommend retail and industrial land uses west of South Boulevard and focus on preserving and promoting neighborhoods within the plan boundaries.

Upon adoption, the *Woodlawn Station Area Plan* becomes the governing land use policy document for properties within the plan boundaries. The updated future land uses are presented inthe Land Use Recommendations section of this document.

#### Issues and Opportunities

An update to the currently adopted land use plans provides an opportunity to promote higher intensity and pedestrian-oriented development surrounding the Woodlawn station.

# Woodlawn Existing Zoning



#### **Existing Zoning**

In general, the zoning for the Woodlawn station reflects the existing development pattern, with industrial and retail zoning along South Boulevard, Old Pineville Road and Woodlawn Road. The existing neighborhoods east of South Boulevard are zoned for single family residential development.

Issues/Opportunities
The development built under the existing industrial and business zoning will typically not meet the intensity, use and community design guidelines for transit oriented development.

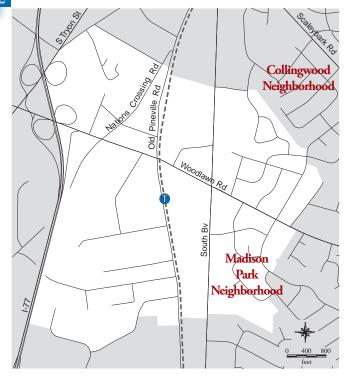
There have been no development-initiated TOD rezonings in the Woodlawn plan area.

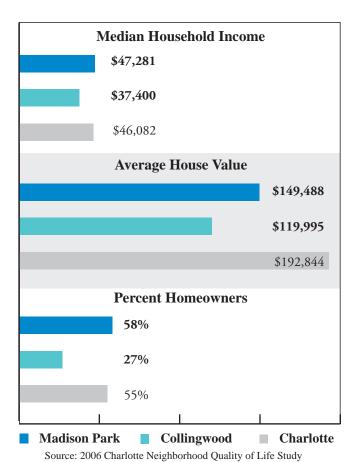


The CATS park and ride lot is zoned transit oriented-mixed.



Most land on South Boulevard, south of Woodlawn Road, is zoned for retail businesses.





#### **Established Neighborhoods**

The Woodlawn plan area includes significant portions of two established neighborhoods: Collingwood and Madison Park. These neighborhoods are categorized as "transitioning" and "stable" respectively by the *Charlotte Neighborhood Quality of Life Study* (2006). These two neighborhoods make up the vast majority of the residential for the station area, with the exception of some scattered residential lots on the west side of the station area. Most of the houses were built in the 1960s and are usually single story.

#### Issues/Opportunities

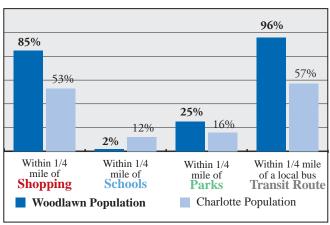
It will be important to protect the existing single family neighborhoods in the eastern portion of the plan area.

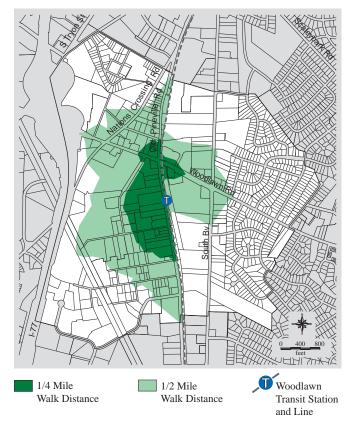
#### Land Use Accessibility Index

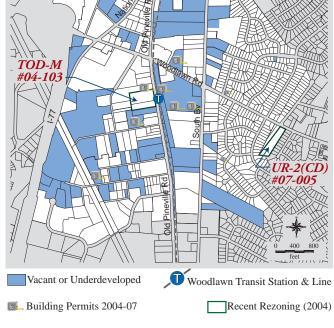
Land use accessibility is often described as convenience or ease of reaching activities and destinations, particularly shopping, schools, parks and local transit routes. 85% of residents within the Woodlawn plan area are within ½ mile of shopping and 96% of residents within a ¼ mile of local transit. This is a much greater percentage than for Charlotte overall. However, only 2% of Woodlawn Station area residents are within ¼ of schools and 25% within a ¼ mile of parks.

#### Issues/Opportunities

Potential development around the station area provides an opportunity to improve the mixture of land uses that are accessible to Woodlawn residents. This is especially important for parks and schools.







#### 1/4 and 1/2 Mile Walk Distance

The Woodlawn Station has a significant amount of land within a ½ mile walk (typically 10 minutes) on the west side of the light rail line. However, the area is limited east of the tracks as the rail line creates a barrier.

Issues/Opportunities

Although there is an extensive area within ½ mile walk of the transit station east of the tracks, there is an opportunity to expand the area within a ½ mile walk by adding street network and connections.

The rail line acts as a barrier for the area west of the tracks. The single-family neighborhoods are over 1/2 mile walk to the station.

#### **Development Activity / Potential Opportunities**

There has been only one rezoning petition filed since 2004. That petition, for the TOD-M (Transit Oriented Development - Mixed) zoning district, was filed by the CATS for the park and ride lot across Old Pineville Road from the Woodlawn Transit Station. The area has also seen very little in terms of new building permits issued, with just 16 commercial building permits issued from 2004-2007. The majority of the development in the area took place prior to the 1980s. Many of the older commercial and industrial buildings are classified as underdeveloped and ripe for redevelopment, especially in the area surrounding the transit station.

Issues and Opportunities

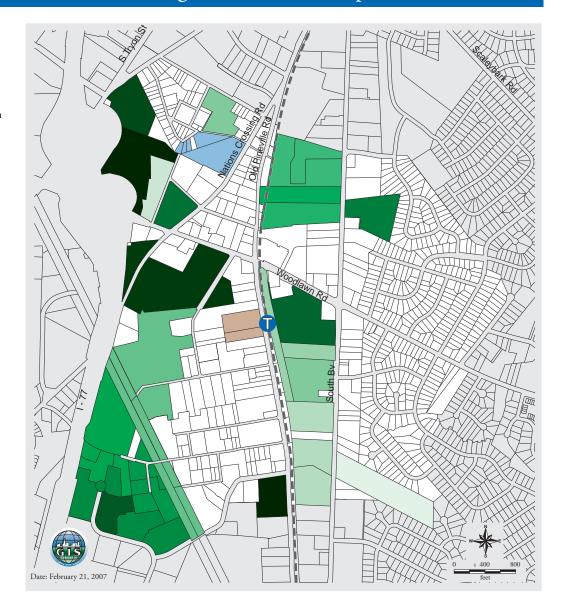
Potential development around the station provides an opportunity to improve the mixture of land uses in the plan area. However, the transit oriented development potential surrounding the Woodlawn transit station is somewhat hampered due to the existing Norfolk Southern Railroad (NSRR) running along the east side of the station. The tracks act as a barrier and inhibit pedestrian and vehicular access to the transit station from the properties on the east side along South Boulevard.

# Woodlawn Large Parcel Ownership

#### Large Parcel Ownership

Non-Profit
Public
Private

Woodlawn Transit Station and Line



#### Large Parcel Ownership

Much of the property in the Woodlawn plan area is in large parcel ownership: either single parcels of 4 acres or greater; or abutting parcels in single ownership of 4 acres or greater. This pattern of ownership is usually a positive factor for redevelopment. However, most of the large parcels are located either on South Boulevard or along I-77, and are not close to the transit station. Some of the largest properties include the vegetable oil refinery on South Boulevard and the shopping center at the corner of Woodlawn and South Boulevard.

#### Issues and Opportunities

Most of the properties close to the Woodlawn light rail station are small sites, usually in individual ownership. This ownership pattern will make transit oriented development more difficult, because assembling larger parcels is needed for TOD.

#### Market Research and Development Projections

In early 2003, Robert Charles Lesser & Company completed a market study of the future South Corridor light rail station areas entitled "Station Area Allocations for New Office Retail and Multi-family Development along the South LRT Line 2000-2025." The study noted: "Woodlawn represents one of two stations with very strong regional access, offering direct interchange access to I-77, both north and south, as well as strong access to I-85 via Billy Graham Parkway. This stronger access, as well as the higher traffic volumes on Woodlawn and South Boulevard, greatly enhances opportunities for more intense commercial development around the station."

The study provided the following assessment of transitsupportive development potential in the Woodlawn station area:

- There is no large vacant land available, but there are a number of parcels ready for redevelopment. These parcels would need to be assembled for transit oriented development.
- 2. Access and high visibility will work to attract retail development in the plan area that could be more community serving.
- 3. Residential development is more likely to be a mid- to late-term endeavor (after 2015) and be located in the north and northeast portion of the station area.
- 4. Substantial office development has the greater potential and is more likely to happen to the station area in the near term. Most of the office development would likely be located to the west of the LRT line, with regional access provided by I-77.

However the study also found that on the south side of the station along South Boulevard, residential and office opportunities diminish somewhat from the impact, visual and otherwise, of the C&T refinery.

#### Issues/Opportunities

While the larger Woodlawn station area has good regional access, the light rail station is located on Old Pineville Road, instead of the more heavily traveled Woodlawn Road or South Boulevard. Transit oriented development is less likely to be initially drawn to this location.

The Norfolk Southern rail line and light rail line, as well as existing topography, are barriers to accessing the highly visible parcels on South Boulevard from the light rail station on Old Pineville Road.

The C&T refinery could negatively impact the development potential of immediately surrounding development.



Smaller parcels near the station will need to be assembled for transit oriented development.



The existing refinery could deter nearby residential development.

### Transportation

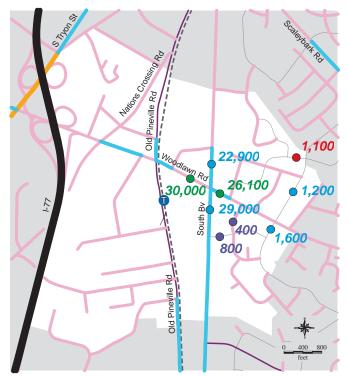
#### The Street Network

The number of route choices available to pedestrians, bicyclists and motorists describes the adequacy of an area's street network. A dense, well-connected network offers greater choices of routes and more direct routes to destinations than does a less connected network, and therefore provides greater overall system capacity.

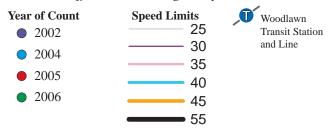
Route choices are measured by the number of lanemiles of streets, number of intersections (nodes), number of blocks (links), and the connectivity index. A lane-mile is one mile of a single roadway lane. The more lane-miles of streets there are, the greater the overall traffic carrying capacity. The connectivity index quantifies how well a roadway network connects destinations and is calculated by dividing the number of roadway links by the number of roadway nodes. A connectivity index of 1.45 or more is desirable for transit station areas.

#### **Woodlawn Station Area**

Area size (square miles)	.94
Miles of streets:	11.2
Lane-mile of streets:	26.7
Connectivity Index:	1.18



Traffic Counts: Average Daily Volume

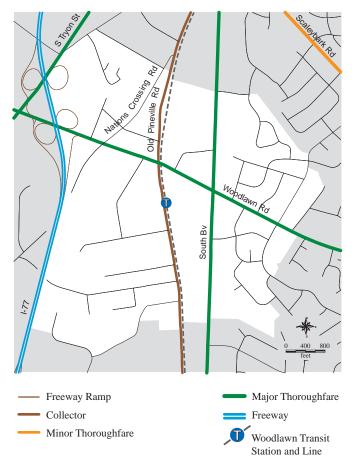


Issues/Opportunities:

There is a noticeable lack of street connectivity from the residential neighborhoods to South Boulevard and from non-residential areas to Old Pineville Road. As commercial properties redevelop along South Boulevard, Old Pineville Road and the new light rail line, there will be opportunities to provide a more robust street network that better links people and places. This improved street network includes not only streets that connect to South Boulevard and Old Pineville Road, but also streets that parallel them.

Woodlawn Road is the only east-west thoroughfare in the Woodlawn study area. As this area grows and redevelops with time, the lack of another such route will be noticed by increased levels of traffic congestion on South Boulevard, Old Pineville Road and Woodlawn Road. Additional east-west streets that can help accommodate the expected increase in travel in the study area can be built through the redevelopment process.

Within the station area, Woodlawn Road is the only public street (and grade-separated) crossing of the LYNX Blue Line. Currently a private at-grade driveway crossing north of Woodlawn Road offers the opportunity to create a new public street serving redevelopment, as well as offer an alternate east-west route to Woodlawn Road for local traffic.



# The Thoroughfare Plan

The Mecklenburg-Union Thoroughfare Plan is the adopted major roadway plan for Mecklenburg and Union counties. The Thoroughfare Plan is used to assure that the most appropriate street system is developed to meet existing and future travel needs. Streets are classified and designed according to their intended functions so that land use and traffic conflicts are minimized. The street classifications applicable to the Woodlawn station area are as follows:

Thoroughfares: South Boulevard, South Tryon Street and Woodlawn Road are major thoroughfares serving the Woodlawn area. As major thoroughfares, these streets are designed to accommodate large volumes of traffic at moderate speeds and provide access to major commercial, industrial and residential land uses.

*Collectors*: Old Pineville Road is a collector street, carrying traffic between the thoroughfares and local streets at moderate volumes and speeds and providing access to adjacent land uses.

*Local Streets*: The remaining roadways are local streets that carry lower traffic volumes, have slow operating speeds and provide access to individual properties.

#### **Additional Facilities:**

Interstate Highway 77 (I-77) runs north-south, as a cross-country, interstate highway between Columbia, South Carolina, and Cleveland, Ohio. Within Charlotte, I-77 travels between the South Carolina state line and the Lake Norman area. Unlike I-85, the only other cross-country interstate highway traversing Charlotte, I-77 more directly serves downtown, serving as a radial expressway for South and Southwest Charlotte. Within the Woodlawn area, I-77 serves as the western study boundary and has partial cloverleaf interchanges at both South Tryon Street and Woodlawn Road near their intersections with Billy Graham Parkway.

Norfolk Southern is a major Class I railroad. The Norfolk Southern network extends over 20,000 miles over 22 states, the District of Columbia and Ontario. Within the Woodlawn area, Norfolk Southern owns and operates a spur running along the east side of the LYNX, serving the refinery on South Boulevard southwest of its intersection with Inwood Drive.



The Woodlawn Road connection to I-77 serves an important regional transportation function.



# Street Classifications Streetscape and Typical Sections

South Boulevard is generally four travel lanes wide with turn lanes added at its signalized intersections. Sidewalks of varying widths are located along both sides of the street, sometimes separated from travel lanes by planting strips and sometimes placed directly behind the curb and gutter. Street lighting is provided on utility poles. (Photo shows South Boulevard looking south towards Woodlawn Road.)



**Woodlawn Road** is generally four travel lanes wide with turn lanes added at its signalized intersections. Sidewalks of varying widths are located along both sides of the street, sometimes separated from travel lanes by planting strips and sometimes placed directly behind the curb and gutter. Street lighting is provided on utility poles. (*Photo shows Woodlawn Road looking west towards South Boulevard.*)



**Old Pineville Road** is two travel lanes wide, with bike lanes (both sides) and sidewalk (on the west side). Planting strips are provided between the sidewalk and the street curb for much of its length. Street lighting is provided on utility poles. (*Photo shows Old Pineville Road.*)



Local Streets vary in appearance according to the adjacent land uses. Industrial and commercial streets are relatively wide (30 to 40 feet) with two travel lanes, some on-street parking, few sidewalks and typically no planting strip. (Photo shows Nations Crossing Road.)



**Residential Streets** are narrower (approximately 24 feet wide) with sidewalks on one side of the street or no sidewalks at all. (*Photo shows Baylor Drive.*)



numbers of vehicles from one part of the city to another. Thus, the modal priority shifts toward motor vehicles, while still accommodating pedestrians and cyclists as safely and comfortably as possible.

Locals: The majority of roadways are local residential and local commercial streets that provide direct access to residential and commercial properties. These streets

Boulevard: A short segment of Woodlawn Road, from Nations Crossing Road to I-77, qualifies as a Boulevard. Boulevards are intended to move large

Locals: The majority of roadways are local residential and local commercial streets that provide direct access to residential and commercial properties. These streets are intended to safely accommodate pedestrians and bicyclists by providing sidewalks, planting strips with trees and low speed limits.

Issues/Opportunities:

Regardless of their classification, a number of streets in the study area fail to consistently provide the street elements or element dimensions desired in an urban environment. While new streets will include the desired elements and dimensions, many of the deficiencies on existing streets will be addressed when adjacent properties redevelop.

**Street Typology** 

The Urban Street Design Guidelines recommend how Charlotte's streets should be planned and designed to provide viable transportation choices. The guidelines are intended to ensure a process that considers the needs of pedestrians, bicyclists and motorists, as well as the affects on adjacent land uses when planning and designing streets. Streets are classified according to land use and transportation contexts and should be designed accordingly.

Currently, the streets in the plan area fall into the following categories:

Avenues: Within the context of the street design guidelines, South Boulevard, Woodlawn Road and Old Pineville Road function closest to Avenues. Avenues are intended to serve a diverse set of functions for a wide variety of land uses and should be designed to provide a balance of service for all transportation modes. Avenues provide an important mobility function for motorists, but are expected to provide a high level of comfort, safety and convenience to pedestrians and bicyclists. Avenues are generally limited to four or less travel lanes (except at major intersections) with block lengths up to 600'. Common elements should include sidewalks, planting strips or amenity zones with street trees, and bicycle lanes.

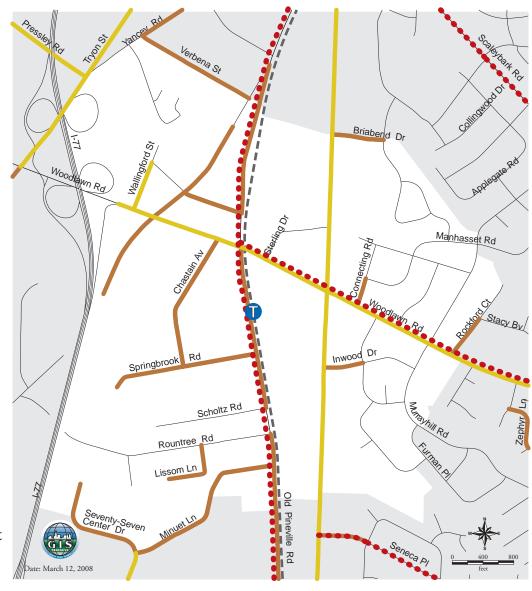


Woodlawn Road is an important Avenue in the plan area.

### Woodlawn Pedestrian & Bike Facilities

# Pedestrian & Bike Facilities

- Partial Sidewalk
- Complete Sidewalk
- Existing Bike Lane
- Woodlawn Transit Station



# Existing Pedestrian & Bicycle Facilities

#### Pedestrian System:

Of the nearly 11 miles of streets in the Woodlawn station area, 19% have sidewalks on both sides of the street, 35% have sidewalk on one side and 39% have no sidewalk. These figures include sidewalks recently built by the South Corridor Infrastructure Program (SCIP) along South Boulevard, as well as sections of Murrayhill Road, Inwood Drive, and Gilmore Drive. SCIP also funded a pedestrian connection between Christine Avenue and Old Pineville Road along the north side of the new park-and-ride lot to enhance access to the Woodlawn station from the west.

#### Bicycle System:

Prior to SCIP, there were no designated facilities for bicyclists in the Woodlawn study area. Using SCIP funds, bike lanes were added to Woodlawn Road (0.5 miles) between Old Pineville and Murrayhill Roads, as

well as Old Pineville Road through the entire station area (1 mile).

#### Issues/Opportunities:

More east-west streets that connect to South Boulevard and Old Pineville Road are needed to provide better pedestrian and bicycle mobility in the study area. The current large block sizes and vehicular environment along these two streets discourage these alternative forms of travel, especially pedestrian travel.

Better north-south pedestrian and bicycle routes are needed parallel to South Boulevard and Old Pineville Road. Opportunity to build these routes will come as commercial properties redevelop along South Boulevard and Old Pineville Road.

and Line

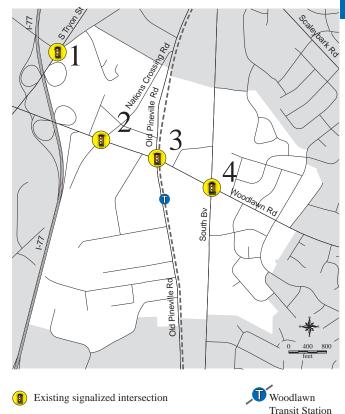
#### **Level Of Service**

Level of Service (LOS) measures the quality of service provided by a transportation facility to its users. The City of Charlotte evaluates level of service for pedestrians, bicyclists and motorists and uses the results to help balance their competing needs when planning and designing streets. Levels of service range from A through F, with desirable levels of service based on the street typologies of the Urban Street Design Guidelines. Transit station areas are intended to be highly accessible for pedestrians and bicyclists, and therefore should have good pedestrian and bicycle level of service (A to B). Lower levels of service for motorists are acceptable if necessary to achieve the desired pedestrian and bicycle levels of service.

Pedestrian and bicycle level of service is rated according to the level of comfort and safety offered by the design features at signalized intersections, while motor vehicle level of service is based on motorist delays. Motor vehicle quality of service

#### LOS Rating Scale

A	Excellent
В	Very Good
C	Good
D	Fair
Е	Poor
F	Failure



Level of Service (LOS)							
	Signalized Intersection	Pedestrian	Bike	Vehicular			
				Volume to Capacity Ratio AM Peak		Volume to Capacity Ration <b>PM Peak</b>	
1	S Tryon Rd & Pressley Rd	С	D-	.60	В	.80	С
2	W Woodlawn Rd & Nations Crossing Rd	D+	Е	.68	С	.75	В
3	W Woodlawn Rd & Old Pineville Rd	С	С	.80	D	.90	D
4	South Bv & E Woodlawn	В	D+	.79	D	.86	D

is also measured by the volume to capacity ratio (v/c), which describes an intersection's ability to process traffic within peak time periods. Values greater than .95 suggest an intersection is near its capacity during this time period and that motorists may experience substantial congestion.

Existing signalized intersections within the station area are mapped with the accompanying table listing Levels of Service by intersection. Pedestrian facilities at the major intersections are generally good, except Woodlawn Road and Nations Crossing Road. Most crossings were recently improved, thanks to work done by the light rail project and SCIP. Similarly, some bicycle lanes were recently created, notably on Woodlawn Transit Station Area Plan

Woodlawn and Old Pineville Roads through SCIP. Although improved, pedestrian and bicycle crossing enhancements are still desirable at several intersections. While motorists experience stops and delays resulting from the close proximity of the Woodlawn Road intersections of South Boulevard and Old Pineville Road, the overall quality of traffic conditions is reasonably good today. Traffic conditions are expected to worsen, however, as station area land uses intensify and traffic volumes in the South Boulevard/ Old Pineville Road corridor continue to grow.

Issues/Opportunities:

Improved levels of service are needed for pedestrians and bicyclists.

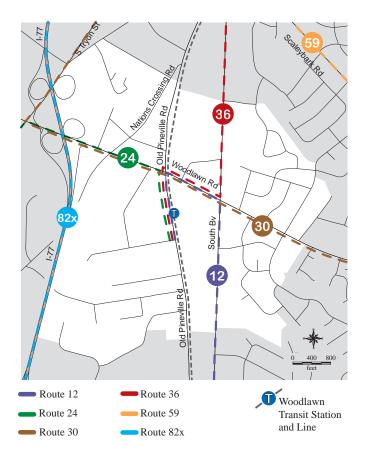
**Existing Roadway Travel Times** 

Travel time is another indicator of the service quality provided by transportation facilities and can be used to describe the overall mobility of an area.

Present day traffic conditions in the Woodlawn station area are reasonably good. South Boulevard and Woodlawn Road have adequate capacity and motorists do not typically experience excessive delays or stops at major intersections. The recent reconstruction of the South Boulevard and Woodlawn intersection has improved travel and safety by providing visual cues for motorists and shorter crossing distances for pedestrians. Pedestrian facilities at major intersections are generally good and bicycle accommodations are improved, thanks in large part to the work done by the signature intersection and the South Corridor Infrastructure Program.

**Issues/Opportunities:** 

While vehicle level of service and travel times are generally good in the Woodlawn area, expected growth and intensified development in the future will likely result in increased congestion on existing streets. Without a more extensive street network, motorists will experience longer delays and travel times as more people are forced to travel on the few through streets that serve the area, such as South Boulevard, Old Pineville Road, and Woodlawn Road. An improved street grid will aid motorists, pedestrians and bicyclists by providing more routes to travel destinations.



**Public Transportation** 

Charlotte Area Transit (CATS) offers public transportation service in and through the Woodlawn area with a combination of light rail vehicles and buses.

Light Rail Service:

Within the Woodlawn plan area, the light rail line runs between and parallel to Old Pineville Road and South Boulevard, adjacent to the Norfolk Southern freight rail line. Light rail patrons are able to access the line at the Woodlawn station, which is located near the intersection of Woodlawn Road and Old Pineville Road. A 386-space park-and-ride facility is sited east of the transit station on Old Pineville Road. Light rail service was projected to carry 9,100 passengers per day by the end of the first year of service, but after three months of service has been averaging close to 12,000.

#### Bus Service:

Since the late 2007 opening of light-rail service in the South Corridor, CATS restructured area bus service to improve connections with light-rail stations. Currently, CATS provides bus service in the Woodlawn area with four local bus routes, as shown on the accompanying map. Routes 24, 30 and 36 are new routes.

### Infrastructure/Public Facilities

#### Education

There are no CMS (Charlotte-Mecklenburg Schools) facilities in the Woodlawn station area, but the area is served by schools nearby in adjoining areas.

#### Public Libraries, Parks, Police and Fire

Public Libraries of Charlotte-Mecklenburg County (PLCMC) has no facility within the station area. However, there is a branch library to the north at South Boulevard and Scaleybark Road.

Park and Recreation has no facilities within the area. However, Collins Park is just northeast of the plan area.

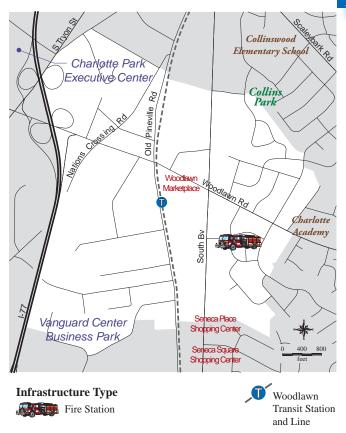
Police have no physical facility plans for the station area but will oversee CATS Transit Police as well as provide service through the Westover Division.

The Woodlawn Station Area is served by the Charlotte Fire Department station number 12 based slightly off South Boulevard, south of Woodlawn Road. No new facilities are projected.

Issues/Opportunities

Prior to full development of the area, the need for new fire and police facilities should be verified.

The study area lacks public open space and the opportunity to develop small green spaces may be lost without a clear goal and funding for such amenities.



Water and Sewer and Storm Water Management

Charlotte-Mecklenburg Utilities (CMU) has worked proactively to replace and install upgraded lines under the light rail line in anticipation of density increases. Many of the upgrades have been financed by SCIP (South Corridor Improvement Program).

City Storm Water Services currently has a project pending on Briabend Drive, south of Woodlawn Road and off of South Boulevard.

Issues/Opportunities

Increased density will increase demand on CMU services. With increased density CMU will be able to serve a larger number of customers per mile compared to a more suburban setting.

City Storm Water Services may experience an increased amount of run-off in the overall plan area, due to the fact that this area is less dense and contains less impervious surface than the station areas to the north.

Redevelopment of this area should address the quality and quantity of storm water runoff.



