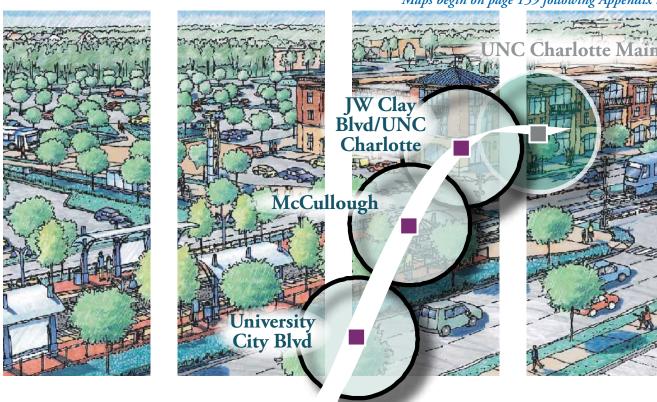
# Volume 5: Appendix (existing conditions)

Maps begin on page 159 following Appendix text



**Introduction:** This chapter examines existing demographic, environmental, land use and design, transportation, and infrastructure/public facilities conditions in the University City Area along the LYNX Blue Line Extension Transit Station Areas. It provides a framework for understanding the opportunities and constraints identified in the Concept Plan.

The plan area is part of the Northeast Growth Corridor identified in the *Centers, Corridors, and Wedges Growth Framework*. The extension of the Blue Line light rail corridor begins at the existing 7th St. station and terminates on the UNC Charlotte main campus. The recently adopted *Blue Line Extension (BLE) Transit Station Area Plans* (2013) address all station areas from Parkwood Station to Tom Hunter Station. Although this plan only focuses on three of the remaining stations, much of the analysis completed considers the entire corridor due to its significance to the context of the project. Those sections of the existing conditions that consider the entire corridor include environment, historic areas/properties, development potential, building permits and rezonings, and public transportation. Details for the remaining existing conditions sections for the station areas between Parkwood and Tom Hunter can be found in the appendix of the *Blue Line Extension Transit Station Area Plans* document, adopted May 2013.

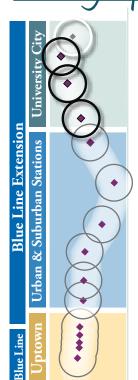
NOTE: Appendix data was reported as of Dec 2013.





The LYNX Blue Line Extension will link the Northeast Corridor to the EPICentre (shown above), as well as to other entertainment, restaurant, and employment opportunities.

# <u>Demographics</u>



#### Total Population and Employment

In 2010, the total population within the six-county Metropolitan Statistical Area (MSA) transportation model, which includes some areas outside the county, was 2,174,353 persons in 4,294 square miles. The population of the Northeast Corridor (excluding the CBD) is 87,286 in 40.4 square miles. The corridor represents 7.4% of the county land area, but 9.5% of the population. At 2,161 persons per square mile, the corridor is denser than the county-wide figure of 1,685 persons per square mile.

Population and Employment Comparison for the Corridor and Metropolitan Area							
	Base Year 2010	Forecast Year 2035	Growth %				
Metropolitan Area							
Total Population	2,174,353	3,424,496	57%				
Total Employment	1,054,740	1,883,870	79%				
Central Business District (CBD)	)						
Total Population	11,184	33,360	198%				
Total Employment	65,670	118,289	80%				
Employment % of Metro Area	6%	6%					
CBD Land Area (Square Miles)	2.1	2.1					
Population Density (Per Square Mile)	5,326	15,886	198%				
Employment Density (Per Square Mile)	31,271	56,328	80%				
Northeast Corridor (excludes Charle	otte CBD)						
Total Population	87,826	128,623	47%				
Total Employment	50,314	124,711	148%				
Population % of Metro Area	4%	4%					
Employment % of Metro Area	5%	7%					
Corridor Land Area (Square Miles)	40.4	40.4					
Population Density (Per Square Mile)	2,161	3,184	47%				
Employment Density (Per Square Mile) 1,245 3,087 148%							
Sources: Housing Units and Population: Census 2010 Employment: InfoGroup (2010) Metropolitan Area, CBD and Corridor: Metrolina Regional Model							







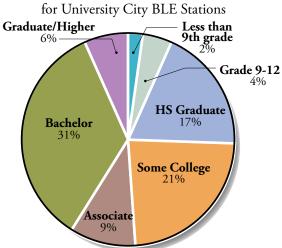
UNC Charlotte is the largest academic institute in Mecklenburg county.

The predominant University City BLE employment category is Retail.

# Existing Demographics

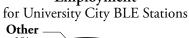


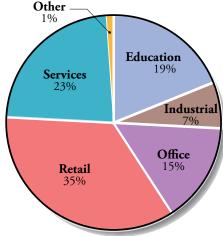
#### **Education Levels**



Source: American Community Survey, 2005-2009

#### **Employment**





Source: Info USA data for 2010 NOTE: Categories based on the 2010 Metrolina Regional Model NAICS Classifications

University City Stations Population by Census Tracts Adjacent to Stations						
Race	University City Blvd. and McCullough Stations	Stations % by Race	JW Clay Bv/UNC Charlotte and UNC Charlotte Main Stations	Stations % by Race	Charlotte % by Race	
Caucasian	163	29%	4378	56%	50%	
African American	304	54%	2102	27%	35%	
American Indian	6	1%	33	1%	<1%	
Asian / Pacific Islander	50	9%	845	10%	5%	
Other	29	5%	231	3%	7%	
Two or More	11	2%	239	3%	3%	
Hispanic <sup>1</sup>	69	_	559	_	_	
Station Total Population	563		7828			
Station by % of University City Station areas	7%		93%			

Source: US Census Data, 2010

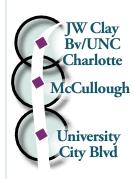
<sup>1</sup> NOTE: People of Hispanic origin are not included as a separate category, since they may be of any race.





Mallard Creek Greenway, the longest greenway in Charlotte, covers more than seven miles. It joins the Toby Creek Greenway at the UNC Charlotte campus edge near N. Tryon St.

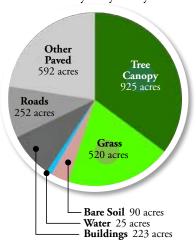
# Environment



#### Natural Environment/Features Along Blue Line Extension Corridor

Tree Cover The land surrounding the LYNX Blue Line Extension stations is both urban and suburban; consequently, the wooded communities in the study area are generally highly disturbed. Generally, tree cover in the study area is fragmented and reflects the highly disturbed nature of the area. The current forest resources are primarily pine, mixed pines or hardwoods. A concentration of natural, relatively undisturbed wooded area is located within a portion of the proposed Old Concord Rd. Station park-and-ride lot and is classified as a mixed pine/hardwood forest community. Groundcover is sparse or absent. Stunted vegetation and a mixed canopy characterize these areas.

# Existing Land Cover in University City study area



Source: City of Charlotte Department of Engineering and Property Management

**Topography** The corridor is characterized by broad, gently rolling inter-stream areas and by steeper slopes along drainage ways. The highest elevations in the corridor are located along N. Tryon St./US-29 east of the proposed Old Concord Rd. Station. The lowest elevations in the corridor are located east of the UNC Charlotte Station at Mallard Creek.

Water Quality – Environmentally Sensitive Areas The N.C. Department of Water Quality (NCDWQ) monitors streams for water quality. Little Sugar Creek does not meet water quality standards, primarily due to wastewater discharges and urban runoff. Problems include turbidity and fecal coliform bacteria, as well as poor-to-fair presence of biological communities (NCDWQ website, accessed December, 2008). Due to this listing, Little Sugar Creek is subject to State restrictions that prohibit the further deterioration of stream water quality.

**Streams** The project corridor is located in portions of two drainage basins. The southern portion of the corridor is located within the Lower Catawba watershed of the Catawba River





Tree canopy is very fragmented because of the urban character of the area.



The 8-county area is classified as an air quality attainment area for most quality standards.

Basin. The northern portion of the corridor is located within the Rocky River watershed of the Yadkin River Basin. Major streams in the southern half of the project region (Upper Little Sugar Creek and Briar Creek in the Catawba River Basin) generally flow in a southerly direction, while streams in the northern half of the project region (Toby Creek in the Rocky River watershed of the Yadkin River Basin) generally flow in a northeasterly direction.

**Floodplains** FEMA Floodplains are land areas adjacent to rivers and streams that are subject to recurring flooding. Because of their continually changing nature, floodplain areas and other flood-prone areas need to be examined in light of how they might affect or be affected by development.

Community Floodplains were established by Mecklenburg County in 2000. Unlike FEMA floodplains that are established by FEMA officials and identify current floodway boundaries, Community Floodplains identify what areas will be prone to flooding in the future, once land upstream is developed. As such, they are known as the future floodplains or Community Floodplains. The floodplain regulations restrict development from occurring within these areas.

According to the FIRM maps for Mecklenburg County, the corridor falls outside of the FEMA 100-year floodplain, with the exception of proposed crossings of Little Sugar Creek and the encroachment into the floodplain at the proposed 36th St. Station. The Little Sugar Creek Community Floodplain is within the corridor and extends for approximately 400 feet along the north side of N. Brevard St. The floodplain area along the south side of N. Brevard St. extends for approximately 300 feet. An existing bridge on N. Brevard St. crosses Little Sugar Creek adjacent to the corridor. The Little Sugar Creek floodplain west of 36th St. extends along the project corridor for approximately 500 feet, to the proposed 36th St. Station.

**Wetlands** Jurisdictional wetlands are defined as areas that have three environmental features: hydrophytic vegetation, wetland hydrology and hydric soils. There are nine jurisdictional wetland areas located within the study area.

**Air Quality** The eight-county Charlotte-Gastonia-Rock Hill, NC-SC metropolitan statistical area is currently classified as an attainment area for all National Ambient Air Quality Standards (NAAQS), with the exception of 8-hour ozone. Additionally, Mecklenburg County is classified as a maintenance area for carbon monoxide.

See Map 11: Land Cover and Tree Canopy, page 159, Map 12: Waters and Wetlands, page 160, Map 13: Watersheds, page 161, and Map 14: Floodplains and Regulated Floodways, page 162.





Many period details, such as the tiled entrance at this NoDa business located on N. Davidson St., still exist and add character and charm to the sidewalk.



#### Historic Areas/Properties

There are no historic areas/properties with the University City Station Areas.

**Archaeological Resources** No known archaeological sites were found within the corridor.

*Historic Resources* The resources determined to be in or eligible for listing (See Map 15: Historic Areas/Properties, page 163) in the National Register (NR) include the following:



#### Philip Carey Company Warehouse

301 E. 7th St. (NR- Eligible), significant for its architectural style from the original warehouse district in Charlotte along the railroad tracks in First Ward. It is of Victorian Romanesque style in commercial architecture constructed in 1907-08.



McNeil Paper Company Warehouse complex: 305-307 E. 8th St. (NR- Eligible), brick masonry building located proximate to the railroad line close to the center of Charlotte. Constructed between 1910-20.





The National Register Listed properties encompasses large portions of the NoDa area.



Clerestory windows enhance the character of the building facade.





Orient Manufacturing Company/ Chadwick-Hoskins No. 3: 311 E. 12th St. (NR-Listed), built in 1901, it is currently utilized as an apartment complex adjacent to the extension of the Blue Line.

#### Herrin Brothers Coal and Ice Company Complex:

315 East 36th St. (NR-Eligible) a well-preserved complex of functional, frame, brick, metal and concrete buildings historically associated with a small-scale fuel and ice operation.





# **Standard Chemical Products Plant:** 600 East Sugar Creek Rd., (NR-Eligible) a modernist office and laboratory that faces Sugar Creek Rd. at the former Southern Railway tracks, now the present day NCRR tracks.

# **Republic Steel Corporation Plant:** 601 Sugar Creek Rd., (NR-Eligible)

a one-story office at the northwest corner of the property facing Sugar Creek Rd. and an expansive, brick and corrugated steel warehousing and fabrication units to the rear.







Original brickwork of refurbished structures are combined with new construction details in these vibrant businesses which contribute to the character of the area.



#### North Charlotte Historic District: (NR-Listed)

bound by the railroad tracks on the north, just south of Anderson St. on the east, Spencer St. to the southeast, Charles Ave. on the southwest and just north of Matheson on the west. This district was nominated to the National Register in 1990 for its association with industry and architecture. The district encompasses 155 acres and over 400 resources. The majority of buildings date from 1903 and circa 1915. The district is oriented towards the former Southern Railway, now the North Carolina Railroad (NCRR), and N. Davidson St. This area is locally known as "NoDa."

# General Motors Corporation Training Center:

5500 N. Tryon St., (NR-Eligible) a large one-story, masonry facility with a flat roof, front office, adjacent auditorium, and a long classroom wing.

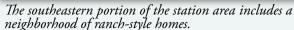




**Chadbourn Hosiery Mills**: 451 Jordan Pl., (NR-Eligible) a large, rectangular, masonry mill constructed in 1947.



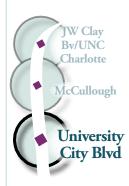






IKEA, a popular national brand, is located close to I-85.

# Land Use and Design



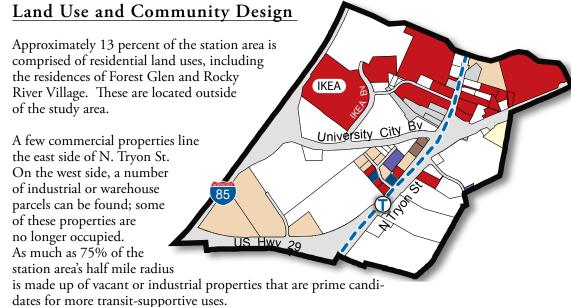
#### Existing Land Use/Design/Character

The Blue Line Extension (BLE) corridor extends the Blue Line, or South LRT Corridor, from 9th St. in Center City (Uptown), through the N. Davidson (NoDa) and University areas to UNC Charlotte. The BLE has 11 transit stations; three are included in this plan. See Map 16: Existing Land Use, page 164. For more information about the first six stations along the Blue Line Extension, please see the *Blue Line Extension Transit Station Area Plans* (2013) document.

#### University City Boulevard Existing Land Use

The University City Blvd. Station is the eighth station along the BLE. The station site is located just south of Stetson Dr. on N. Tryon St. Its strategic location offers the option of transit service to commuters accessing Interstate 85 to/from University City Blvd. and N. Tryon St., as well as transit service to redevelopment of vacant and underutilized properties along N. Tryon St.









University Point Blvd. currently does not extend over I-85. It dead ends before reaching the interstate.

#### University City Boulevard Existing Land Use

The configuration of the N. Tryon St. and University City Blvd. intersection – known as the "weave" – previously limited vehicular access to adjacent properties and left large portions of the area around the station underdeveloped, despite its strategic location near an interstate exit. The City of Charlotte and NCDOT developed a solution to the "weave" condition that involves two at-grade intersections along Tryon St. This solution not only increases accessibility, but also creates a more pedestrian friendly environment and frees up considerable land for future high intensity, mixed-use development appropriate around transit.

A portion of University City Boulevard has been constructed in conjunction with the development of an IKEA retail store and other related retail uses behind the proposed station, close to the I-85 interchange.

The University City Area Plan (2007) currently encourages residential-based mixed-use on the east side of N. Tryon St. as transit ties into the existing neighborhoods. Commercial and office-based mixed-use development is called for on the west side of Tryon St.; in particular, there is the potential for a large transit-supportive mixed use development near the BLE station. There are significant vacant parcels around the station with excellent interstate access that offer potential TOD opportunities, which make them especially attractive locations for future development.

I U	Land Use in University City Blvd. Station Area					
	Single Family	13%				
	Multi-Family	_				
	Commercial	10%				
	Office	1%				
	Institutional	1%				
	Industrial	12%				
	Vacant	63%				

# Employees or Residents Within 1/2 Mile Radius of University City Blvd. Station Single Family 806 Multi-Family — Commercial 612 Office — Institutional 4 Industrial 59

#### Street Network and Pedestrian Environment

The University City Blvd. transit station area street network consists mainly of two major thoroughfares: N. Tryon St. and University City Blvd.. The lack of a complementary and well-connected local street network contributes to the congestion along these roadways and discourages use by bicyclists and pedestrians. Increasing street connectivity throughout the transit station area may help to alleviate congestion and provide useful route choices for pedestrians and bicyclists. Expanded street connectivity will also open up land for more development opportunities. Improving the pedestrian infrastructure of N. Tryon St. and University City Blvd. will facilitate walking throughout the station area.









Fire Station 27 protects UNC Charlotte, hotels, retail centers, and community residences.

Grand Promenade commercial area at N. Tryon St. and W.T. Harris Blvd.



#### McCullough Existing Land Use

The McCullough Station is located in the geographic center of the University City Municipal Services District (MSD). As such, it captures a large proportion of University City's core commercial and office uses. Although much of the station area is built out, there are a number of locations that are well-positioned for redevelopment and infill.

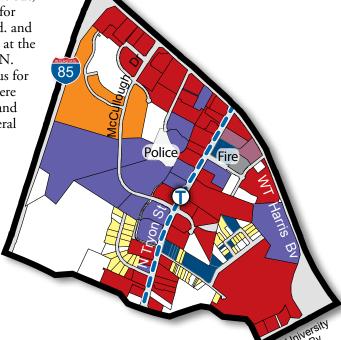
#### Land Use and Community Design

The McCullough Station Area is composed mainly of commercial and office uses. The largest office concentration outside Uptown and along the Northeast Corridor can be found in the University City Business Park on the southwest quadrant of the station area.

At the northeast edge of the station area is one of the largest potential generators for transit ridership on the BLE, the Carolinas Medical Center (CMC) University Hospital.

Although the station area is almost built out, there are several large parcels available for redevelopment along W. T. Harris Blvd. and McCullough Dr. There are also parcels at the intersection of W. T. Harris Blvd. and N. Tryon St. that could provide an impetus for further redevelopment. In addition, there is still a significant amount of vacant land located along I-85 and adjacent to several single family neighborhoods.

Over time, existing suburban scale development is expected to redevelop with higher intensity employment uses.



Single Family - Detached
Multi-Family
Retail
Office
Civic/Institutional
Utility
Parking
Vertical Mixed Use
Vacant
Transit Station & Line

Existing Land Use

Station Boundary





N. Tryon St.'s existing wide median will be the location of the LYNX Blue Line Extension rail line.

#### McCullough Existing Land Use

#### Street Network and Pedestrian Environment

W. T. Harris Blvd. and N. Tryon St. are the two thoroughfares that serve the station area. Additional street network is provided by collector and local-commercial streets such as IKEA Blvd. and McCullough Dr. While these streets are internally oriented and connect to relatively few points on W. T. Harris Blvd. and N. Tryon St., there is potential for additional local street network to link major institutional land uses to the commercial core.

Improving pedestrian amenities on W. T. Harris Blvd. and N. Tryon St. can enhance pedestrian mobility throughout the station area. The station's "walk shed" can be further expanded if new streets and pedestrian paths are introduced as part of redevelopment in the station area.

I	Land Use in McCullough Dr. Station Area					
	Single Family	3%				
	Multi-Family	7%				
	Commercial	31%				
	Office	21%				
	Institutional	1%				
	Industrial	2%				
	Vacant	34%				

Employees or Residents Within 1/2 Mile Radius of McCullough Dr. Station					
Single Family	64				
Multi-Family	850				
Commercial	3,072				
Office	714				
Institutional	190				
Industrial 39					
•					



The intersection of W.T. Harris Blvd. and N. Tryon St. is a challenge for pedestrians and bicyclists.

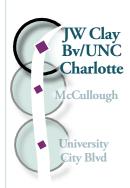




Multi-family housing along Stanborough Ct. is within the 1/2 mile walk distance.



Within the Shoppes at University Place vicinity are 700 hotel and motel rooms.



Existing Land Use

Multi-Family

Retail

Water

Vacant
Transit Station & Line

Office

Station Boundary

Single Family - Detached

Warehouse/Distribution

Open Space/Recreation

Civic/Institutional

#### JW Clay Bv/UNC Charlotte Existing Land Use

The JW Clay Bv/UNC Charlotte half-mile station area encompasses approximately 400 acres of residential, office and commercial land uses. Together with the McCullough Station, the JW Clay Bv/UNC Charlotte transit station serves two major activity generators — Carolinas Medical Center (CMC)-University Hospital and the Shoppes at University Place — as well as part of the UNC Charlotte campus (which has its own station) and Charlotte Research Institute (CRI).

#### Land Use and Community Design

Potential transit riders around the station include residents from the more than 70 acres of multi-family apartment homes and 700 hotel and motel rooms within and adjacent to the Shoppes at University Place. This shopping area holds the largest concentration of retail uses in the area and is the location of the 15-story Hilton Hotel. There are also potential riders from CMC-University Hospital and UNC Charlotte.

Over half of the station area is either commercial or institutional. There is a healthy density and good stock of multi-family housing in the station area, integrated with the Shoppes at University Place as part of the larger 1980s multi-use plan for the then emerging University City. University City was the fastest-growing and urbanizing part of Charlotte-Mecklenburg in the 1990s and is approaching build out in the station area. The adopted University City Area Plan (2007) near JW Clay Bv/UNC Charlotte transit station promotes mixed-use development with a concentration of pedestrian-oriented uses with ground floor retail west of N. Tryon St.

g and burg in at in the City Area Plan of the transit ent with a conwith ground

While there are few vacant parcels in the station area, both the hospital and UNC

Charlotte do have areas that allow for future development. Most notably, the university recently completed the Charlotte Research Institute across from the BLE station.





Pedestrian access and amenities are an important component of the University Research Institute's overall masterplan.

#### JW Clay Bv/UNC Charlotte Existing Land Use

#### Street Network and Pedestrian Environment

W. T. Harris Blvd. and N. Tryon St. are the two thoroughfares that serve the station area. The Shoppes at University Place is served by JW Clay Blvd, while a series of circuitous local streets provide access to UNCC. There are opportunities to introduce a new street network as part of the expansion of the hospital and university areas and these connections are included in the adopted *University City Area Plan* (2007) and *University Research Park Area Plan* (2010).

The station's "walk shed" serves several multi-family neighborhoods, Shoppes at University Place, the hospital and the edge of the UNC Charlotte campus. The pedestrian reach of the station could be extended with pedestrian connections or new local streets throughout the station area.

Pedestrian improvements along N. Tryon St. and W.T. Harris Blvd. – particularly sidewalks and other amenities – are also important for station access. The *University City Area Plan* (2007) recommends establishing "entrance parks" on both sides of the JW Clay Blvd./N. Tryon St. intersection to create a focal point for this major pedestrian crossing.

# Land Use in JW Clay Bv/UNC Charlotte Station Area Single Family 1% Multi-Family 19% Commercial 37% Office 6% Institutional 20%

Industrial

17%

Vacant

Employees or Residents Within 1/2 Mile Radius of JW Clay Bv/UNC Charlotte Station					
Single Family 103					
Multi-Family	2,484				
Commercial	2,298				
Office	489				
Institutional	1,095				
Industrial 14					





Carolinas Medical Center (CMC) University Hospital (left); University Place (right) at West W.T. Harris Blvd. has a mixture of uses at this prime location and is sited to take advantage of water views.





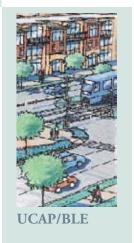
Charlotte City Council reviews and adopts plans (2014-2015 City Council is shown) that will help guide future development.

#### Adopted Future Land Use

The Northeast District Plan (1996), University City Area Plan (2007), University Research Park Area Plan (2010), and the Newell Area Plan (2002) provide land use guidance for this portion of the corridor. These plans are updated by subsequent approved rezonings and area plans. As depicted on Map 17: Adopted Future Land Use, page 165, their future land use recommendations generally follow the patterns of existing land use. The adopted plans are used to guide development and rezoning decisions. A map showing the adopted area plans in and around the study area is on Map 18: Adopted Area Plans within University City, page 166.



University City Area Plan/LYNX Blue Line Extension Transit Station Area Plans Update





Many existing neighborhoods within the plan area are comprised of a mixture of single and multi-family homes sited along quiet streets with mature trees and existing sidewalks.



#### **Existing Neighborhoods**

The LYNX Blue Line Extension is within the Northeast Growth Corridor, one of five Growth Corridors identified in the *Centers, Corridors and Wedges Growth Framework* (2010). Growth Corridors encompass a wide diversity of land uses and some sections may contain areas of existing, primarily low density residential communities that are typically comprised of single family housing. These areas are known as Established Neighborhoods.

The 2010 Charlotte Mecklenburg Quality of Life Study identifies six neighborhoods in the UCAP/BLE Transit Station plan areas. See Map 19: Existing Neighborhoods, page 167. This study considers social well-being, physical characteristics, crime, and economic vitality. Household characteristics such as median income, average house value and percentage of homeownership are illustrated in the table below.

UCAP/BLE Existing Neighborhood Data 2006-2010					
Neighborhood		Average House Value	Percentage Homeowners		
Charlotte	\$52,200	\$89,700	23%		
Newell South	\$47,000	\$142,000	83%		
Mineral Springs/ Rumple Road	\$55,400	\$118,200	46%		
College Downs	\$37,800	\$105,300	30%		
University City South	\$35,700	\$79,300	14%		
University City North	\$64,200	\$118,700	13%		
Harris-Houston	\$48,900 0 10000 20000 30000 40000 50000 60000 70000	\$115,200	0 20 40 60 80 100		

NOTE: A very small portion of Newell is located within the plan boundary. It is not included in the table because of its minimal impact.





Unique features of each station area will be combined with new development to help define the character of individual stations.



#### Development Activity/Potential Opportunities

#### **Summary**

The Northeast Corridor largely traverses already-developed areas of the City, although Greenfield opportunities exist primarily around a few stations in the University City Area. Still, numerous opportunities exist for significant redevelopment and intensification of underdeveloped and vacant properties along the corridor. Over the next 25 years, station areas along the BLE could capture nearly 12,400 new residential units, 3.8 million square feet of new office space and roughly 1.35 million square feet of new retail space.

See Map 20: Existing Zoning, page 168, Map 21: Generalized Zoning, page 169, Map 22: ½ and ¼ Mile Walk Distances, page 170, Map 23: Redevelopment Potential of Large Parcels, page 171. Information regarding the Parkwood, 25th St., 36th St., Sugar Creek, Old Concord Rd., and Tom Hunter Stations can be found in the *Blue Line Extension Transit Station Area Plans* (2013).

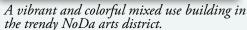
Station Area Estimated Growth 2010-2035						
Station Area	Station Area Office Sq. Ft. Retail Sq. Ft. Residential Units					
9th St.	•		2,166,438	111,567	1,774	
Parkwood	•		126,226	83,691	1,167	
25th St.	•	urban	90,898	69,608	1,167	
36th St.	•	stations	111,140	116,613	1,728	
Sugar Creek	•		35,328	44,272	508	
Old Concord Rd.	•	suburban	47,354	122,942	613	
Tom Hunter	•	stations	42,583	58,085	565	
University City Blvd.			232,967	353,599	1,829	
McCullough		University City	440,214	160,979	1,416	
JW Clay Bv/UNC Charlotte		Stations	508,303	226,112	1,678	
Total Station Areas			3,801,451	1,347,468	12,385	

<sup>•</sup> These stations are not included in the Concept Plan of this document. They may be found under separate cover.

Source: Noell Consulting Group, Economic Development Potential Around Northeast Corridor Transit Stations (December 2010)









Major roadways, I-85 and the BLE continue to stimulate growth in the University City Stations.

#### University City Existing Land Use

To provide context for the corridor and the area between University City and uptown Charlotte, a brief summary of the previous stations is included in this plan. For more information about the first six stations along the Blue Line Extension, please see the *Blue Line Extension Transit Station Area Plans* (2013) document. The N. Davidson corridor – from Center City to NoDa – is an increasingly attractive, yet still edgy, residential corridor intown. Over the past 10 to 20 years, significant revitalization has occurred at both ends, with some initial infill of residential and commercial uses in between station areas. More residential infilling is expected around the 9th through 36th St. stations as the area continues to gain momentum, helped by the implementation of light rail.

Redevelopment and revitalization of Old Concord Rd. and Tom Hunter Stations will be quite challenging with demand potential being tempered by a number of factors, including lower household incomes, moderate home prices and retail abandonment. Moderate opportunities exist for residential infill (largely attached) and some retail infill. Critical in this area will be working with developers and/or property owners to redevelop aging uses. In addition, place making and creating a sense of location will be important to grow redevelopment beyond specific sites.

University City is one of Charlotte's fastest growing sub-markets that includes UNC Charlotte main campus, Carolinas Medical Center (CMC) University Hospital, University Research Park, and University Place among others. These major land uses and the proximity of the area to major roadways such as I-85 are an impetus for the extensive office and retail market that exists in the area. There are opportunities for development of vacant parcels and redevelopment/infill to intensify existing land uses where appropriate.

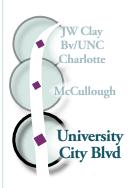




Road improvements, including the "Weave", benefits existing and future land uses.



Retailers, such as IKEA, attract customers from local and regional markets.



#### University City Bv Station Area Opportunities

#### Issues/Opportunities

Major road improvements at the intersection of N. Tryon St. and University City Blvd. have created new opportunities for an emerging retail and residential core as the area offers significant regional access. The station area has some of the corridor's largest tracts of vacant land.

Retail is a real possibility, given the strong location this station area represents. Many large properties to the east of the station remain available for development and could emerge as a mix of retail, some office, and residential



development. Residential opportunities will be significant, with areas west of N. Tryon St. to potentially feature rental apartment development and areas east likely being developed as single family and some attached for-sale.

The station area is lacking in office space, however future expansion of the use is likely to remain limited relative to the W.T. Harris Blvd./N. Tryon St. area and due to the dominance of retail in this area. Market information included in this section is gleaned from an independent market analysis and may not mirror recommendations included in the Concept Plan due to considerations during the plan development process.

#### Developable Property

Estimated Vacant Acres: 250

Estimated Under Utilized Acres: 40

#### Rezonings (January 1, 2008 to June 30, 2013)

There has been one rezoning in the past five years to the Commercial Center (CC) district to allow for a pedestrian friendly multi-family development. However this site was not developed as approved and is currently going through the rezoning process.

#### Building Permits (January 1, 2008 to June 30, 2013)

There were only three (3) building permits issued within the past five years in the station area. All three permits were for non-residential development.

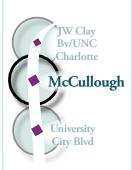




There are several office parks within the station area.



Retail currently employees about 35% of the work force in the University City Station Areas.



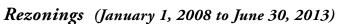
#### McCullough Station Area Opportunities

#### Issues/Opportunities

McCullough has significant potential for intensification of current conditions, with lowrise office and retail development dominating the landscape and little residential. Several greenfield opportunities also remain available.

This station is one requiring a stronger anchor and sense of place. Potential investments should include greenway trails, small parks, etc. to enhance the attractiveness as a place to live, work, and shop.

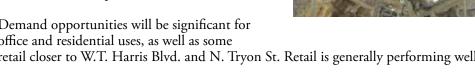
Demand opportunities will be significant for office and residential uses, as well as some retail closer to W.T. Harris Blvd. and N. Tryon St. Retail is generally performing well



There have been eight (8) rezonings in the past five years within a ½ mile radius of the McCullough Station. All of the rezonings were to non-residential districts including Commercial Center, Business, Office, and Institutional districts.

#### Building Permits (January 1, 2008 to June 30, 2013)

Over the past five years, 18 building permits have been issued within the station area. These permits were all for non-residential development.



Developable Property

Estimated Vacant Acres: 181

Estimated Under Acres: 28

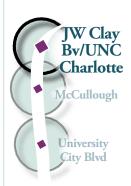




University Place is one area with the potential to expand and intensify over time.



The main UNC Charlotte campus has an enrollment of over 26,000 students.



## JW Clay Bv/UNC Charlotte Station Area Opportunities

#### Issues/Opportunities

JW Clay Bv/UNC Charlotte is perhaps the strongest station area along the Northeast Corridor today and has the potential to remain so going forward. Charlotte Research Institute (CRI), the hospital, and portions of University Place act as solid anchors to build on and not only create demand but offer potential design cues on which to build.

The station area acts as the retail core for the University and Northeast Mecklenburg, and draws large-scale support from outside the area. The office market is minimal and is an opportu-



nity to offer more space in a more cohesive environment. The residential base is small and aging somewhat, although opportunities exist.

There has been a strong interest to create an "urban village" around the station area. Opportunities are greatest for office and residential uses, with a potential for regional-serving (possibly town center) retail.

#### Developable Property

Estimated Vacant Acres: 98

Estimated Under Utilized Acres: 11

#### Rezonings (January 1, 2008 to June 30, 2013)

There have been three (3) rezonings in the past five years within a half mile radius of the JW Clay Station. One request was to rezone the property to Commercial Center to allow for the operation of a variety of retail, service, and office uses in the University Place development. The City sponsored a petition to rezone approximately 2.4 acres near the JW Clay Bv/UNC Charlotte Transit Station to TOD-M to allow the development of a structured park-and-ride facility. The third rezoning was to an Institutional district.

#### Building Permits (January 1, 2008 to June 30, 2013)

There were 13 building permits issued within the station area within the past five years. These permits were for both residential and non-residential development.



The LYNX Blue Line has spurred many Transit Oriented Development (TOD) projects. Rezonings within the past five years for this portion of the corridor continue that same development pattern.





#### Summaries of Building Permits & Rezonings

# Building Permits Summary for University City Stations (January 1, 2008 to June 30, 2013)

There were 34 building permits issued over the past five years in this portion of the corridor for both residential and non-residential development.

# Rezonings Summary for University City Stations (January 1, 2008 to June 30, 2013)

Over the past five years, there have been 12 rezoning petitions approved in this portion of the corridor. Many recent rezonings have been to office or commercial districts. Within the past year, petitions have been approved for Transit Oriented Development districts in the study area. Along the entire corridor north of uptown Charlotte, nearly half of the rezonings have been to mixed-use or TOD to allow for more transit supportive uses. Approval of a TOD zoning district requires land use recommendation of Transit Oriented Development, which wasn't available until the adoption of station area plans and/or the Record of Decision (ROD) for the light rail extension.





An interconnected street network for pedestrians, bicyclist, and motorists offers different route options and provides greater overall system capacity.

# Mobility



#### Street Network for University City Stations

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

Route choices are measured by the number of lane-miles 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 and in-town neighborhoods, while an index of 1.35 is recommended for other areas, including the University City Station Areas.

University Area Stations					
Miles of streets	52				
Lane-mile of streets	120				
Connectivity Index	1.24				

#### Issues/Opportunities

Interstate 85 and other major thoroughfares provide adequate motor vehicle access to the University City transit station areas. However, a lack of internal street connectivity creates dependence on these major thoroughfares for almost all trips within the area, creating considerable congestion and discouraging travel by walking or bicycling. As the *University City Area Plan* (2007) recognized, "providing easy access via foot, bicycle, transit and/or motor vehicles throughout University City is essential for the successful implementation of the urban land use and transportation vision for the district."





N. Tryon St. (major thoroughfare) and JW Clay Blvd. (major collector) intersect in proximity to the future transit station.

#### **Existing Mobility**

There are opportunities to create a more connected internal street network within the station through redevelopment and capital projects. For example, the construction of IKEA Blvd. and connection to McCullough Dr. through the Belgate development provides an important route paralleling N. Tryon St. for motorists, pedestrians and bicyclists. Additionally, the Northeast Corridor Infrastructure Program may also provide some key connections to provide access to the light rail stations.

#### Existing Thoroughfares & Collectors

The *Mecklenburg-Union Thoroughfare Plan* is the adopted major roadway plan for Mecklenburg and Union counties and 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 University City Transit Station Areas are as follows:

**Major Thoroughfares:** Major thoroughfares are designed to accommodate large volumes of traffic at moderate speeds and provide access to major commercial, employment and residential land uses.

**Collectors & Locals:** Collectors are designed to carry traffic between the thoroughfares and local streets at moderate volumes and speeds and providing access to adjacent land uses.





Two major thorough fares intersect - W.T. Harris Blvd. crosses over University City Blvd.



UNC Charlotte's Mary Alexander Rd is categorized as both a Major and Minor Collector.

#### **Existing Mobility**

University City Station Areas Street Classifications						
Major Major Minor Thoroughfares Collectors Collectors						
John Kirk Drive	Cameron Boulevard	Alumni Way				
Mallard Creek Church Road	Mary Alexander Road					
N. Tryon St.	E. McCullough Drive					
University City Boulevard	JW Clay Boulevard	University City Road				
W.T. Harris Boulevard	Mary Alexander Road					
	McCullough Drive					
West Rock River Road						
The remaining roadways are local streets that carry low traffic volumes, have slow operating speeds and provide access to individual properties.						
Source: Charlotte Department of Transportation, October 2013						

See Map 24: Street Network/Classifications, page 172 for the location of thoroughfares within the northeast corridor. Also see Map 25: Planned and Programed Projects, page 173.

Streets in Charlotte are also classified according to the *Urban Street Design Guidelines* (USDG) into the following five street types: Main Streets, Avenues, Boulevards, Parkways and Local Streets. These street types fall along a continuum, with the Main Street being the most pedestrian-oriented street type and the Parkway being the most auto-oriented street type. USDG street classifications are discussed and addressed in detail within the concept plan.



Charlotte
Transportation Center,
located between
Fourth and Trade
Streets, is CATS' main
transportation center.
The CTC serves as a
multimodal transfer
center, providing
customers with
connections to the
LYNX Blue Line light
rail, Amtrak, as well
as the local, express,
and regional express
bus routes.



#### **Existing Mobility**

#### **Public Transportation**

CATS operates a fleet of 407 buses (CATS Bus Fleet Management Plan, October 2011) and 20 light rail vehicles system wide. As of January 2012, 16 bus routes operated within the Northeast Corridor, with eight local bus routes, three UNC Charlotte shuttle routes, two neighborhood circulator routes and three express routes. See **Map 26**: Existing Bus Network, page 174.

Annual Ridership for Routes Serving the Northeast Corridor						
Route Number	Route Name	Type of Route	FY 10	FY 11	Percent Change	System-wide Rank FY 11
3	The Plaza	Local	500,583	511,173	2.1%	11
4	Country Club	Local	252,408	247,969	-1.8%	25
11	North Tryon	Local	1,453,768	1,600,654	10.1%	1
13	Nevin Road	Local	345,218	371,443	7.6%	21
22	Graham St.	Local	404,372	441,306	9.1%	16
23	Shamrock Drive	Local	562,437	580,935	3.3%	9
29	UNCC/South Park	Local	112,484	120,907	7.5%	40
39	Eastway Drive	Local	425,906	457,462	7.4%	14
47	UNCC Nugget Shuttle	Shuttle	105,879	78,630	-25.7%	51
49	UNCC Niner Shuttle	Shuttle	125,576	68,838	-45.2%	54
501	UNCC CRI Shuttle	Shuttle	1	107,613	1	1
54X	University Research Park	Express	197,416	184,131	6.7%	34
79X	Concord Mills Express	Express (Sat only)	79,681	78,728	43.3%	73
80X	Concord Express	Express Plus	79,681	78,728	-1.2%	50
81X <sup>2</sup>	Wachovia CIC Shuttle	Express	43,716	10,467	-76.06%	72
204	LaSalle	Neighborhood	110,392	131,535	19.2%	38
211	Hidden Valley	Neighborhood	250,898	294,143	17.2%	24
Corridor	Total		4,975,757	5,293,130	6.4%	
Bus Syste	m Total		18,981,140	19,653,118	3.5%	
Light Rai	1		4,812,176	4,769,934	-0.9%	
Total Bus	and Light Rail		23,793,316	24,423,052	2.7%	

Source: CATS Market Research Ridership by Route FY 2010 & 2011

<sup>&</sup>lt;sup>1</sup> Route Discontinued in FY 2010, Redesigned and Returned to Service in FY 2011.

<sup>&</sup>lt;sup>2</sup> Route was Discontinued in FY 2011





CATS Local Bus Route Number 11 serves passengers along most portions of N. Tryon St. from the Charlotte Transportation Center to the I-485 area.



#### **Existing Mobility**

#### Travel Time

The existing bus routes within the Northeast Corridor currently operate in mixed-traffic on congested roadways. As a result, several of the Northeast Corridor routes consistently experience delays above the system-wide average. The table presents the Northeast Corridor routes ranked by schedule adherence as compared to the system average.

Schedule Adherence for Routes Serving the Northeast Corridor						
	Route Number	Route Name	Type of Route	Percent Late	Rank by schedule Adherence	
	4	Country Club	Local	5.3%	8	
	204	LaSalle	Circulator	5.9%	14	
AT OR System	23	Shamrock Drive	Local	7.3%	21	
	3	The Plaza	Local	7.7%	23	
	13	Nevin Road	Local	8.9%	35	
Perform AT ABOVE Sys Average	81X1	Wachovia CIC	Express	9.4%	42	
Pe <b>AI</b> Av		System	10.7%			
	39	Eastway	Local	10.8%	46	
	22	Graham St.	Local	13.7%	58	
<b>&gt;</b>	79X	Concord Mills Express	Regional Express (Saturday Only)	15.5%	66	
9ge	80X	Concord	Regional Express	15.8%	67	
Perform <b>BELOW</b> System Average	211	Hidden Valley	Circulator	19.2%	69	
[ ii. ]	11	N. Tryon	Local	19.5%	70	
rfor 7ste	29	UNCC/SouthPark	Local	19.8%	71	
Pe Sy	54X	University Research Park	Express	20.0%	72	
	Source: CATS Schedule Adherence by Route FY 2011 (July 1, 2010 - June 30, 2011) <sup>1</sup> Route Discontinued in FY 2011 (Routes 47, 49 & 50 (UNCC Shuttles) are not tracked for schedule adherence due to the nature of the service)					





Bike commuting offers an alternative to vehicular use in the Uptown area.



A pedestrian pathway, with landscaping and lighting, runs alongside the South LRT line.

#### **Existing Mobility**

#### Bikeways and Major Pedestrian Ways

Miles of Bicycle Facilities		
Facility Type	Miles within:	
	Entire BLE	Charlotte
Bicycle lanes	7	75
Signed bike routes	3	55
Greenways and Off- street paths	6	44
Source: Charlotte Department of		

Transportation, Oct 2013

#### Bicycle Facilities

Over the past decade, the City has made a significant effort to improve conditions for bicyclists through the creation of bicycle lanes, signed bike routes, off-street paths and higher standards for street connectivity. However, the BLE corridor lacks a substantial network of bicycle facilities. For example, only 5.6% of thoroughfares contain bicycle lanes. The total miles of bicycle facilities within the northeast corridor are documented in the table to the left.

For the location of existing bicycle facilities within the northeast corridor, see Map 27: Bikeways, page 175.

According to the City's *Urban Street Design Guidelines*, bicycle lanes are the expected bicycle facility on all new or retrofitted avenues or boulevards, while off-street paths may be provided along parkways (See Map 24: Street Network/Classifications, page 174). As of 2013, bike lanes were marked on only 4.3% of thoroughfares in the BLE corridor.

The 26-mile Cross Charlotte Trail, included in the adopted 2014-2018 Capital Improvement Plan, is intended to create a seamless, multi-use trail connecting across Charlotte from Pineville to the Cabarrus County line. Approximately 16 miles of the trail will traverse the northeast corridor, including some existing segments of Little Sugar Creek and Toby Creek greenways.

#### Pedestrian Facilities

The state of pedestrian infrastructure within the northeast corridor is inadequate. Only 25 percent of thoroughfares and 28 percent of local streets have sidewalk on at least one side of the street. The continuity of the sidewalk network is minimal or non-existent in many areas, especially within the University City transit station areas.

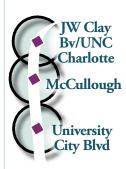
According to the City's *Urban Street Design Guidelines* (2007), sidewalks are expected on both sides of all thoroughfares and local streets. Sidewalks will be constructed in some areas as part of the Blue Line Extension, but creating a better pedestrian network throughout the station areas will rely on other capital investments and private development opportunities.





Toby Creek Greenway connects University City Blvd. to the Mallard Creek Greenway through the UNC Charlotte campus including the University Ecological Reserve.

# Infrastructure and Public Facilities



#### **Schools**

UNC Charlotte is the only school within the University City Area Plan boundaries. Spanning 648 acres, the UNC campus incorporates 25% of the *University City Area Plan/LYNX Blue Line Extension Transit Station Area Plans Update* plan area. Charlotte Mecklenburg Schools (CMS) is currently undertaking a project to relocate Newell Elementary School from 8601 Old Concord Rd. to 431 Rocky River Rd. W. The site is outside the project area, however the change effects the community that is the topic of this plan. Additionally, CMS will open a high school on UNC Charlotte main campus in 2014. The school will offer a new early college program with a focus on Science, Technology, Engineering and Mathematics (STEM).

#### Parks, Greenways and Recreation Facilities

*Kirk Farm Fields Community Park* – A 36 acre park connected to the eastern end of the Clark's Creek/Mallard Creek Greenway. Construction will soon start on a branch of the greenway to extend through the main campus of UNC Charlotte.

**Toby Creek Greenway** – A two-mile greenway that follows Toby Creek from University City Blvd/NC 49 through the UNC Charlotte campus to connect with Mallard Creek Greenway.

**Mallard Creek Greenway** – A seven-mile greenway which begins in Kirk Farm Fields Park, passes under I-85, through University Research Park and into many university area neighborhoods.

#### Libraries

The University City Regional Branch Library is located within the plan area boundary.







University City Regional Library is located on W.T. Harris Blvd.

University City Division of CMPD patrols 46.8 square miles of the area.

Existing
Infrastructure &
Public Facilities

#### Police, Fire and Post Offices

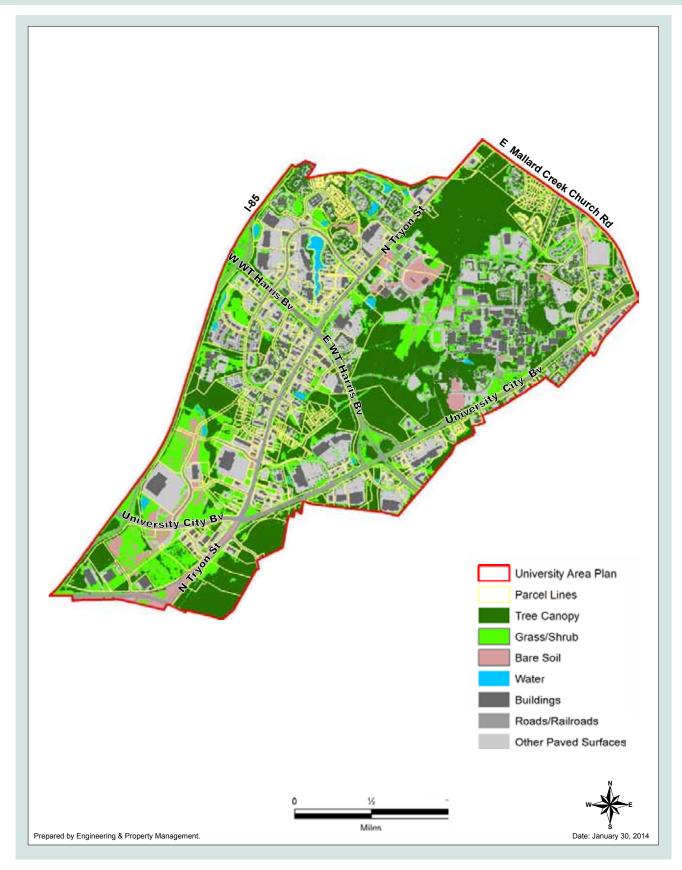
There is one Police and one Fire Station within the plan area boundary. They are the Police's University City Division and Fire Station #27 (McCullough Station Area).

There is one U.S. Post Office on University City Blvd. on UNC Charlotte main campus near the UNC Charlotte Main station.

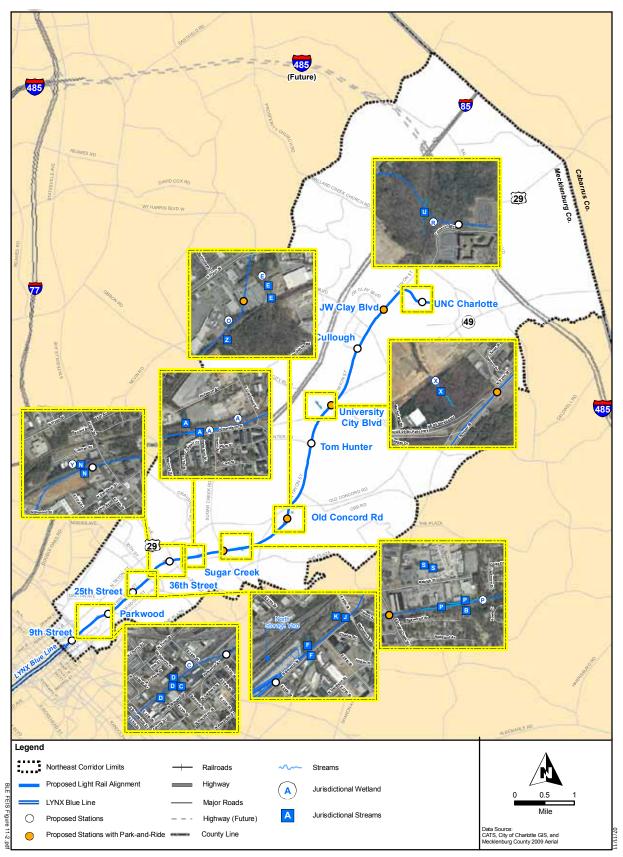
#### Water and Sewer

Public water and sewer is provided by Charlotte-Mecklenburg Utilities. Drinking water comes from Mountain Island Lake and Lake Norman in the northern part of Mecklenburg County and is treated at one of three treatment plants in the County. Wastewater is collected and treated in one of five treatment plants.

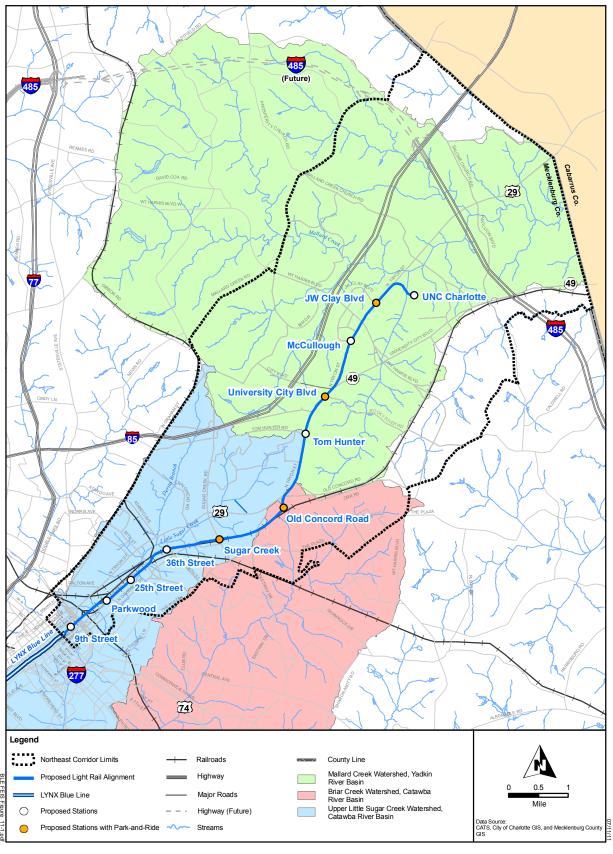
Map 11: Land Cover and Tree Canopy



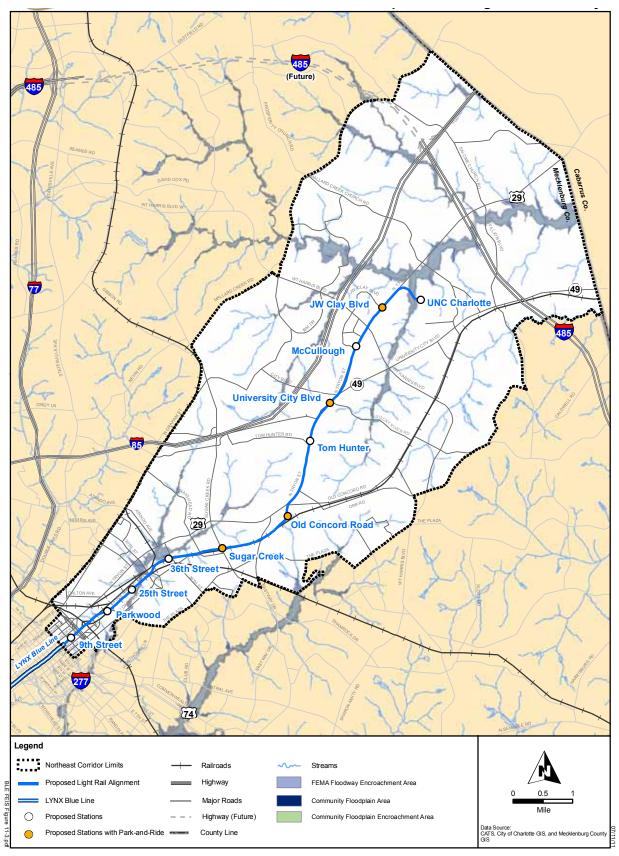
# Map 12: Waters and Wetlands



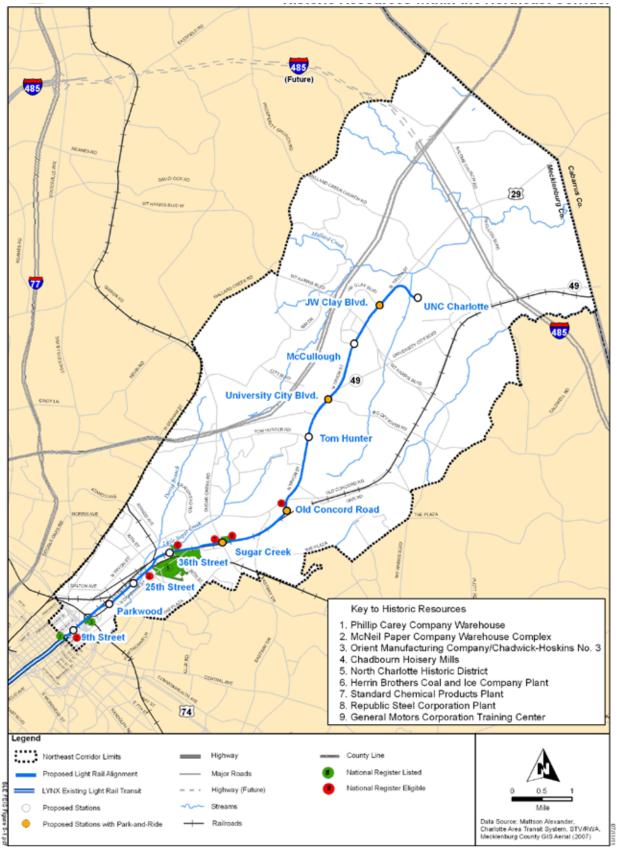
# Map 13: Watersheds



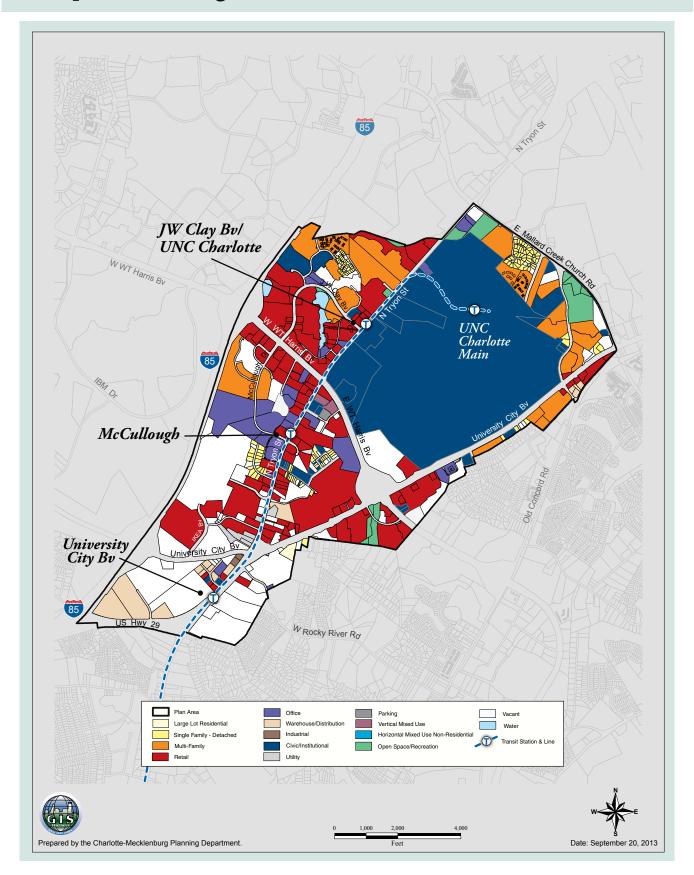
# Map 14: Floodplains and Regulated Floodways



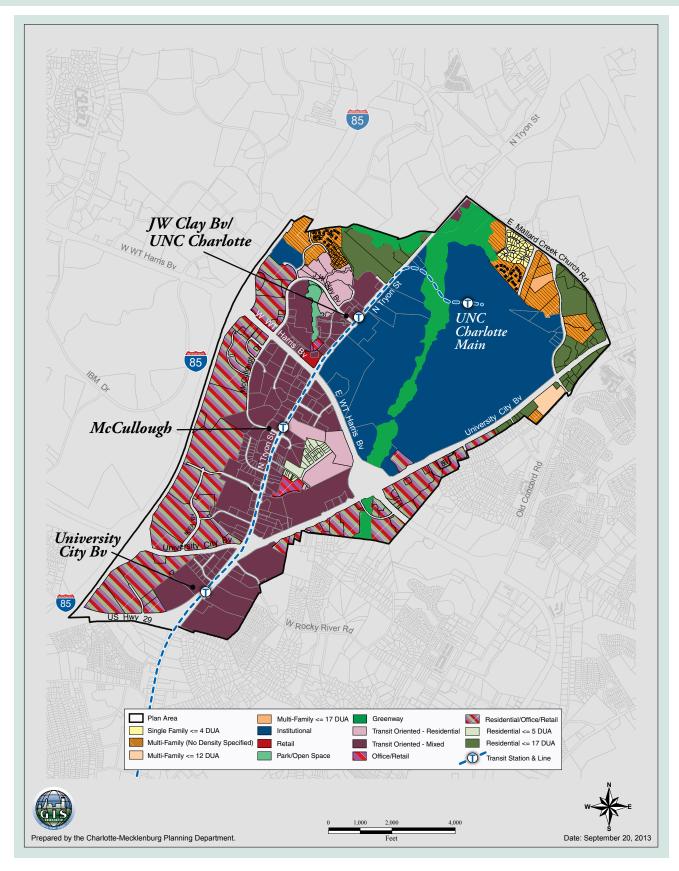
#### Map 15: Historic Areas/Properties



### Map 16: Existing Land Use



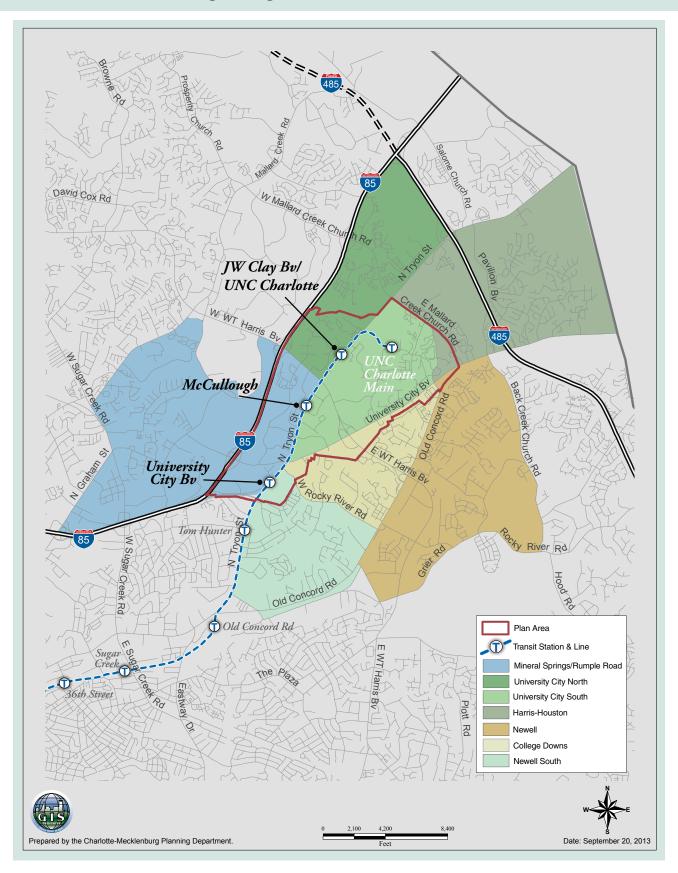
Map 17: Adopted Future Land Use



# Map 18: Adopted Area Plans within University City

map to come

Map 19: Existing Neighborhoods

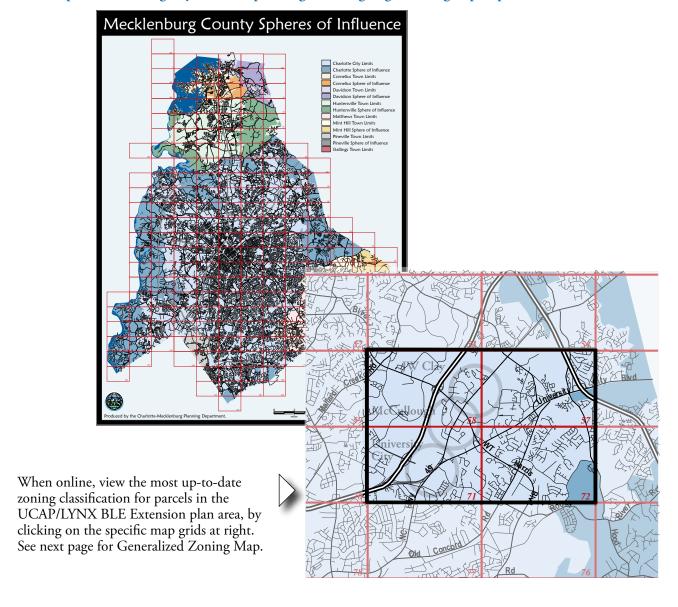


#### Map 20: Existing Zoning

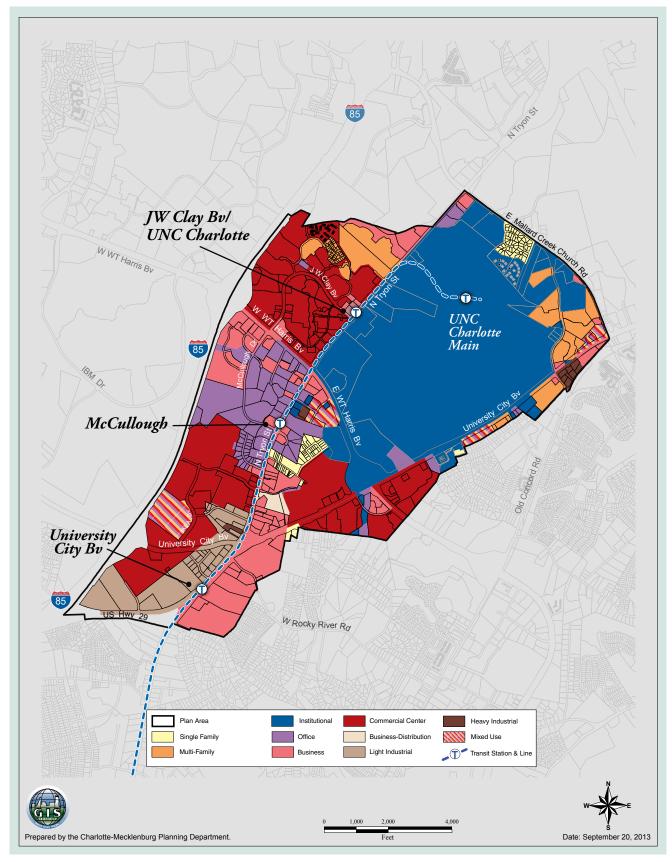
## **Zoning Map** *What is it?*

The Zoning Maps are rectangular maps based on the NC State Plan Coordinate System that show zoning designation for property. The numbering system starts in the northern part of Mecklenburg County and ends in the southern part of the County. There are 145 Zoning Maps. (not all Zoning Map Numbers are within the City of Charlotte's Zoning jurisdiction) Zoning Maps for property within Charlotte zoning jurisdiction are updated after the Charlotte City Council approves a Rezoning Petition.

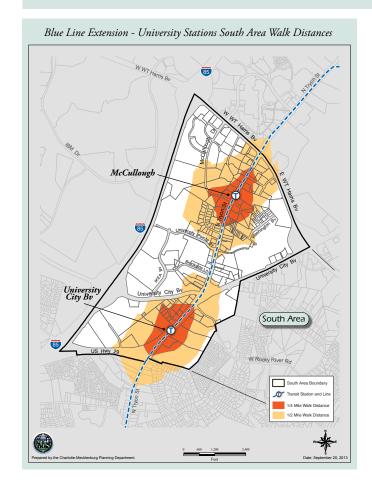
Visit our website at http://charmeck.org/city/charlotte/planning/Rezoning/Pages/ZoningMaps.aspx

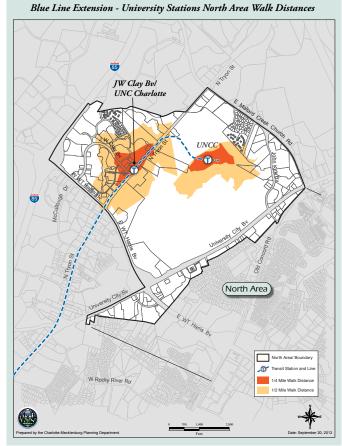


Map 21: Generalized Zoning

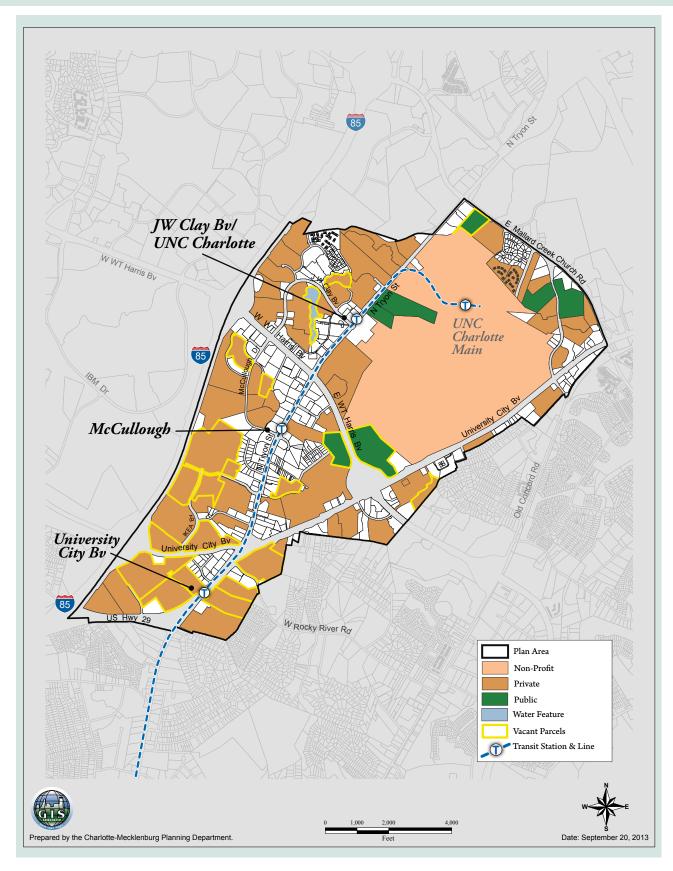


### Map 22: 1/2 & 1/4 Mile Walk Distances

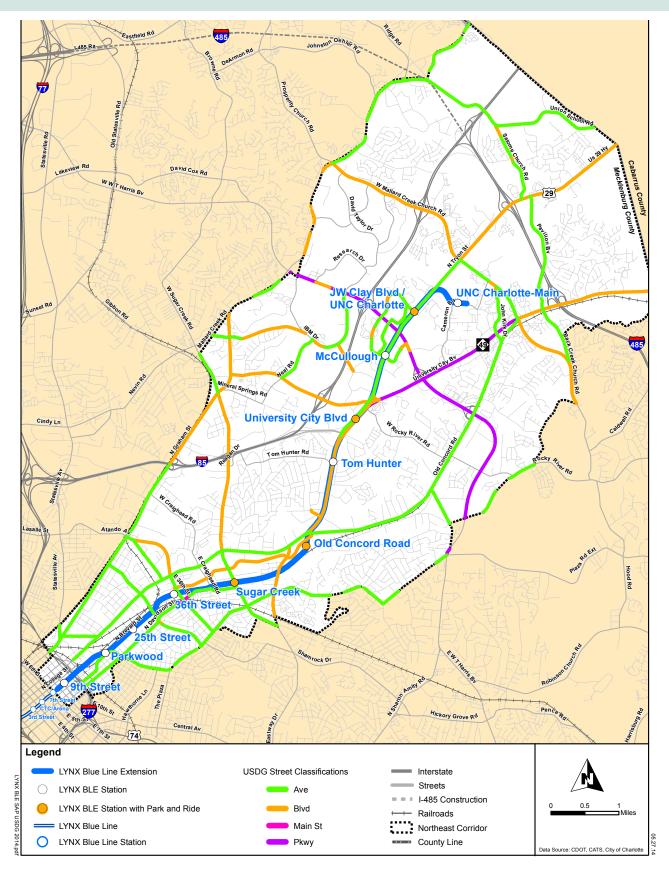




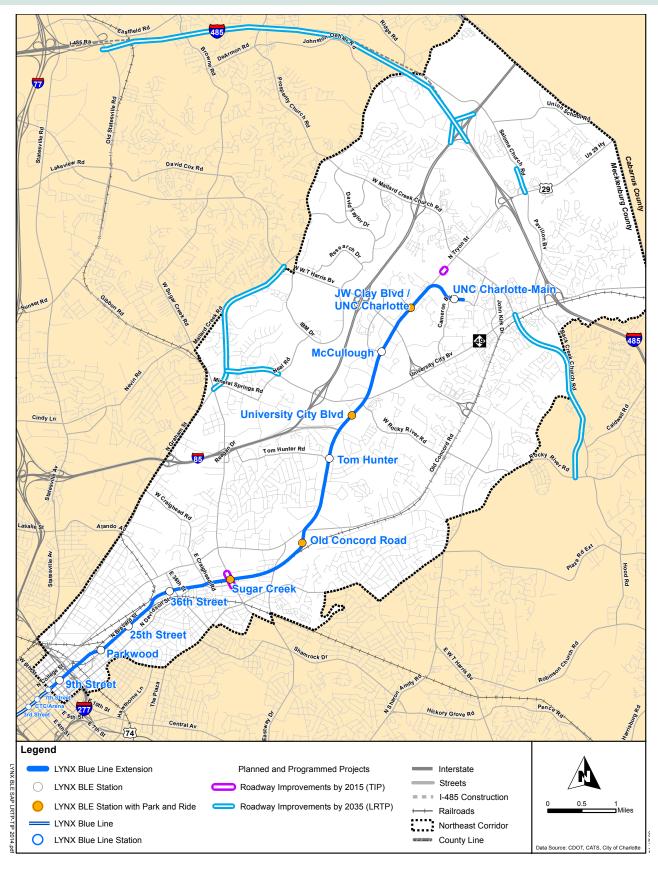
Map 23: Redevelopment Potential of Large Parcels



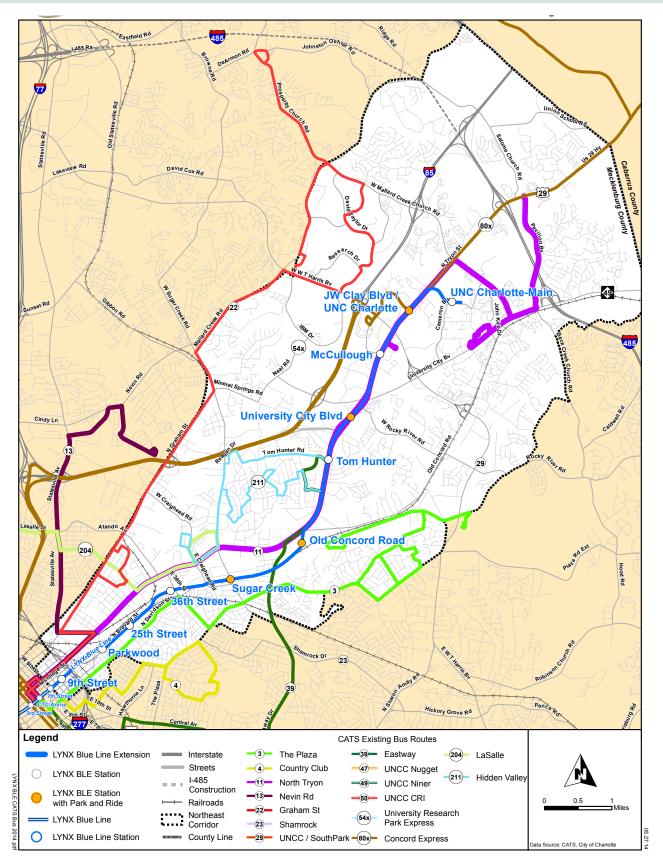
# Map 24: Street Network/Classifications



Map 25: Planned and Programed Projects



### Map 26: Existing Bus Network



### Map 27: Bikeways

