

6.0 NEIGHBORHOODS, COMMUNITY SERVICES AND ENVIRONMENTAL JUSTICE

This chapter provides an assessment of potential impacts to neighborhoods, community facilities and special populations located within the proposed LYNX Blue Line Extension Northeast Corridor Light Rail Project (LYNX BLE). Neighborhoods within the study area are described and community facilities are identified. Potential direct effects to communities and special populations are discussed in terms of the long-term direct effects associated with the alternatives under study in this Final Environmental Impact Statement (EIS).

6.1 Changes to this Chapter since the Draft EIS

This chapter has been revised to reflect the identification of the Light Rail Alternative as the Preferred Alternative for the LYNX BLE. Additionally, since the Draft EIS, design of the LYNX BLE has been refined as described in Chapter 2.0: Alternatives Considered. These refinements are included in this chapter and reflected in the analysis of potential impacts to neighborhoods, community facilities and special populations. It should be noted that while the U.S. Census 2010 has been completed, and some data from that census is available, the analysis performed for the Draft EIS and this Final EIS commenced in 2008, prior to the U.S. Census 2010. Therefore, this chapter has not been updated to include U.S. Census 2010 data.

6.2 Affected Environment

The following sections describe the existing conditions of corridor neighborhoods; community services and social service providers; and environmental justice communities of concern. The study area for the assessment of neighborhoods includes all neighborhood statistical areas (NSAs) located adjacent to the Preferred Alternative. The study area for the assessment of environmental justice populations includes Census tracts located within or adjacent to the Preferred Alternative. Existing community facilities within ½-mile of the Preferred Alternative were identified. The environmental justice study area is defined as any Census tract partially or wholly within ½-mile of the Preferred Alternative. Data was collected at the block group level for the study area and for Mecklenburg County for comparative purposes (including for minority households, transit-dependent populations and low-income households) and was aggregated to the Census tract level for presentation within this Final EIS. The entire county was selected as the appropriate comparison tool because of the potential regional influence of this proposed project and because it best represents the regional project area.

6.2.1 Neighborhoods

Descriptions of study area neighborhoods are based on site visits, aerial photography and the *Charlotte Neighborhood Quality of Life Study 2008*, completed for the City of Charlotte Neighborhood Development and the Charlotte-Mecklenburg Planning Commission by the University of North Carolina at Charlotte's (UNC Charlotte's) Metropolitan Studies Group. The *Charlotte Quality of Life Study 2008* is part of a series of studies conducted to evaluate living conditions in Charlotte's neighborhoods. The study report includes a profile for each of the city's 173 NSAs and rates each neighborhood's condition and quality of life relative to those in other NSAs (using the following dimensions to develop neighborhood profiles: social, physical, crime, and economic conditions).

Overall, the Northeast Corridor has relatively healthy neighborhoods and, in 2008, none of the neighborhoods located along the proposed project corridor are identified as "challenged." Table 6-1 presents the results of the *Charlotte Neighborhood Quality of Life Study 2008* for the neighborhoods in the Northeast Corridor study area. The neighborhoods adjacent to the Preferred Alternative are presented generally in geographic order from Center City Charlotte to the Mecklenburg-Cabarrus County line and are also shown in Figure 6-1.

Following Table 6-1 is a brief description of each neighborhood located within the study area. Calculations for the percentage of persons within a specific neighborhood with access to transit are based on the percentage of NSA residents living within walking distance (¼-mile) of a bus-stop. Pedestrian friendliness of each neighborhood was rated by comparing the total length of sidewalks to the total length

of streets within each neighborhood. The data and calculations are from the *Charlotte Neighborhood Quality of Life Study 2008*.

**Table 6-1
Summary of Northeast Corridor Neighborhood Demographics and Quality of Life Index**

NSA	Neighborhood	Population	Median Household Income	Average Home Value	Overall Quality of Life	Trend Change 2002-2008
67	First Ward	2,172	\$32,776	\$314,023	Stable	No Change
32	Fourth Ward	3,006	\$47,357	\$316,706	Stable	Trending Up
51	Belmont	2,487	\$26,215	\$97,308	Stable	Trending Up
45	Optimist Park	733	\$24,597	\$109,614	Stable	Trending Up
35	Lockwood	921	\$22,321	\$75,262	Transitioning	Trending Up
46	Villa Heights	2,332	\$31,452	\$87,837	Transitioning	Trending Up
36	Tryon Hills	2,172	\$29,170	\$53,681	Transitioning	Trending Up
48	Plaza-Shamrock	3,513	\$32,806	\$93,462	Transitioning	No Change
44	North Charlotte	3,443	\$29,231	\$201,820	Stable	Trending Up
40	Sugaw Creek/ Ritch Avenue	2,666	\$29,785	\$95,897	Transitioning	Trending Up
142	Shannon Park	7,110	\$39,523	\$87,892	Transitioning	No Change
141	Hampshire Hills	6,055	\$40,389	\$85,318	Transitioning	Trending Down
140	Hidden Valley	12,127	\$34,746	\$70,867	Transitioning	No Change
139	Newell South	2,240	\$47,743	\$140,536	Transitioning	Trending Down
133	Mineral Springs/ Rumple Road	6,938	\$57,205	\$126,555	Transitioning	No Change
138	College Downs	5,779	\$38,828	\$102,230	Stable	Trending Up
134	University City South	5,200	\$35,784	\$83,173	Transitioning	No Change
132	University City North	5,994	\$59,086	\$127,768	Transitioning	Trending Up
135	Harris-Houston	7,610	\$50,776	\$120,998	Transitioning	Trending Down

Ratings are defined as follows:

- Stable – Neighborhoods identified as above average and having few neighborhood and social problems, low rates of crime, few physical needs, sound housing and high levels of economic vitality.
- Transitioning – Neighborhoods characterized as average on most dimensions but may display weakness on one or more dimensions, indicating a possible shift in the overall quality of life. Transitioning status can be of an improving or declining position, relative to other Charlotte NSAs.
- Challenged – Neighborhoods that scored low-to-moderate on all four dimensions and characteristic of a lower quality of life and “at risk” on multiple dimensions. Neighborhoods are characterized by high rates of physical deterioration, crime, social needs and low rates of income change (even declines). Challenged neighborhoods generally have a below average quality of life in comparison to other Charlotte NSAs.

A 6-year analysis (2002-2008) identified changes from the previous ratings and are generally defined as follows:

- Trending Up – Neighborhoods experiencing improvements in performance with a cumulative positive change in variable scores.
- No Change – These neighborhoods experienced slight or modest changes in scores (improving or declining).
- Trending Down – Neighborhoods that experienced declining scores for individual and cumulative variables.

Source: *Charlotte Neighborhood Quality of Life Study 2008*

First Ward (NSA-67)

The First Ward neighborhood is located in Center City Charlotte and is part of the High Intensity Urban Core District. The neighborhood is bound on the north and east by Interstate 277 (I-277) and extends south to East Trade Street and west to North Tryon Street/US-29. First Ward encompasses a mix of uses including offices, institutional and high-density residential. The neighborhood is also home to several

community facilities including a fire station and a school. A new park, called First Ward Park, is also proposed for the neighborhood and will be an urban park (planned for completion in 2012) within a mixed-use development between East 7th Street, East 9th Street and North Brevard Street. The park will be constructed by a private developer as part of a public-private partnership and also includes construction of the UNC Charlotte Uptown Campus (currently under construction) on the site. The neighborhood is well developed with sidewalks and within walking distance to many amenities within Center City Charlotte and approximately 100 percent of residents have access to public transportation.

Fourth Ward (NSA-32)

Fourth Ward is located northwest of First Ward in Center City Charlotte, between I-277 to the north, North Tryon Street/US-29 to the east, East Trade Street to the south and Smith Street to the west. Fourth Ward is part of the High Intensity Urban Core District and includes a mixture of land uses including both single-family and multi-family residential, and some neighborhood retail. The neighborhood also contains community facilities including a police station, a fire station and several religious institutions. The location provides walk-to-work opportunities to most of the high-rise office buildings located in Center City Charlotte and approximately 100 percent of residents have access to public transportation.

Belmont (NSA-51)

Belmont is located east of Center City Charlotte, just outside of I-277, within the Industrial Communities District. The neighborhood is bound by North Davidson Street to the west, Parkwood Avenue to the north, Hawthorne Lane to the east and East 10th Street to the south. The area was historically an industrial and working-class mill neighborhood and much of the historic mill housing is still present. The proximity of the neighborhood to Center City Charlotte has made it a popular area for redevelopment and in-fill housing, including industrial mill conversions throughout. The primary land use in the neighborhood is single-family residential with industrial and neighborhood commercial uses scattered throughout. The neighborhood also includes two middle schools, several parks, a greenway/trail, churches and a library. Approximately 100 percent of residents have access to public transportation.

Optimist Park (NSA-45):

Optimist Park is located along the west side of Belmont, adjacent to the Norfolk Southern Intermodal Facility between I-277 and 30th Street/Matheson Avenue. The neighborhood is within the Industrial Communities District and is dominated by industrial uses (primarily along the existing railway corridor), with a concentration of single-family homes in the southern portion. A few multi-family and commercial uses are scattered throughout, as well as several religious institutions. The Little Sugar Creek Greenway runs along portions of Optimist Park and a future extension of the greenway is proposed through the northern portion of the neighborhood. Approximately 100 percent of residents have access to public transportation.

Lockwood (NSA-35)

Lockwood is located northeast of Center City Charlotte, roughly between Graham Street, West 24th Street, the existing railway and I-277. This neighborhood is part of the Industrial Communities District, and land use in this neighborhood is primarily industrial with a small concentration of single-family residences on the western side of North Tryon Street/US-29. The neighborhood houses several religious institutions and the Charlotte Amtrak Station. The pedestrian friendliness of the neighborhood is rated as medium and approximately 100 percent of residents have access to public transportation.

Villa Heights (NSA-46)

Villa Heights is part of the Industrial Communities District and is located north of Belmont and east of the northern portion of Optimist Park. The neighborhood is bordered by Matheson Avenue to the north, Clemson Avenue and The Plaza to the east, Parkwood Avenue to the south and North Davidson Street to the west. The neighborhood primarily contains single-family residences, with some commercial uses fronting The Plaza and industrial uses along North Davidson Street. Cordelia Park is located in the southwestern portion of the neighborhood. The pedestrian friendliness of the neighborhood is rated as low and approximately 90 percent of residents have access to public transportation.

Tryon Hills (NSA-36)

Tryon Hills is located to the north of the Lockwood neighborhood and is roughly bordered by 24th Street, North Graham Street, an existing railway and North Tryon Street/US-29. Tryon Hills is part of the Industrial Communities District and contains a mixture of multi- and single-family housing bordered by industrial uses. Tryon Hill Park is located within the neighborhood, but there are relatively few community facilities otherwise. The pedestrian friendliness of the neighborhood is rated as low; however, approximately 100 percent of residents have access to public transportation.

Plaza-Shamrock (NSA-48)

Plaza-Shamrock is located at the eastern edge of the Northeast Corridor and is bordered by The Plaza, Eastway Drive, East Ford Road/Shamrock Drive/Hillard Drive and Matheson Avenue. The neighborhood is not located within a specific design district due to its distance from the proposed project corridor. Land use in the neighborhood is predominantly single-family residential, with a few concentrations of multi-family residential. The neighborhood also includes small areas of commercial and industrial uses and there are two schools and several religious organizations. The pedestrian friendliness of the neighborhood is rated as low; however, approximately 100 percent of residents have access to public transportation.

North Charlotte (NSA-44)

North Charlotte is bordered by an existing railway corridor to the north, Eastway Drive to the east, The Plaza to the south, and Clemson Avenue and Matheson Avenue to the west. The neighborhood encompasses a mix of residential, commercial and industrial uses. The western portion of North Charlotte is part of the Historic Urban Communities District and the eastern portion is part of the Established Suburban Communities District. Much of the neighborhood is designated as a historic district (North Charlotte Historic District). In recent years, North Charlotte, particularly the NoDa community, has seen redevelopment, infill development and adaptive reuse of former mills, as well as residential renovations. The North Charlotte neighborhood also contains several community facilities including churches, schools, parks and a YMCA. The pedestrian friendliness of the neighborhood is rated as low and approximately 85 percent of residents have access to public transportation.

Sugaw Creek/Ritch Avenue (NSA-40)

Sugaw Creek/Ritch Avenue is located north and east of Tryon Hills and is bordered by North Graham Street, I-85, Sugar Creek Road and the existing rail corridor. The neighborhood is located within both the Historic Urban Communities District and the Established Suburban Communities District. The western portion of the neighborhood is composed of industrial and commercial uses, while the eastern portion includes single-family and multi-family residential uses. Some single-family residential uses can also be found scattered throughout the industrial and commercial uses. A school, police station and a library are also located within this neighborhood. The pedestrian friendliness of the neighborhood is rated as low and approximately 90 percent of residents have access to public transportation.

Shannon Park (NSA-142)

Shannon Park is located at the eastern edge of the Northeast Corridor and is bordered by The Plaza, Eastway Drive, Shamrock Drive and Tipperary Place. The neighborhood is not located within a specific design district due to its distance from the proposed project corridor. Land use in the neighborhood is predominantly single-family residential and there are several religious institutions. The pedestrian friendliness of the neighborhood is rated as low and approximately 75 percent of residents have access to public transportation.

Hampshire Hills (NSA-141)

Hampshire Hills is located north of North Charlotte. The neighborhood is primarily bound by North Tryon Street/US-29, Orr Road, Newell-Hickory Grove Road, The Plaza and Eastway Drive. A small western portion of the neighborhood is bordered by the existing railway, Sugar Creek Road and North Tryon Street/US-29. The neighborhood is located within the Established Suburban Communities District and is composed of residential, industrial and commercial uses. Several religious institutions and a large district park (Eastway Park) are also located within this neighborhood. The pedestrian friendliness of the neighborhood is rated as low and approximately 90 percent of residents have access to public transportation.

Hidden Valley (NSA-140)

Hidden Valley is located east of the Sugaw Creek/Ritch Avenue neighborhood, between Sugar Creek Road, I-85 and North Tryon Street/US-29. The neighborhood is located within the Established Suburban Communities District and consists of a core of single-family homes and multi-family complexes. Commercial and industrial uses are located along North Tryon Street/US-29 and near the Sugar Creek Road/I-85 interchange. Hidden Valley also includes two schools, several religious institutions and the Hidden Valley Eco Park (stormwater restoration area). The pedestrian friendliness of the neighborhood is rated as low and approximately 96 percent of residents have access to public transportation.

Newell South (NSA-139)

Newell South is located northeast of Hampshire Hills, between Rocky River Road, Old Concord Road, Orr Road and North Tryon Street/US-29. The neighborhood is located within the Established Suburban Communities District, and land use is predominantly single-family residential, with industrial and commercial uses along North Tryon Street/US-29. Several religious institutions are located within the neighborhood and a charter high school is located along North Tryon Street/US-29. The pedestrian friendliness of the neighborhood is rated as low and 20 percent of residents have access to public transportation.

Mineral Springs/Rumple Road (NSA-133)

Mineral Springs/Rumple Road is located west of College Downs and University City North and directly adjacent to “the weave.” The neighborhood is bordered by I-85, North Tryon Street/US-29, W.T. Harris Boulevard, IBM Drive, Mallard Creek Road, Sugar Creek Road and North Graham Street. The neighborhood contains a large portion of the University City core commercial area and is located in an area of transition from the Established Suburban Communities District to the New Suburban Communities District. There are a variety of land uses within the neighborhood including single- and multi-family residential, office, and commercial uses, and vacant land. There is a large concentration of commercial uses at the intersection of W.T. Harris Boulevard and North Tryon Street/US-29. The pedestrian friendliness of the neighborhood is rated as low and approximately 50 percent of residents have access to public transportation.

College Downs (NSA-138)

College Downs is located northeast of Newell South, east of University City Blvd./NC-49 and north of Rocky River Road. A small portion of the neighborhood is located along North Tryon Street/US-29 and the neighborhood is within the New Suburban Communities District. Land uses throughout College Downs include commercial and single- and multi-family residential. However, much of the existing land use is primarily commercial and undeveloped land. There are no community facilities within this neighborhood. The pedestrian friendliness of the neighborhood is rated as low and 30 percent of residents have access to public transportation.

University City South (NSA-134)

University City South is located north and west of College Downs, between North Tryon Street/US-29, Mallard Creek Church Road, and University City Blvd./NC-49 and is part of the University City Core District. Institutional land uses dominate this neighborhood, with UNC Charlotte and Carolinas Medical Center-University (CMC-University) making up the northern two-thirds of the area. The southern tip of the neighborhood includes commercial and office park uses. Many of these uses are located along North Tryon Street/US-29. Residential areas include a small area of single-family residences south of W.T. Harris Boulevard and a mix of single- and multi-family residences north of UNC Charlotte along Mallard Creek Church Road. The pedestrian friendliness of the neighborhood is rated as low; however, approximately 100 percent of residents have access to public transportation.

University City North (NSA-132)

University City North is located north and west of University City South and is part of the University City Core District. The neighborhood is bordered by Interstate I-85, Interstate I-485, North Tryon Street/US-29 and W.T. Harris Boulevard. The area includes a mix of commercial and higher-density residential uses, as well as some undeveloped land. Large commercial development can be found near the intersection of W.T. Harris Boulevard and North Tryon Street/US-29. There are no community facilities located within this

neighborhood. The pedestrian friendliness of the neighborhood is rated as low; however, approximately 100 percent of residents have access to public transportation.

Harris-Houston (NSA-135)

Harris-Houston is located northeast of University City South, between North Tryon Street/US-29, the Mecklenburg-Cabarrus County line, University City Blvd./NC-49 and Mallard Creek Church Road. The neighborhood is located within the New Suburban Communities District (as identified in the Draft EIS). South of I-485, the neighborhood includes undeveloped land, industrial uses and some residential uses. However, the majority of residents within this neighborhood live on the northern side of I-485. The neighborhood also includes a large park (Kirk Farm Fields) and a greenway trail (Mallard Creek Greenway). The pedestrian friendliness of the neighborhood is rated as low and only 40 percent of residents have access to public transportation.

6.2.2 Community Services and Social Service Providers

Community services/facilities and social service providers include, educational, religious and healthcare facilities to public libraries, police/fire stations and post offices located within a ½-mile of the Preferred Alternative (Table 6-2). The evaluation of the effect of the proposed alternative on neighborhoods and communities includes the consideration of the potential direct impacts of the project on these services/facilities, as these services contribute to the overall quality of life and sense of community in these areas.

**Table 6-2
Community Services and Social Service Providers**

Facility Name	Address	Facility Type
Police Station – Headquarters	601 East Trade Street	Police Station
Fire Station #1	221 North Myers Street	Fire Station
Children & Family Services Center	601 East 5th Street	Government Facility
Carole A. Hoefner Community Services Center	610 East 7th Street	Community Center
UNC Charlotte – Uptown Campus (Existing)	220 North Tryon Street	University
Police Station - Central Division	119 East 7th Street	Police Station
First United Presbyterian Church	406 North College Street	Religious Institution
Main Branch Library	310 North Tryon Street	Library
First United Methodist Church	501 North Tryon Street	Religious Institution
Fire Station #4	525 North Church Street	Fire Station
Fire Station – Administrative Division	228 East 9th Street	Government Facility
Hal Marshall Services Center Annex	618 North College Street	Government Facility
Hal Marshall Center	700 North Tryon Street	Government Facility
First Ward Elementary School	715 North Caldwell	School
Mecklenburg County Services Center	624 College Street	Government Facility
United Baptist Association	2313 Vinyard Lane	Religious Institution
First Ward Community Center	1410 North Tryon Street	Community Center
Duncan Memorial Methodist Church	420 East 15th Street	Religious Institution
Good Shepherd Baptist Church	1139 North Alexander Street	Religious Institution
Fifteenth Street Church of God	615 East 15th Street	Religious Institution
Episcopal Diocese of North Carolina	425 East 17th Street	Religious Institution
Corinthian Missionary Baptist Church	1404 North Church Street	Religious Institution
Bethlehem Fire Baptist Church	421 East 18th Street	Religious Institution
Jerusalem Pentecostal	421 East 18th Street	Religious Institution
Belmont Center Branch Library	700 Parkwood Avenue	Library
Seigle Avenue Church of God	1620 Seigle Avenue	Religious Institution
Villa Heights Elementary School	800 Everett Place	School
Greater Myers Pentecostal Church	606 Jordan Place	Religious Institution
First Mount Calvary Baptist	209 West 28th Street	Religious Institution
New Life Theological Seminary	3117 Whiting Avenue	Religious Institution
Highland Mill Montessori School	3201 Clemson Avenue	School
Johnson Branch YMCA	3025 North Davidson Street	YMCA

Table 6-2 (continued)
Community Services and Social Service Providers

Facility Name	Address	Facility Type
CMC Health Center	3025 North Davidson Street	Medical Center
Fire Station #7	3210 North Davidson Street	Fire Station
Union Missionary Baptist Church	721 East 35th Street	Religious Institution
Church of Jesus Christ of Latter-Day Saints	600 East 36th Street	Religious Institution
North Charlotte Presbyterian Church	719 East 36th Street	Religious Institution
Spencer Memorial Methodist Church	1025 East 36th Street	Religious Institution
Plaza Road Pre-K School	1000 Anderson Street	School
Mount Caramel Church of God	3901 The Plaza	Religious Institution
Zion Primitive Baptist	827 Sugar Creek Road	Religious Institution
Highland Renaissance Academy	125 West Craighead Road	School
Joblink Center	4045 North Tryon Street	Government Facility
Sugar Creek Branch Library	4045 North Tryon Street	Library
Police Station - North Tryon Division	4045 North Tryon Street	Police Station
Hispanic Church/Faith Based Facility	4409 North Tryon Street	Religious Institution
The Vietnamese Baptist Church	4301 Howie Circle	Religious Institution
Mount Zion Church of God Holiness	4600 The Plaza	Religious Institution
Faith Christian Methodist Church	457 Wellingford Street	Religious Institution
CMC – Northpark	251 Eastway Drive	Medical Center
Crossroads Charter High School	5500 North Tryon Street	School
Iglesia Pentecostes Church	5714 Old Concord Road	Religious Institution
Harbor Baptist Church	5801 Old Concord Road	Religious Institution
Center for Community Transitions	6000 Old Pineville Road	Government Facility
Greenville Memorial Zion Church	6116 Montieth Drive	Religious Institution
Kingdom Purpose Church	6108 North Tryon Street	Religious Institution
New Direction Church	6201 Elgywood Lane	Religious Institution
Christ Gospel Church	312 Tom Hunter Road	Religious Institution
Landmark Baptist Church	400 Tom Hunter Road	Religious Institution
Gloryland Baptist Church	3001 Gloryland Avenue	Religious Institution
U.S. Post Office – North Tryon	6700 North Tryon Street	Post Office
Camino Del Rey Ministries	133 Stetson Drive	Religious Institution
New Hampton Presbyterian	201 Hampton Church Road	Religious Institution
Police Station – University City Division	8401 University Executive Park Drive	Police
Department of Motor Vehicles	8446 North Tryon Street	Government Facility
Fire Station #27	111 Ken Hoffman Road	Fire Station
University City Regional Branch Library	301 East W.T. Harris Boulevard	Library
CMC-University	8800 North Tryon Street	Medical Center
UNC Charlotte	9201 University City Boulevard	University

6.2.3 Environmental Justice

To comply with Executive Order 12898, the presence of minority and low-income persons in the study area was determined. In addition, concentrations of transit-dependent populations, such as the elderly, children, and households without a vehicle, were identified. Concentrations of minorities and other special population groups near the Preferred Alternative were identified through analysis of the 2000 U.S. Census data at both the County and Census tract level. The individual tract data were compared to the countywide data to determine if any of the tracts would qualify as having large concentrations of one or more special populations. These concentrations are referred to as communities of concern.

Communities of concern were identified as those Census tracts with either a large concentration of minority residents or median income levels substantially lower than the county-wide median income. A tract was categorized as having a community of concern if:

- Minority population within that tract was greater than or equal to 49 percent of total tract population; or,
- Median income for that tract was less than \$40,463 (80 percent of the 2000 Mecklenburg County median income).

Table 6-3 lists the 2000 Census tracts that are located within the ½-mile study area and indicates whether high concentrations of minority and/or low-income residents were present. This information is also shown in Figure 6-2. In addition, the median household incomes listed in Table 6-3 may not be the same as the ones listed in Table 6-1. The median household incomes in Table 6-1 were based on neighborhood NSA boundaries from the *Charlotte Neighborhood Quality of Life Study 2008*. The median household incomes listed in Table 6-3 are based on Census tracts with different boundaries for the defined neighborhoods.

As shown in Table 6-3, 16 of the 19 Census tracts in the proposed project corridor include communities of concern. The Census tracts in the southern portion of the study area generally meet the threshold for both minority and low-income residents. The communities of concern identified in the northern portion of the study area meet the threshold for low-income.

In addition to communities of concern, special populations of interest include transit-dependent populations. Generally, the elderly, children, zero-car households, and low-income populations are considered to be transit-dependent. These categories are not mutually exclusive and the different types of data are not consistent by one type of population unit (i.e., some information is by individual, some by household, some by housing unit). Therefore, it was not possible to correlate the data to obtain an accurate composite number of transit-dependent individuals for each tract. Instead, Table 6-3 includes the first three indicators for transit dependency by Census tract. These transit-dependent neighborhoods are shown in Figure 6-2. The threshold for the transit-dependent categories is if the percentage of the population of a particular group within a tract is at least 10 percent greater than the percentage of that population in the county. These criteria resulted in the following threshold values for transit dependency:

- The elderly population (age 65 and older) within a tract is greater than or equal to 19 percent of total tract population (Note: none of the Census tracts were comprised of an elderly population and this category is therefore not included in Table 6-3);
- The youth population (age 0 to 17) within a tract is greater than or equal to 35 percent of total tract population;
- The percentage of zero-car housing units (based on occupied housing units) within a tract is greater than or equal to 17 percent; and,
- Median income for that tract is equal to or less than \$40,463 (80 percent of the 2000 Mecklenburg County median income).

6.2.4 Title VI

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. To comply with federal requirements, transit agencies are required to evaluate significant system-wide service and fare changes and proposed improvements at the planning and programming stages to determine whether those changes have a discriminatory impact. The proposed project represents a major service change with implementation of new light rail service and modifications to existing bus services within the corridor. No fare or service inequities are expected from the proposed project. Improved transit service levels are planned for the corridor. CATS is currently completing a separate Service and Fare Equity Analysis for the proposed service changes, which will be made available for public review.

Table 6-3
Communities of Concern within the Study Area

Neighborhood	Census Tract	Total Population	Total Minority Population	% Minority Population	Median Household Income	% Elderly	% Youth	% Zero-Car Housing Units	Communities of Concern		Large Concentration of Transit-Dependent	
									Minority	Low-Income	Youth	Zero-Car
First Ward	6	1,711	1,417	83%	\$14,338	5%	17%	26%	●	●		●
	1	1,147	442	39%	\$35,385	12%	2%	28%	●	●		●
Fourth Ward	5	2,388	1,270	53%	\$36,711	11%	13%	25%	●	●		●
Belmont	8	3,099	2,991	97%	\$16,995	5%	40%	44%	●	●	●	●
Optimist Park	7	627	614	98%	\$25,233	6%	24%	19%	●	●		●
Lockwood/ Tryon Hills	52	3,056	2,930	96%	\$26,230	9%	30%	32%	●	●		●
Villa Heights	9	2,172	2,103	97%	\$28,173	9%	30%	22%	●	●		●
Plaza-Shamrock	13	4,288	2,657	62%	\$32,607	13%	25%	17%	●	●		●
Shannon Park	15.04	4,806	3,706	77%	\$36,625	10%	31%	12%	●	●		
North Charlotte	14	2,687	1,771	66%	\$25,762	9%	25%	22%	●	●		●
Sugaw Creek/ Ritch Avenue	53.01	2,649	2,146	81%	\$28,991	6%	23%	16%	●	●		
Hampshire Hills	15.06	6,454	5,552	86%	\$41,358	6%	28%	9%	●	●		
	53.03	6,970	6,264	90%	\$35,203	8%	26%	10%	●	●		
Hidden Valley	53.04	6,393	6,186	97%	\$31,633	1%	28%	18%	●	●		●
Newell South	15.05	2,875	1,188	41%	\$47,202	8%	28%	4%				
Mineral Springs/ Rumble Road/ University City North	55.07	10,240	4,252	42%	\$50,671	6%	19%	2%				
College Downs	56.05	3,718	1,428	38%	\$39,434						●	
University City South	56.04	4,880	1,779	36%	\$33,723	0%	1%	4%			●	
Harris-Houston	56.03	6,373	2,884	45%	\$52,755	1%	23%	4%				

Source: 2000 U.S. Census Data

6.3 Environmental Consequences

This section discusses the potential impacts of the No-Build Alternative and the Preferred Alternative on neighborhoods, community facilities and environmental justice populations. Table 6-4 is a summary of neighborhood impacts.

**Table 6-4
Summary of Potential Impacts to Neighborhoods**

Resource	No-Build Alternative	Preferred Alternative
First Ward	No Impact	No Impact
Fourth Ward	No Impact	No Impact
Belmont	No Impact	No Impact
Optimist Park	No Impact	No Impact
Lockwood	No Impact	No Impact
Villa Heights	No Impact	No Impact
Tryon Hills	No Impact	No Impact
Plaza-Shamrock	No Impact	No Impact
Shannon Park	No Impact	No Impact
North Charlotte	No Impact	Potential Impact (VA)
Sugaw Creek/Ritch Avenue	No Impact	No Impact
Hampshire Hills	No Impact	No Impact
Hidden Valley	No Impact	No Impact
Newell South	No Impact	No Impact
Mineral Springs/Rumple Road	No Impact	No Impact
College Downs	No Impact	No Impact
University City South	No Impact	No Impact
University City North	No Impact	No Impact
Harris-Houston	No Impact	No Impact

VA Indicates impacts to visual and aesthetic environment

6.3.1 No-Build Alternative

The No-Build Alternative would consist of a future scenario with no changes to transportation services or facilities in the Northeast Corridor, beyond the projects that are already committed. As a result, impacts to neighborhoods and community facilities would not occur under the No-Build Alternative. However, with the No-Build Alternative, neighborhoods and community facilities in the Northeast Corridor would not benefit from enhanced access to transit that would be associated with the implementation of the Preferred Alternative.

6.3.2 Preferred Alternative

The following sections describe the direct impacts to neighborhoods, community services and environmental justice populations. The introduction of the physical elements of the Preferred Alternative, when proximate to neighborhoods and community facilities would have the potential to cause both positive and negative impacts. Impacts to environmental justice population communities of concern and transit-dependent populations within these neighborhoods would also occur and are identified in Section 6.3.2.3. The Preferred Alternative would include new stations, park-and-ride facilities, substations, a vehicle storage yard, dispatch facility, trackwork and an overhead catenary system. These facilities would be located along neighborhoods within the corridor and would result in a permanent physical change of the corridor as well as changes to local traffic operations and street patterns.

Physical impacts include business displacements, new access barriers, visual changes, or noise and vibration impacts. While some impacts would have a negative impact resulting from these physical changes, the Preferred Alternative would provide mobility benefits to neighborhood residents by improving access to transit and destinations along the proposed Northeast Corridor as well as the existing LYNX Blue Line light rail service.

As part of the station area planning process for the proposed project, the *Design Criteria, Chapter 3, Blue Line Extension Urban Design Framework (UDF)* (2011) was developed to reduce potential impacts and integrate the proposed project into the context of the surrounding environment. The UDF specifies design treatments for the light rail trackway, fencing, retaining walls, embankments, bridges, traction power system components and landscaping. The UDF recommendations are an attempt to minimize the impact of the proposed project on its surroundings and to help integrate it with those surroundings. Station Area Plans are being developed for each station.

Citizens within the proposed project corridor have been involved throughout the planning process in an attempt to avoid or minimize potential impacts on surrounding neighborhoods. As part of this involvement, a Public Involvement Plan (PIP) was developed and implemented for the planning and design phases. Details on the PIP are included in Chapter 22.0. In addition, comments from the public have been included in Chapter 23.0: Draft EIS Review Comments and Responses and addressed in that chapter as well as throughout the Final EIS, where appropriate.

6.3.2.1 Neighborhoods

Neighborhoods were evaluated for the effects of the Preferred Alternative on travel patterns and accessibility; displacements and relocations; noise and vibration; visual and aesthetics; and cohesion. A general assessment was performed at the corridor level to identify direct effects to individual properties that do not constitute an overall impact to the entire neighborhood. The second portion of the evaluation specifically assesses impacts expected to affect the entire neighborhood. Neighborhoods that would experience no negative impacts are not included in this discussion.

Most of the residential areas for neighborhoods identified along the Preferred Alternative corridor are 500 feet or more from the proposed alignment, therefore reducing the potential for negative impacts. Given that the existing rail corridor and North Tryon Street/US-29 currently form the boundaries for several neighborhoods within the Northeast Corridor, the Preferred Alternative would not physically divide neighborhoods, reduce access to or disrupt the cohesion of existing communities. The alignment would also not be likely to alter neighborhood boundaries or the setting in which these neighborhoods exist. Additionally, access to neighborhoods would not be severed. However, visual impacts would be expected to occur in some areas.

General Assessment

Travel Patterns and Accessibility: Given the distance of most neighborhoods from the Preferred Alternative, overall negative impacts to automobile travel patterns and accessibility are not anticipated within these neighborhoods. The Preferred Alternative would not sever or divide any streets within the corridor, as the majority of the proposed project would be constructed along existing railway and roadway. However, the portion of the Preferred Alternative that would be constructed within the median of North Tryon Street/US-29 would change traffic operations and patterns along this roadway. North Tryon Street/US-29 serves as an arterial route to local neighborhood streets; and with the project North Tryon Street/US-29 would be redesigned and rebuilt to create a complete urban street. The redesigned roadway will accommodate more diverse modes of transportation including light rail, buses, automobiles, pedestrians and bicyclists.

Generally, accessibility for transit patrons, bicyclists and pedestrians within the Northeast Corridor would be positively affected by the proposed project by providing another mode of transportation for residents and a more efficient option to automobile and bus travel. In addition, the frequency at which transit would be provided within this corridor would also increase with the Preferred Alternative. Pedestrian improvements (sidewalks, crossings, etc.) are also proposed and the City of Charlotte would identify desired improvements beyond direct station access in a separate project called the Northeast Corridor Infrastructure Project (NECI). Bicycle lanes are planned for North Tryon Street/US-29 as part of the proposed project and bicycle parking spaces are also planned at stations. Specific details on how travel and accessibility would be altered as a result of the Preferred Alternative are included in Chapter 3.0: Transportation.

In addition, the proposed project would be grade-separated at 11 roadways to eliminate most conflicts

between vehicular traffic and the Preferred Alternative. Seven of these grade-separations would be new structures and one would involve modification of an existing structure. In addition, new signals and the addition of turn lanes would also help to alleviate vehicular traffic conflicts resulting from the proposed project. However, construction of the Preferred Alternative within the median of North Tryon Street/US-29 would restrict left turns across the roadway from some side streets. Motorists in these restricted locations would be allowed to make turns and u-turns at signalized intersections. Motorists would be required to drive a minimal distance to make permitted turns. In addition, there are locations where the Preferred Alternative would cross streets and require motorists to wait for the light rail traffic to pass. Some of these locations already experience wait times for vehicles due to the existing railway traffic. Increased wait times at these locations, in addition to new crossing locations along North Tryon Street/US-29, are not expected to negatively affect vehicular travel patterns or accessibility within the corridor. While the proposed project is expected to have local traffic impacts, the transit capacity provided by the Preferred Alternative will enhance the North Tryon Street/US-29 corridor by both increasing the overall person carrying capacity of the corridor and by providing a transit option, and by improving pedestrian and bicycle facilities.

There is potential for transit patrons to utilize neighborhood streets for parking. This potential exists at walk-up stations where park-and-ride lots would not exist, as well as at park-and-ride stations where dedicated parking could overflow. Overflow parking in neighborhoods would affect available on-street parking in neighborhoods, as well as introduce additional traffic. However, overflow parking on neighborhood streets along the LYNX Blue Line light rail service has not been an evident problem.

Displacements and Relocations: Property acquisitions would be required for development of the Preferred Alternative. Acquisitions would primarily be required for the development of the station areas with parking facilities and the widening of North Tryon Street/US-29. Acquisitions would also be required where the proposed alignment would transition from the existing rail corridor to North Tryon Street/US-29. Development of the Preferred Alternative would require the full and partial acquisition of approximately 223 parcels. These acquisitions would total approximately 90.4 acres and would result in approximately 14 displacements of commercial and industrial uses. Residential uses would not be displaced as a result of the Preferred Alternative. In addition, both temporary and permanent easements would also be required for construction of the Preferred Alternative. These easements would provide a right to use land to construct operate and/or maintain the Preferred Alternative. Details on these required acquisitions and resulting displacements can be found in Chapter 17.0: Acquisitions and Displacements.

Noise and Vibration: Noise monitoring was conducted at noise sensitive receptors within the neighborhoods immediately adjacent to the Preferred Alternative. A noise and vibration impact assessment was conducted and is detailed in Chapter 13.0: Noise and Vibration. Individual noise and vibration impacts may occur at various sites along the Preferred Alternative (including residential buildings); however, those individual impacts do not constitute an effect on the overall neighborhood.

Visual and Aesthetics: The Preferred Alternative would introduce a new visual element within or adjacent to many neighborhoods. However, concern for visual/aesthetic impacts are eliminated largely because of existing land uses (office buildings, historic warehouses, etc.) that screen residential areas from the proposed alignment and the industrial context of the existing rail corridor.

In addition, individual visual and aesthetic impacts may occur at various sites along the Preferred Alternative. However, those individual impacts do not necessarily constitute an effect on the overall visual and aesthetic quality of the neighborhood. In one instance, the Preferred Alternative would change the visual context of homes located along the existing freight tracks within the Hampshire Hills neighborhood and result in a potential impact to approximately six homes along Leafmore Drive, Clintwood Drive, St. Anne Place and Prince Charles Street. The Preferred Alternative would require the removal of existing vegetation in this location, and the construction of a retaining wall and fencing in this location; but would not result in an impact to the visual context to the overall Hampshire Hill neighborhood. Parking garages are also proposed at two stations. New visual elements would be introduced with the construction of a six-level parking garage at the University City Blvd. Station and a four-level parking garage at the JW Clay Blvd. Station. While some businesses and residential uses would have views of the proposed

parking garages, they are not out of character with existing land uses and minor impacts would not constitute significant visual impacts to the neighborhoods as a whole. Details of the visual impacts are included in Chapter 7.0: Visual and Aesthetic Resources.

Cohesion: Generally, the Preferred Alternative would be located along neighborhood boundaries and/or along an existing transportation corridor. As a result, the proposed project would not create a new physical barrier to neighborhood residents or physically divide neighborhoods.

Neighborhood Assessments

An assessment of the effects of the Preferred Alternative for each neighborhood in the study area was undertaken with regards to travel patterns and accessibility; displacements and relocations; noise and vibration; visual and aesthetics; and cohesion. The following summarizes the assessment of impacts to neighborhoods that could be negatively affected by the proposed project. Neighborhoods that would experience no negative impacts are not included in this discussion. Based on the detailed noise analysis undertaken since the Draft EIS, no noise impacts are expected to the Pines Mobile Home Park located within the Hidden Valley neighborhood. In addition, due to changes in the proposed project terminus since the Draft EIS, potential impacts to the Harris-Houston neighborhood have been eliminated.

North Charlotte (NSA 44): The Preferred Alternative would be located along the northern portion of the North Charlotte neighborhood, adjacent to the existing rail corridor and commercial, industrial and residential uses. Two stations for the Preferred Alternative would be located within the North Charlotte neighborhood, namely the 36th Street Station and the Sugar Creek Station.

Residential uses within this neighborhood are located within 100 feet of the Preferred Alternative (primarily homes along Bearwood Avenue and Howie Circle). Multi-family residential uses can be found approximately 150 feet from the Preferred Alternative, between North Davidson Street and the existing rail corridor. The remainder of the residential development within this neighborhood is located on the east side on North Davidson Street, approximately 150 feet or greater from the Preferred Alternative. The Preferred Alternative would be constructed primarily within existing rail right-of-way through North Charlotte.

North Charlotte is accessed primarily from North Davidson Street, 36th Street, Craighead Road and Sugar Creek Road. At-grade crossings with the rail corridor currently exist at 36th Street, Craighead Road and Sugar Creek Road; however, grade-separations at 36th Street and Craighead Road would be constructed as part of the Preferred Alternative. A grade-separation at Sugar Creek Road is also planned as a separate project being undertaken by the North Carolina Department of Transportation (NCDOT). The addition of grade-separations in these locations would improve travel and accessibility within North Charlotte. The Preferred Alternative is not expected to negatively change travel patterns or accessibility for North Charlotte residents. Access would be improved because of the grade separation of 36th Street and the railroad, eliminating delays related to train crossing. In addition, it is expected that North Charlotte residents would benefit from the increased access to transit and other transportation options provided by the Preferred Alternative as the majority of the neighborhood would be located within one mile of the proposed project.

The Preferred Alternative would not result in the displacement or relocation of residents or businesses within North Charlotte. Partial acquisitions would be required along the rail corridor where additional right-of-way would be needed for the alignment and where parcels would be needed for the development of the proposed stations. The majority of these properties are developed with industrial and commercial uses.

As part of the Noise and Vibration Impact Assessment, noise monitoring sites were selected on North Davidson Street and Bearwood Avenue. Comparing existing noise conditions against anticipated project-related noise, it was determined that noise impacts would not occur within North Charlotte.

Additionally, the Preferred Alternative would be visible from the North Charlotte neighborhood and the proposed project would result in the introduction of new visual elements. However, the views would not be significantly different from the existing views of the rail corridor and industrial areas and as a result, only potential visual/aesthetic impacts would occur. Due to the size of the North Charlotte Historic District

and the multiple locations that the Preferred Alternative would be visible from, this would constitute a potential impact for the entire neighborhood. However, this impact would not be considered significant.

The Preferred Alternative would be located alongside the North Charlotte neighborhood but would not create a new physical barrier to North Charlotte or physically divide the neighborhood. Therefore, neighborhood cohesion would not be altered by the Preferred Alternative.

6.3.2.2 Community Services and Social Service Providers

The development of transit projects (specifically rail) have the potential to delay emergency services when these vehicles are required to wait for the transit vehicle to cross an intersection. Several police and fire stations are located within the Northeast Corridor as well as a major medical center (CMC-University). A Preliminary Hazard Analysis was conducted at 30 percent level of design and is being conducting further at 65 percent level of design to further investigate and identify emergency service needs. In addition, CATS will coordinate with emergency service providers to ensure that the design of the proposed project allows access for these services. Signal designs would be included as part of the proposed project to ensure that efficient emergency services are not impeded. Additional design measures are detailed in Chapter 16.0: Safety and Security.

Early design changes to bridge spans near CMC-University illustrate CATS' commitment to minimizing the impact to emergency services. Original bridge designs, and specifically retaining wall placement, created a potential impact to CMC-University's emergency and customer access. Additional engineering evaluation was undertaken and bridge approaches were adjusted to eliminate or avoid the closure of the CMC-University driveway from North Tryon Street/US-29.

The majority of the community facilities identified in Table 6-2 would experience a positive impact from increased access to transit and transportation choices provided by the Preferred Alternative. Two of these community facilities would experience potentially negative impacts from the Preferred Alternative. The following is a description of those potentially negative impacts.

A potential impact would result from the partial acquisition at the Crossroads Charter School. This acquisition would be at the rear of the parcel where the Preferred Alternative would transition to North Tryon Street/US-29 and would consist of a minimal amount of property (approximately 8 percent of the entire parcel). The area of acquisition would be from an area that is currently used for parking at the rear of the building and would not affect the use or functioning of this facility. Views of the school from North Tryon Street/US-29 would not be blocked or substantially altered other than the park-and-ride at the rear of the property. Therefore, the potential visual impact is not anticipated to be significant.

Coordination between CATS and CMC-University was conducted during preliminary engineering to minimize proposed project impacts to this resource and maintain emergency access and patient entrances. A potentially significant visual impact would result at CMC-University, located at the intersection of W.T. Harris Boulevard and North Tryon Street/US-29, since the Preferred Alternative would block views of the medical center due to the proposed bridge over W.T Harris Boulevard. This could affect way-finding by non-emergency personnel in emergency conditions and patient visitors. In addition, partial acquisition on a portion of the parcel adjacent to North Tryon Street/US-29 would also be required. The acquisition would be minimal (less than 2 percent of the entire parcel) and would occur at a portion of the parcel that is not developed and would not affect the functioning use of CMC-University.

6.3.2.3 Environmental Justice

Overall, the Preferred Alternative would improve accessibility for all communities of concern including low-income, minority and transit-dependent populations. The specific impacts to communities of concern associated with the Preferred Alternative are outlined in the following. Overall, these impacts are minimal compared with the proposed project's benefits to the larger environmental justice populations including increased accessibility, a new mode choice and reduced travel times to/from Center City Charlotte.

The key criteria for an environmental justice analysis are whether adverse impacts identified in each of the environmental analysis categories are disproportionate within communities of concern. In other words,

would the impacts within a minority or low-income community be appreciably more severe or greater in magnitude than those that would be experienced in non-minority or non low-income communities?

As indicated in Table 6-3, the majority (16 of 19) of Census tracts located within the study area contain special populations that are identified as communities of concern. The only portion of the project corridor that is not located adjacent to a community of concern is a section approximately ½-mile in length between Sandy Avenue and Rocky River Road.

Travel Patterns and Accessibility

With respect to transit service, the Preferred Alternative would provide a significant level of benefits for environmental justice populations, particularly the transit-dependent. The Preferred Alternative would utilize an exclusive guideway that would provide increased reliability, increased service frequencies and significant travel time savings over the No-Build Alternative. As an extension of the LYNX Blue Line light rail service, there would be an increase in transit accessibility as well as mobility to origins and destinations throughout the entire CATS system. Access would improve to employment centers along the existing LYNX Blue Line light rail service and within the Northeast corridor.

All unsignalized intersections along N. Tryon Street north of Old Concord Road would be restricted to right-in/right-out access to prevent vehicles from crossing the Preferred Alternative without protection from a traffic signal. Several of these intersections are located within communities of concern. U-turns would be allowed at the signalized intersections due to restricted access at unsignalized intersections. These roadway modifications would change travel patterns for both drivers and pedestrians; however, they would provide a safer environment.

The impacts of the proposed physical roadway changes were also analyzed as part of the *LYNX Blue Line Extension Traffic Analysis Report* (2011). The traffic analysis performed looked at the measure of effectiveness at each intersection and determined future level of service (LOS) at existing and proposed intersections along the Preferred Alternative. The LOS projected at these intersections was compared against the conditions that would occur under the No-Build Alternative. This traffic analysis determined that most unsignalized intersections would experience the same or improved functioning with the Preferred Alternative. However, eight unsignalized intersections would experience a slight degradation in LOS at certain times. Approximately five of these unsignalized intersections would be located within communities of concern. In addition, 11 signalized intersections would experience degradation in LOS and approximately six of those intersections would be located within communities of concern. The intersections located within communities of concern projected to experience a decreased LOS are as follows:

Unsignalized

- Sugar Creek Road and Raleigh Street – North
- North Tryon Street/US-29 and Dorton Street
- Eastway Drive and Curtiswood Drive
- North Tryon Street/US-29 and Northchase Drive
- North Tryon Street/US-29 and Hampton Church Road

Signalized

- North Tryon Street/US-29 and Old Concord Road
- North Tryon Street/US-29 and Arrowhead Drive
- North Tryon Street/US-29 and Tom Hunter Road
- North Tryon Street/US-29 and Ken Hoffman Drive
- North Tryon Street/US-29 and W.T. Harris Boulevard
- North Tryon Street/US-29 and UNCC Research Drive

The majority of projected degradation in service for the Preferred Alternative is slight when compared to the No-Build Alternative. The only significant degradation in LOS would occur at North Tryon Street/US-29 and Ken Hoffman Drive and at North Tryon Street/US-29 and UNCC Research Drive. The measure of effectiveness at these intersections would decrease from a B/C LOS (free flow/stable flow of traffic) to a LOS of F (breakdown flow of traffic where traffic exceeds capacity) with the Preferred Alternative and

these impacts are considered significant and adverse. These intersections are located within the University City South neighborhood, classified as a low-income community of concern. However, these adverse impacts are not disproportionate within communities of concern. Pedestrian and bicycle LOS would improve under the Preferred Alternative. These benefits would be realized throughout the corridor, including in communities of concern.

Displacements and Relocations

Overall, impacts resulting from acquisitions and displacements would not be adverse or disproportionate amongst minority and low-income communities under the Preferred Alternative. Residential displacements are not anticipated from the proposed project.

Eleven of the 14 displacements expected with the Preferred Alternative are located within communities of concern. Acquisitions requiring displacement would be to parcels with commercial and industrial uses. These acquisitions and displacements located within communities of concern would be considered significant and adverse, as these acquisitions would result in displacement. At this time, there is no visible evidence that these displacements are businesses that provide a unique or special service to a community of concern; therefore the impact is not disproportionate within communities of concern.

Community Services and Social Service Providers

Under the Preferred Alternative, two community facilities located within a community of concern would experience impacts. Specifically, the Crossroads Charter High School (Hampshire Hills, Census Tract 15.06) would have a potential visual impact, as well as a potential impact related to a partial acquisition. Though a new visual element would be introduced, other transportation elements are present (North Tryon Street/US-29). Additionally, the school would not be displaced and no physical alteration to the building would occur. This impact would not be considered adverse or disproportionate. The proposed Old Concord Road Station would be in close proximity to the Crossroads Charter High School, thus increasing the school's accessibility by transit. The partial acquisition of CMC-University would also occur within a community of concern (University City South, Census Tract 56.04), but the acquisition would occur on a portion of the parcel that is not developed. Therefore, the impact would not be considered adverse or disproportionate. A potentially significant visual impact is also anticipated at CMC-University as the Preferred Alternative would block views of the first three floors of the building, including the emergency room. Additional directional signage will be added to the project design in order to improve way-finding to CMC-University.

Neighborhoods

The Preferred Alternative would not adversely or disproportionately affect neighborhoods with high concentrations of minority or low-income residents within the proposed project corridor. While some impacts would occur to specific properties, none of these impacts would significantly affect a neighborhood. The improved access to transit, more frequent service headways on rail and bus, and increased mobility to other destinations in the region would result in a positive impact to these communities of concern and transit-dependent populations.

Noise and Vibration: Moderate noise impacts are expected to occur at seven residential buildings and severe noise impacts are expected at three residential buildings (prior to mitigation) as a result of the Preferred Alternative. A vibration impact is also anticipated at a residential building (prior to mitigation) as a result of the Preferred Alternative. Chapter 13.0: Noise and Vibration includes additional information regarding the noise and vibration analysis. Each of the aforementioned impacts is located within communities of concern (i.e., Optimist Park, North Charlotte, Hampshire Hills and University City South) and these noise and vibration impacts would be considered adverse. As no residential noise impacts are expected to occur outside of communities of concern under the Preferred Alternative, these impacts would be considered disproportionate. However, mitigation measures will eliminate the noise and vibration impacts to these receptors. Additional detail on proposed mitigation measures is included in Section 6.4.

Visual and Aesthetics: One potentially significant visual impact would be anticipated within a community of concern at CMC-University from the bridge over W.T. Harris Boulevard. Eight potential visual impacts within communities of concern were identified, which are not considered significant:

- Alpha Mill Apartments (Optimist Park neighborhood) from the proposed elevated tracks and proposed retaining wall immediately behind this building.
- Herrin Brothers Coal and Ice Company (North Charlotte neighborhood) from the depression of 36th Street under the proposed light rail tracks and the proposed 36th Street Station.
- North Charlotte Historic District from a change in visual landscape associated with the view of the 25th Street Station, 36th Street Station, two bridges near 30th Street, and a bridge over Craighead Road.
- Hampshire Hills neighborhood from views of the Preferred Alternative, as well as a retaining wall that would be located along a portion of the proposed project corridor within Hampshire Hills.
- Crossroads Charter School (Hampshire Hills) from views of the proposed Old Concord Road Station and park-and-ride lot and proposed bridge over Old Concord Road.
- Businesses along North Tryon Street/US-29 between Old Concord Road and JW Clay Boulevard from bridges within the median of North Tryon Street/US-29 and from the potential to obstruct views of business signage.
- Charlotte Research Institute (University City South) from views of the Preferred Alternative from planned buildings on this high quality, visually sensitive resource.
- Toby Creek Greenway from an approximately 805-foot long bridge that would cross over this greenway resulting in disrupted views of a natural setting and resulting in vegetation removal along the bridge and light rail trackway. However, the visual character would be similar to existing trails located in the immediate vicinity.

As noted previously, because many of these areas already house a rail corridor and/or major arterial roadway, the proposed light rail project elements would not be out of character with surrounding development and transportation uses. The impacts are not considered disproportionate among communities of concern.

Community Outreach

A detailed Public Involvement Plan (PIP) was developed at the onset of the proposed LYNX BLE study process to actively seek public input throughout the planning and preliminary design of the proposed project. Various workshops and meetings, beginning in 2000 and continuing to the present, have afforded residents and business owners within communities of concern the opportunity to learn about the proposed project and to provide input. Additional detail regarding the PIP and the targeted Environmental Justice outreach efforts for the communities of concern is included in Chapter 22.0: Public Involvement and Agency Coordination. Comments from the public have been included in Chapter 23.0: Draft EIS Review Comments and Responses and addressed in that chapter, as well as throughout the Final EIS, where appropriate.

6.4 Mitigation

CATS has conducted extensive public information activities to inform residents and provide the opportunity for participation in evaluating the proposed project, station locations, environmental concerns, etc. Public presentations have been offered to the public at-large, community groups, public officials, institutional officials, and local, state, and federal agencies. As a result of public involvement, several design decisions were made. Chapter 22.0: Public Involvement and Agency Coordination summarizes these activities and meetings. Public involvement will continue throughout design and construction, and comments and concerns from area residents will continue to be solicited.

6.4.1 Neighborhoods

Impacts to neighborhoods resulting from the Preferred Alternative will be reduced through a number of mitigation measures. The only neighborhood of particular concern is the North Charlotte neighborhood, due to overall visual impacts from the Preferred Alternative. However, the impact is not considered significant because the new visual elements will not be significantly different than the existing views of the rail corridor and industrial areas. Therefore, no mitigation is proposed.

The only potentially significant concern for neighborhood impacts is parking. Four park-and-ride facilities would be added within and near neighborhoods. Overflow parking in neighborhoods located near

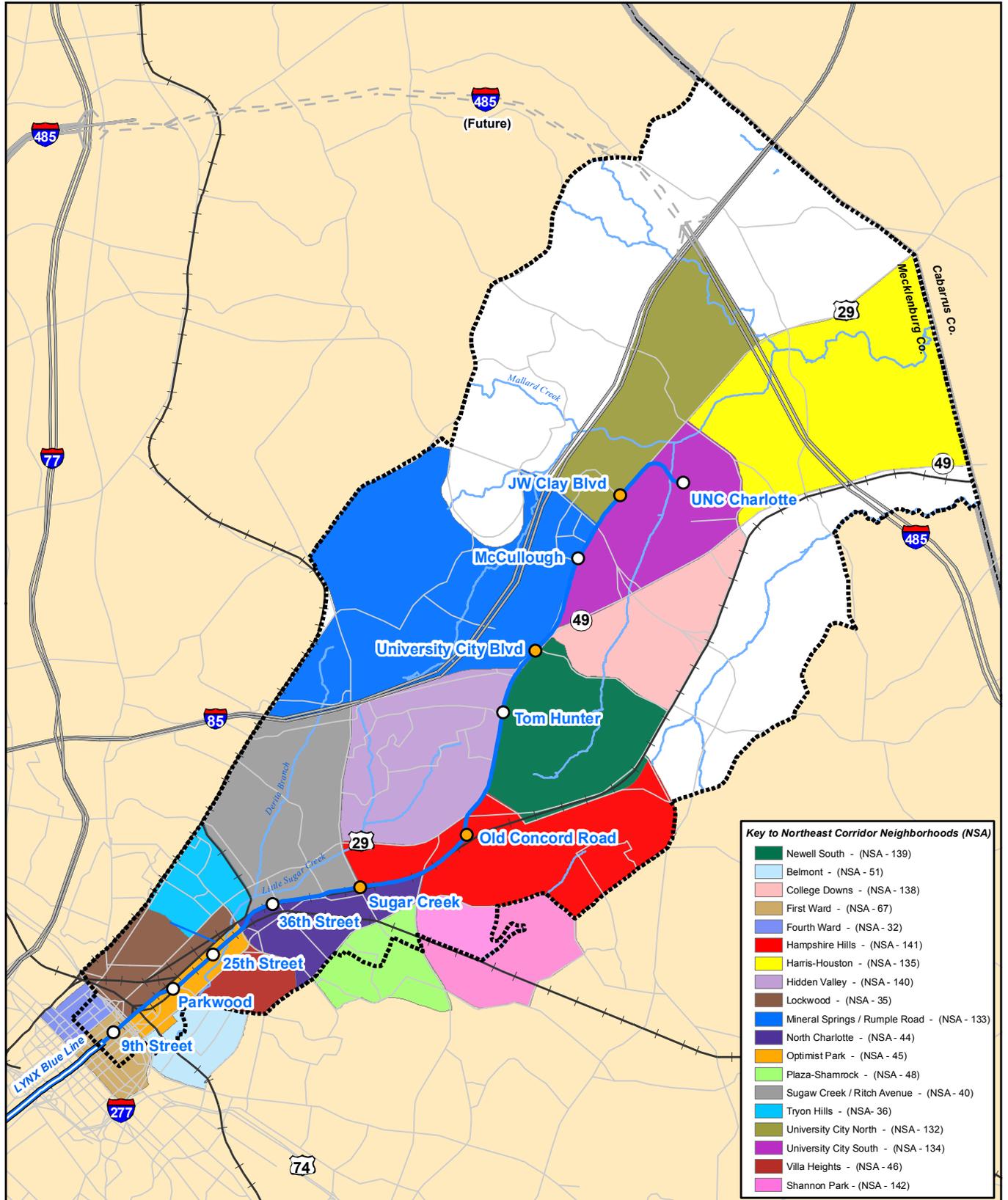
proposed stations will be monitored through visual survey to determine whether additional parking is needed. If overflow parking becomes an issue for adjacent neighborhood streets, local resources near the problematic stations will be assessed to determine whether additional dedicated or shared parking could be secured. If necessary, parking enforcement will be instituted, allowing only residents of particular neighborhoods to park on specified streets.

6.4.2 Community Services and Social Service Providers

CATS will coordinate with emergency service providers to ensure that the design of the proposed project allows access for these services. Signal designs would be included as part of the proposed project to ensure that efficient emergency services are not impeded. Mitigation measures will be necessary for potentially significant visual impacts at CMC-University. CATS will continue to coordinate with CMC-University regarding design treatments and the type and location of directional signage.

6.4.3 Environmental Justice

The only potential adverse and disproportionate impact to communities of concern is related to noise. The proposed mitigation measures would eliminate the noise and vibration impacts at the affected properties located within communities of concern. The Federal Transit Administration (FTA) requires that mitigation for moderate impacts be incorporated into the proposed project when it is considered reasonable. For severe impacts, mitigation should be incorporated into a proposed project unless there are extenuating circumstances to prevent it. The goal is to gain substantial reductions in noise level. The most practical noise and vibration mitigation recommendations for properties affected by the Preferred Alternative have been determined and include rail an automated friction modifier, noise barriers, sound insulation, specially-engineered trackwork and vibration isolation treatments. Additional detail regarding the proposed mitigation is included in Chapter 13.0: Noise and Vibration and the *Detailed Noise and Vibration Technical Report* (2011). Coordination with property owners regarding acceptable mitigation methods would occur prior to final design.



Key to Northeast Corridor Neighborhoods (NSA)

[Green]	Newell South - (NSA - 139)
[Light Blue]	Belmont - (NSA - 51)
[Pink]	College Downs - (NSA - 138)
[Brown]	First Ward - (NSA - 67)
[Blue]	Fourth Ward - (NSA - 32)
[Red]	Hampshire Hills - (NSA - 141)
[Yellow]	Harris-Houston - (NSA - 135)
[Purple]	Hidden Valley - (NSA - 140)
[Dark Brown]	Lockwood - (NSA - 35)
[Dark Blue]	Mineral Springs / Rumble Road - (NSA - 133)
[Light Purple]	North Charlotte - (NSA - 44)
[Orange]	Optimist Park - (NSA - 45)
[Light Green]	Plaza-Shamrock - (NSA - 48)
[Grey]	Sugaw Creek / Ritch Avenue - (NSA - 40)
[Cyan]	Tryon Hills - (NSA - 36)
[Olive Green]	University City North - (NSA - 132)
[Purple]	University City South - (NSA - 134)
[Red]	Villa Heights - (NSA - 46)
[Pink]	Shannon Park - (NSA - 142)

Legend

[Dashed Line]	Northeast Corridor Limits	[Solid Line]	Highway
[Blue Line]	Proposed Light Rail Alignment	[Solid Line]	Major Roads
[Blue Line]	LYNX Existing Light Rail Transit	[Dashed Line]	Highway (Future)
[Circle]	Proposed Stations	[Wavy Line]	Streams
[Circle with Orange]	Proposed Stations with Park-and-Ride	[Crossed Line]	Railroads
		[Dotted Line]	County Line

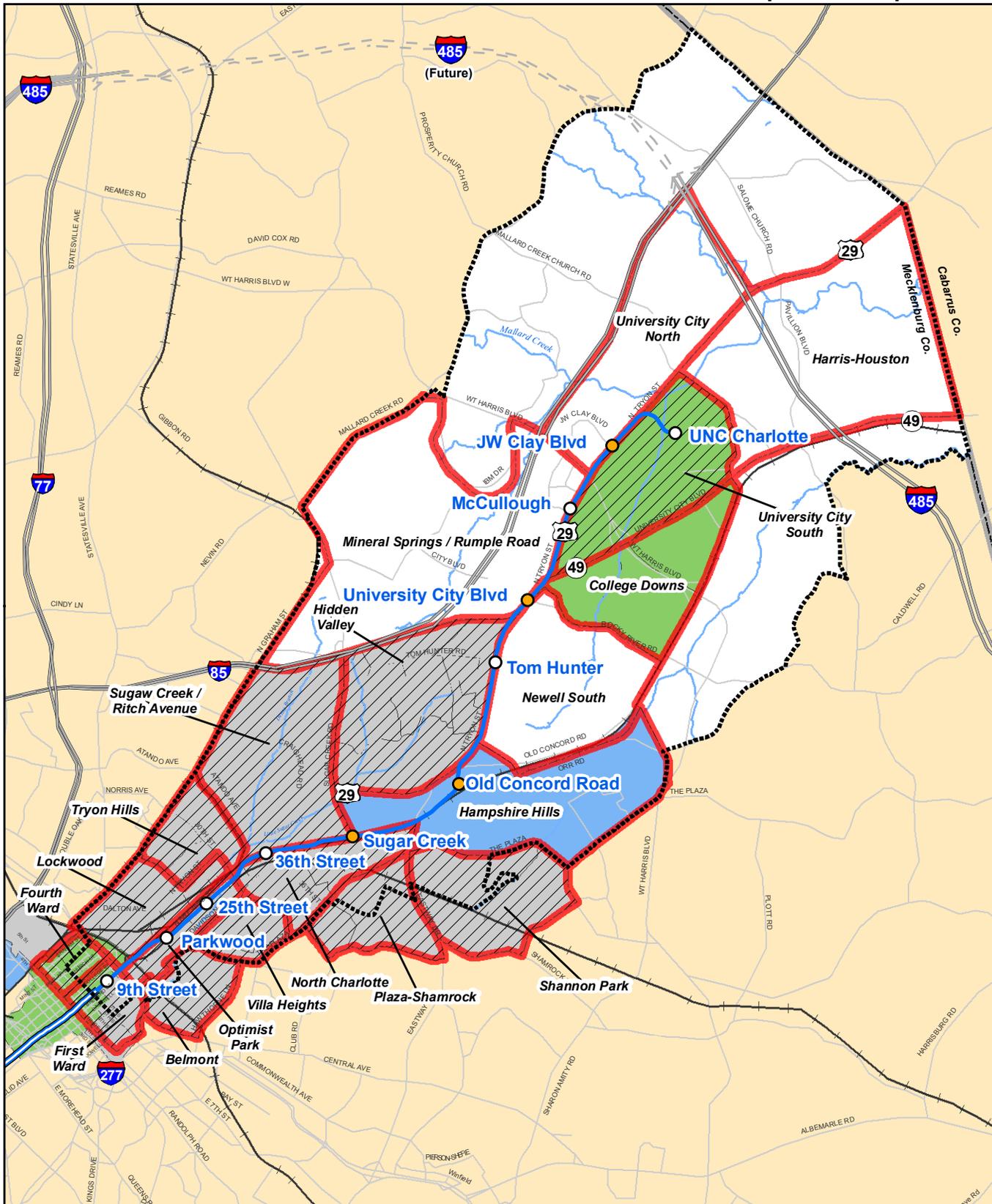
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Data Source:
CATS, City of Charlotte GIS, and Mecklenburg County GIS

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Environmental Justice and Transit Dependent Populations



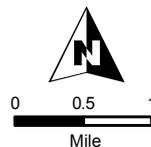
Legend

- Northeast Corridor Limits
- Proposed Light Rail Alignment
- LYNX Existing Light Rail Transit
- Proposed Stations
- Proposed Stations with Park-and-Ride

- Highway
- Major Roads
- Highway (Future)
- Streams
- Railroads
- County Line

Environmental Justice Populations

- Neighborhood Boundary
- Low Income
- Low Income / Minority
- Minority
- Transit Dependent Neighborhoods



Data Source:
CATS, City of Charlotte GIS, RWA/STV and
Mecklenburg County GIS