

5.0 SOCIO-ECONOMIC CONDITIONS

This chapter describes existing population, housing and economic conditions such as employment, economic output and government finance located within the study area for the proposed LYNX Blue Line Extension Northeast Corridor Light Rail Project (LYNX BLE). This chapter also includes a discussion of the potential socio-economic effects of the LYNX BLE and its impact on the local economy. Potential mitigation measures are also included, where necessary.

5.1 Affected Environment

The following discussions focus on the existing population, housing and employment within the study area. A description of existing income, special economic activities, as well as finance and tax sources is also included.

5.1.1 Population, Housing and Employment

Population, housing and employment data were reviewed at the regional, county, census tract and station area levels. The following offers a summary of the data.

Population

The six-county Charlotte-Gastonia-Concord, NC-SC Metropolitan Statistical Area (further abbreviated to MSA henceforth) has an estimated 2008 population of 1,702,000 and was ranked the 34th largest MSA in the country (U.S. Census, 2008). Mecklenburg County is the most populous county in the Charlotte-Gastonia-Concord, NC-SC MSA with an estimated 895,567 people in 2008, representing approximately 53 percent of the total 2008 MSA population. By 2030, Mecklenburg County’s population is expected to grow by 42 percent. According to the U.S. Census 2000, census tracts in the study area (all census tracts within the corridor) total 151,000 people. This represents approximately 22 percent of the Mecklenburg County population; furthermore, the population represents an approximate 62 percent increase over the population reported in 1990.

Because of the accessibility and walkability, transit stations often become focused development areas that are expected to experience economic effects as a result of a transit project. Table 5-1 shows the estimated existing population, number of housing units and total employment contained by a ½-mile buffer of the proposed light rail station areas.

**Table 5-1
Population, Housing and Employment within ½-Mile of Stations, 2009**

Station Area	Population	Housing Units	Employment
9th Street Station	4,469	2,504	25,176
Parkwood Station	1,682	515	2,163
25th Street Station	1,727	587	1,419
36th Street Station	1,968	844	2,024
Sugar Creek Station	1,477	576	1,848
Old Concord Road Station	1,862	678	1,451
Tom Hunter Station	3,496	1,147	829
University City Blvd. Station	614	233	1,427
McCullough Station	186	83	5,036
JW Clay Blvd. Station	1,372	614	2,571
UNC Charlotte Station	2,346	306	2,059
Mallard Creek Church Station	945	188	671
I-485/N. Tryon Station	1,020	420	71
Totals:	23,164	8,695	46,745

Note: Data derived from Traffic Analysis Zones (TAZs)
Source: CATS LYNX BLE, Northeast Corridor, FY11 New Starts Submittal Land Use (Quantitative) Template, 2009.

Housing

U.S. Census data revealed an approximate 65 percent increase in total households within the census tracts that are located along the proposed project corridor from 1990 to 2000. The number of households

generally increases from south to north (i.e. Center City Charlotte to I-485). The census tracts with the largest number of households include those around the University City area (i.e. Census Tracts 55.05, 55.06 and 55.07). For a more accurate depiction of existing households, TAZ level data was utilized to estimate the existing number of households around each of the proposed station areas. Table 5-1 provides a summary of the estimated existing number of housing units contained by a ½-mile buffer of the proposed station areas.

Employment

An examination of the existing employment within the study area requires a multi-scale evaluation to assess the existing employment market and trends. The total labor force in the MSA totals nearly 1.2 million, with more than 130,000 commuting into Mecklenburg County from surrounding MSA counties (Charlotte Chamber of Commerce, 2009). The workforces within the MSA vary, with the top industries in the MSA being retail trade; professional, scientific and technical services; and construction (U.S. Census, 2007). The Charlotte labor force increased by approximately 16 percent since 2000, and, during that same time, employment grew by approximately 6 percent (Charlotte Chamber of Commerce, 2009).

Within the project corridor, there are approximately 148,366 people employed, including approximately 68,630 within Center City Charlotte. This represents approximately 23 percent of the employment base for the County. Table 5-1 provides a summary of the estimated existing employment numbers using TAZ level data for all TAZs contained by a ½-mile buffer of the proposed station areas.

5.1.2 Economic Output, Jobs Creation and Income

According to the U.S. Census Bureau 2006-2008 American Community Survey, the median household incomes in Mecklenburg, Cabarrus, Union and York counties are higher than the respective state averages. The median household income in Anson and Gaston counties is lower than the North Carolina state average. Mecklenburg County and Union County have the highest median household income in the MSA at approximately \$56,766 and \$62,105, respectively. Additionally, income levels in both Mecklenburg and Union Counties increased at corresponding rates of 12 percent and 23 percent when compared to 2000 U.S. Census. Income levels in the remaining MSA counties have increased between 13 percent and 17 percent.

5.1.3 Special Economic Activities

Development activity in the proposed LYNX BLE Northeast Corridor is increasing, as the corridor provides a vital link between two major activity centers in the area (Center City Charlotte and University City). The proposed project corridor contains several economic activity centers, and for the purposes of this discussion are divided into three geographic areas: Center City Charlotte (generally 9th Street Station to I-277), North Charlotte (generally Parkwood Station to Tom Hunter Station), and the University City area (generally Tom Hunter Station to I-485/N. Tryon Station).

Center City Charlotte

The most southern portion of the project area includes Center City Charlotte and the Central Business District, the major activity and employment center for the region. Center City Charlotte contains much of the area's office space as well as the government offices for the City of Charlotte and Mecklenburg County. Center City Charlotte has seen significant change over the past decade fueled largely by redevelopment and infill development, as well as improvements to transit, including the opening of the LYNX Blue Line light rail service in 2007. Key activities in Center City Charlotte include: First Ward Urban Village; a new academic building for the University of North Carolina at Charlotte (UNC Charlotte); and, 10th Street Connector.

North Charlotte

Just north of Center City Charlotte, the development character shifts from urban development to industrial uses along the existing rail corridor. The area between Parkwood Avenue and 36th Street is dominated by industrial uses that developed because of exceptional access to freight rail and highways. The area is also developed with historic residences in the Optimist Park, Belmont, Villa Heights, and the North Charlotte Historic District neighborhoods that once served the mills and industrial areas along the rail corridor. These neighborhoods experienced disinvestment in the past, but have seen revitalization efforts

in earnest in the past five years. In addition to by-right development, the Charlotte-Mecklenburg Planning Department has received numerous requests for rezonings in the corridor since 2006. Ten properties, totaling approximately 75 acres received rezoning approvals within the North Charlotte segment. Nine of the ten approvals changed zoning designations to Mixed-Use. A number of institutional and civic land uses are also within this area including: Cordelia Park, the Little Sugar Creek Greenway, the CATS Davidson Street Bus Facility and Bus Operations Division Administrative Offices, Johnston Branch YMCA and various churches, schools and day care facilities.

Active industrial warehousing and trucking facilities are located north of 36th Street to Sugar Creek Station. Beyond the Sugar Creek station, land uses transition to residential and commercial uses before the alignment transitions to North Tryon Street/US-29. Additional detail can be found in Chapter 4.0: Land Use, Public Policy and Zoning.

University City

Some of the corridor's largest tracts of undeveloped properties and new communities are located in the University City area, which transitions from the older development along North Tryon Street/US-29 to the more recently developed area. The land surrounding this area is primarily undeveloped (greenfields), with scattered office, industrial and commercial uses found along North Tryon Street/US-29 as the corridor progresses northward. The extension of University City Blvd./US-49 is currently under construction. On the western side of North Tryon Street/US 29 is the Belgate development. This new mixed-use development currently houses two major retail sites, an IKEA and a Wal-Mart. Portions of single-family residential uses are located in the eastern part of the corridor.

As mentioned, in addition to by-right development, the Charlotte-Mecklenburg Planning Department has received numerous requests for rezonings in the corridor since 2006. Four properties, totaling approximately 63 acres received rezoning approvals within the University City area segment. The rezoning approvals largely modified existing zoning to accommodate expanded uses on the existing sites.

The City of Charlotte has established several Municipal Service Tax Districts (MSDs) to provide or maintain services beyond, or in addition to, what is provided for the entire city. The City of Charlotte can establish MSDs outside of the central business district in urban areas, if those areas are considered business centers. As such the University City Area MSD was formed and is one of the City's multi-use activity centers. The University City Area MSD includes the area between the intersection of North Tryon Street/US-29 Street and University City Blvd./NC-49 and East Mallard Creek Church Road. The University City core area has the second largest concentration of retail and office space outside of Center City Charlotte as well as two of the biggest employment centers along the Northeast Corridor - the Carolinas Medical Center (CMC) - University and the UNC Charlotte campus. The University City core is located at the intersection of W.T. Harris Boulevard and North Tryon Street/US-29 and includes shopping and entertainment uses, hotel and some residential uses.

The UNC Charlotte campus was developed on its current site in 1961 and has approximately 950 acres of land between North Tryon Street/US-29, W.T. Harris Boulevard and East Mallard Creek Church Road. The current UNC Charlotte Master Plan outlines additional expansion plans to double the existing academic space from 1.2 million square feet to 2.2 million square feet. UNC Charlotte anticipates a student population of 35,000 students by 2020.

Greenfields and new development comprise the segment of the corridor between East Mallard Creek Church Road and I-485. Some of the corridor's newest residential and retail development supporting UNC Charlotte can be found along North Tryon Street/US-29 between East Mallard Creek Church Road and the I-485/North Tryon Street/US-29 interchange area. Further north along North Tryon Street/US-29 and past I-485 there are retail commercial uses, multi-family developments, and the Starlight Movie Theater. The Verizon Wireless Amphitheatre, Charlotte's largest outdoor concert venue, is located approximately ½-mile east of North Tryon Street/US-29 on the northern side of I-485.

5.1.4 Government Finance and Tax Sources

The cities and counties in the MSA rely on property tax and sales tax revenues to fund general services. Within all of the counties in the MSA, property taxes are the largest revenue source, which fund services

including, but not limited to, fire and police, greenways and parks, local libraries and schools, and road repair. Mecklenburg County is the only county in the MSA that currently has an additional ½-percent sales tax that is dedicated to transit funding. Table 5-2 presents a summary of the revenue sources, derived from the most recent and readily available budget summaries, for entities within the MSA.

**Table 5-2
Local Revenue Sources**

County/City (Budget Year)	Property Tax	Sales Tax	Other Sources
Mecklenburg County (2010)	60%	9%	31%
City of Charlotte (2010)	63%	13%	24%
Anson County (2009)	45%	9%	46%
Cabarrus County (2008)	56%	7%	22%
Gaston County (2010)	54%	10%	36%
Union County (2010)	68%	13%	19%
York County (2009)	46%	--*	54%

*York County Annual Budget includes sales tax in Other Sources

Source: City of Charlotte, FY2010 Budget Summary; Mecklenburg County Strategic Business Plan 2008-2010 and Recommended Budget Fiscal Year 2010; Cabarrus County Annual Budget Fiscal Year 2009-2010; County of Anson 2008-2009 Fiscal Year Budget Ordinance; Gaston County FY 2009-2010 BOC Adopted Budget; Union County Fiscal Year 2009-2010 Adopted Budget Ordinance; York County Annual Budget FY 2008-2009.

In addition to the revenue sources noted in Table 5-2, the City of Charlotte collects additional ad valorem property tax from property owners and businesses within the defined MSDs. The project corridor crosses two MSDs, namely District 1 – Center City and District 5 – University City. The 2010 revenues for these districts are projected at \$921,385 and \$611,488, respectively. All revenues are spent on programs and services that enhance the quality of the districts.

5.2 Environmental Consequences

The effects of each alternative can be measured to varying degrees in terms of population, housing and employment; economic output, jobs creation and income; special economic activities; and government finance and tax sources. An examination of socio-economic effects requires a multi-scale analysis that considers the relationships among the regional area and the project corridor. Thus socio-economic impacts of the proposed project are evaluated at three scales, namely: at the regional level, at a smaller county/city level, and at a more refined corridor/site specific level. This multi-scale analysis provides a summary of the anticipated socio-economic impacts of the project alternatives with regards to a range of considerations, from regional good and services to changes in the local (i.e., city) tax revenue.

5.2.1 No-Build Alternative

Under the No-Build Alternative, there would be no changes to the existing transportation services or facilities in the Northeast Corridor, beyond those projects already committed. Therefore, the No-Build Alternative would not result in a change to population, housing or employment along the project corridor. However, there would be fewer opportunities for redevelopment and revitalization along the proposed project corridor, particularly around proposed station locations, resulting in a potential negative impact to population, housing and employment and future economic development related to plans and policies for transit-supportive development. This could also indirectly impact future property values and tax revenues.

5.2.2 Light Rail Alternative

5.2.2.1 Population, Housing and Employment

Due to increased connectivity, mobility and reductions in travel time that would result from the proposed Light Rail Alternative, it is anticipated that increased development would likely occur in the project corridor, based on the previously described land use plans. As a result, it is anticipated that the proposed project would result in an increase in population, housing and employment along the proposed project corridor.

Table 5-3 shows the estimated population, number of housing units and total employment in 2030 within ½-mile of the proposed station areas. Most station areas show a drastic increase of greater than 75 percent in all three categories.

**Table 5-3
Projected Population, Housing and Employment within ½-Mile of Stations, 2030**

Station Area	Population	Percent Change from 2008	Housing Units	Percent Change from 2008	Employment	Percent Change from 2008
9th Street Station	10,431	133%	6,040	141%	39,722	58%
Parkwood Station	3,419	103%	1,041	102%	3,516	63%
25th Street Station	3,549	106%	1,170	99%	2,763	95%
36th Street Station	4,101	109%	1,701	102%	3,297	63%
Sugar Creek Station	1,989	37%	777	35%	3,017	63%
Old Concord Road Station	2,358	27%	838	24%	2,509	73%
Tom Hunter Station	4,077	17%	1,318	15%	1,774	114%
University City Blvd. Station	1,902	210%	755	224%	2,490	75%
McCullough Station	2,096	1,029%	866	942%	6,687	33%
JW Clay Blvd. Station	3,283	139%	1,358	121%	3,371	31%
UNC Charlotte Station	3,151	34%	349	14%	3,967	93%
Mallard Creek Church Station	1,751	85%	400	112%	2,360	252%
I-485/N. Tryon Station	2,086	105%	777	85%	1,099	1,457%

Source: Charlotte-Mecklenburg Planning Department Land Use Projections (LUSAM Model), 2009.

Implementation of the proposed LYNX BLE would result in the acquisition and displacement of residential properties. Specifically, where the Light Rail Alternative transitions from UNC Charlotte to the Mallard Creek Church Station, the full acquisition of a multi-family building and the partial acquisition of an adjacent multi-family building would be required. However, the number of units displaced represents a very small percentage of available rental properties.

The Light Rail Alternative would also result in the full acquisition of approximately 25 parcels (approximately 20 non-vacant industrial or commercial properties), discussed in further detail in Chapter 17.0: Acquisitions and Displacements. These acquisitions would result in relocation of the businesses and employees. However, business relocations do not mean that jobs would be lost as the City of Charlotte would provide relocation assistance to displaced businesses. Given the vacancy rate in the local and regional market, it is anticipated that most businesses would find opportunities to relocate. The industrial vacancy rate is estimated at 7.6 percent, with a retail vacancy rate of 11.8 percent and office vacancy rate of 22.7 percent. 14.46 percent in the Northeast Corridor (Charlotte Business Journal, 2010). Therefore, for the purposes of this analysis it is assumed that jobs would be relocated and not eliminated.

5.2.2.2 Economic Output, Jobs Creation and Income

Construction of the Light Rail Alternative would result in increased short-term employment and spending in the project area during construction, as well as long-term benefits resulting from the project operations necessary to operate and maintain the proposed project. Capital costs are broken into six main categories including construction, right-of-way, vehicles, professional services, and contingency and finance charges. General construction includes guideway and track elements; stations, stops, terminals and intermodal elements; support facilities such as yards, shops and administration buildings; sitework and special conditions such as earthwork, utility relocation, etc.; and systems including train control and signals, etc. Right-of-way includes the costs to purchase and/or lease real estate and to relocate existing households and businesses, as applicable. Vehicle costs include those associated with the procurement of light rail vehicles and other non-revenue vehicles that may be necessary. Professional services are those associated with preliminary engineering, final design, construction administration and management, etc.

The estimated capital cost for construction of the Light Rail Alternative is \$1.2 billion in year of expenditure dollars (*Revised 15% Estimate*, Rev. 01, STV, September 11, 2009). The economic impact of

these expenditures depends on the amount of goods and services acquired locally. For example, it is anticipated that construction goods and services would largely be purchased within the MSA, providing a positive economic impact. The purchase of vehicles would not occur locally since light rail vehicles are not manufactured within the MSA. Therefore, there would be little to no economic impact on the local level from this particular expenditure.

Generally, locally funded projects yield smaller economic benefit than state and/or federally funded projects, which bring additional funds to the project area that would not normally be there. As described previously, only the inflow of funds beyond the local level (i.e. those at the state and federal levels, would be considered new expenditures that would contribute to new economic output, jobs creation and income). It is anticipated that approximately 75 percent of the proposed project costs would be provided by non-local sources (e.g. federal capital funding sources such as New Starts and state capital funding sources such as Transit Trust Funds).

Table 5-4 demonstrates the application of the RIMS II multipliers (produced by Bureau of Economic Analysis and widely used for socio-economic impact analyses) for the construction industry to the amount of new capital expenditures to provide an estimate of the net output, earnings and employment generated by the Light Rail Alternative during construction. The resulting effect of construction spending for the Light Rail Alternative would be approximately \$955 million in output. It is estimated that direct construction activities of the Light Rail Alternative would generate \$285 million in net earnings and payroll expansion and would generate 8,593 jobs in the MSA. Employment impacts from construction include direct employment (e.g. construction workers), as well as indirect (e.g. employment by businesses that provide goods and services to construction firms) and induced impacts (e.g. jobs created as a result of additional purchases made by individuals/households due to increased incomes from direct or indirect employment). These impacts are one-time impacts that would last for the duration of project construction.

**Table 5-4
Economic Effects of Construction Activity – Light Rail Alternative**

New Capital Expenditure	Final Demand Multipliers ¹			Output (thousands of dollars)	Earnings (thousands of dollars)	Employment (jobs) ²
	Output (dollars)	Earnings (dollars)	Employment (jobs)			
\$424,365,750 ³	2.2510	0.6707	20.2479	\$955,247	\$284,622	8,593

¹ U.S. Department of Commerce BEA, RIMS II, Final Demand Multipliers (Construction Industry), 2009.

² One job is defined as a job for one person for one year. A job that lasts five years would equate to five person-year jobs.

³ Represents Federal (50 percent) and State (25 percent) share of total construction cost

The Light Rail Alternative would also create jobs and additional earnings from operations and maintenance (O&M) expenditures. O&M expenditures include, but are not limited to, the expenses associated with rail operators, vehicle maintenance, right-of-way maintenance, station maintenance, and safety and security. The Light Rail Alternative would also result in an increase in bus service within the Northeast Corridor to foster connectivity between modes of transportation. These costs are associated with vehicle operating costs, vehicle maintenance costs and administration costs. It is assumed that O&M funding would be procured from local and project-generated funds, and although these expenses would be generated at the local level, O&M expenditures would not happen without the Light Rail Alternative.

Applying the RIMS II multipliers for the transit and ground passenger transportation industry to the amount of new O&M expenditures provides an estimate of net change in local earnings generated by O&M of the Light Rail Alternative. The economic effects of O&M uses direct effect multipliers because output measures are largely contingent on market prices, which are not known for the future (i.e. 2030). Table 5-5 estimates that the socio-economic impact associated with the O&M of the Light Rail Alternative would be approximately \$39 million in net earnings and payroll expansion by 2030. The increased earnings come from direct hiring for light rail and bus-affiliated jobs, as well indirect earnings that result from light rail and bus workers spending their earnings, which creates additional consumer demand and associated jobs.

**Table 5-5
Economic Effects of O&M – Light Rail Alternative, 2030**

Mode	Incremental O&M Expenditure ¹	Direct Effect Earnings Multiplier ²	Earnings (dollars)
Light Rail	\$14,320,449	2.2129	\$31,689,722
Bus	\$3,219,347 ³	2.2129	\$7,124,093
Total			\$38,813,815

¹ Sources: STV, 2009. Operations and Maintenance Quantities and Costs, Light Rail Transit; STV, 2009, Operations and Maintenance Quantities and Costs, Bus.

²Transit and Ground Passenger Transportation, Direct Effect Earnings Multipliers (Transit and Ground Passenger Transportation), U.S. Department of Commerce BEA, RIMS II, 2009.

³ Only CATS bus routes are included in the O&M cost estimate. Rock Hill-Fort Mill Area Transportation Study (RFATS) Gaston and Cabarrus/Rowan buses are excluded. Additionally, for CATS express bus routes that serve areas outside of Mecklenburg County, only 50 percent of the operating costs were included since CATS shares 50 percent of the operating costs with other entities.

The Light Rail Alternative would add approximately 96 new jobs for rail O&M by 2030 (Table 5-6). These jobs would include, but are not limited to, light rail operators and supervisors, rail car mechanics and servicers, rail shop machinists, maintenance supervisors, maintenance-of-way technicians and supervisors, track maintainers and laborers, warranty and parts managers and specialists, stores clerks and receiving clerks.

**Table 5-6
Summary of New O&M Jobs Created – Light Rail Alternative**

Labor Item	2015	2030
Vehicles Operations		
Light Rail Operators and Supervisors	35	38
Vehicle Maintenance		
Rail Car Mechanics	15	19
Rail Car Servicers	5	6
Rail Shop Machinists	2	2
Maintenance Supervisors	2	3
Maintenance-of-Way		
Maintenance-of-Way Technicians	12	12
Maintenance-of-Way Supervisors	5	5
Track Maintainers and Laborers	4	4
Warranty and Parts		
Warranty and Parts Managers/Specialists	2	3
Stores Clerks	2	3
Receiving Clerks	1	1
Total	85	96

Source: STV, 2009. Operations and Maintenance Quantities and Costs, Light Rail Transit.

5.2.2.3 Special Economic Activities

Construction of the proposed Light Rail Alternative would be anticipated to result in increased development and possible increases in property values in the project corridor. The City of Charlotte and Mecklenburg County are committed to ensuring that development principles enhance the community and provide for sustainable growth. For that effort, the City of Charlotte and Mecklenburg County have instituted several regional plans and policies to promote increased development, infill development and/or redevelopment in established urban cores, and to limit development away from primary activity centers. These plans and policies are described in detail in Chapter 4.0: Land Use, Public Policy and Zoning.

The City of Charlotte and Mecklenburg County realize that integrated land use and transit are essential to fostering sustainable growth. Therefore, the City of Charlotte has developed Transit Oriented Development (TOD) and overlay districts along key transit corridors, and has included these districts within the City of Charlotte Zoning Ordinance. The project corridor includes properties that fall within a wide range of zoning districts, reflecting varying types and intensities of residential, commercial, and industrial uses. As an implementation strategy for the development of property within a ½-mile radius of

the proposed stations area, low-density districts may be rezoned with the appropriate transit-supportive zoning districts as part of the Station Area Planning Process. A detailed discussion regarding zoning districts is included in Chapter 4.0: Land Use, Public Policy and Zoning.

CATS and the Charlotte-Mecklenburg Planning Department have developed Station Area Concepts for the proposed LYNX BLE to identify transit-supportive development opportunities and outline the unique characteristics critical to integrating each station with its surrounding area. Building on the Station Area Concepts developed for the proposed LYNX BLE as well as other land use plans such as the University City Area Plan, CATS and Planning are preparing detailed Station Area Plans to guide the specific land use changes and infrastructure projects necessary to implement transit-supportive development around each station. Once developed and adopted, the Station Area Plans would serve as a blueprint to guide growth and development surrounding the stations.

Therefore, it would be anticipated that as a result of the associated land use policies, zoning and plans, the Light Rail Alternative would result in positive effects on development. The Light Rail Alternative would contribute to economic benefits by encouraging and supporting high density land uses, particularly around station locations.

5.2.2.4 Government Finance and Tax Sources

Construction of the Light Rail Alternative would result in the full acquisition of approximately 25 parcels for easements, rights-of-way, stations (including park-and-ride lots or parking garages where applicable), substations and the Vehicle Light Maintenance Facility (VLMF). Full acquisitions would result in removal of the parcels from the local tax base, and the annual tax revenue would subsequently be lost. The subsequent annual tax revenue loss would be between \$135,000 and \$146,000 (based on 2009 property tax bills), depending on which Park-and-Ride Option is considered for the Sugar Creek Station. Given the size of overall tax revenues within the City of Charlotte (i.e. approximately \$282 million), this loss would be minor. Additionally, it is anticipated that the short-term tax revenue loss would be offset by the long-term increase in property values that are expected from economic development that would occur as a result of the proposed Light Rail Alternative.

5.2.3 Light Rail Alternative – Sugar Creek Design Option

5.2.3.1 Population, Housing and Employment

The impacts to population, housing and employment are also expected to be similar to the Light Rail Alternative. The Light Rail Alternative – Sugar Creek Design Option would result in the full acquisition of approximately 31 parcels (26 non-vacant industrial or commercial properties), as well as the acquisition of residential land uses. Acquisition of these properties would result in relocation of residences, businesses and employees. However, these impacts would be offset by the increase in housing and that most business would find opportunities to relocate.

5.2.3.2 Economic Output, Jobs Creation and Income

The capital costs for construction of the Light Rail Alternative – Sugar Creek Design Option based on *15% Preliminary Engineering Design Plans* are estimated at \$1.277 million, approximately \$70 million more than the Light Rail Alternative.

As described previously in Section 5.2.2.2, only the inflow of funds beyond the local level (i.e. those at the state and federal levels, would be considered new expenditures that would contribute to new economic output, jobs creation and income). The same assumptions and multipliers used for the Light Rail Alternative were used to evaluate the effect of construction spending for the Light Rail Alternative – Sugar Creek Design Option, which would be approximately \$977 million in output (Table 5-7). It is estimated that direct construction activities of the Light Rail Alternative – Sugar Creek Design Option would generate \$288 million in net earnings and payroll expansion and would generate 8,704 jobs in the MSA, both slightly greater than what would be generated for the Light Rail Alternative.

**Table 5-7
Economic Effects of Construction Activity
Light Rail Alternative – Sugar Creek Design Option**

New Capital Expenditure	Final Demand Multipliers ¹			Output (thousands of dollars)	Earnings (thousands of dollars)	Employment (jobs) ²
	Output (dollars)	Earnings (dollars)	Employment (jobs)			
\$429,860,250 ³	2.2510	0.6707	20.2479	\$976,615	\$288,307	8,704

¹ U.S. Department of Commerce BEA, RIMS II, Final Demand Multipliers (Construction Industry), 2009.

² One job is defined as a job for one person for one year. A job that lasts five years equates to five person-year jobs.

³ Represents Federal (50 percent) and State (25 percent) share of total construction project cost

The Light Rail Alternative – Sugar Creek Design Option would also create jobs and additional earnings for O&M expenditures, as described in Section 5.2.2.2. The economic effects of O&M of the Light Rail Alternative – Sugar Creek Design Option would be the same as for the Light Rail Alternative (see Section 5.2.2.2).

5.2.3.3 Special Economic Activities

The Light Rail Alternative – Sugar Creek Design Option would transition the alignment to North Tryon Street/US-29 from the NCRR right-of-way just north of the Sugar Creek Road crossing. The *CATS Blue Line Extension Sugar Creek and North Carolina Railroad Alignment Alternatives Study* (February 2009), revealed that the Light Rail Alternative – Sugar Creek Design Option was similar to the Light Rail Alternative with regards to several parameters, including economic development impacts. Therefore, like the Light Rail Alternative, the Light Rail Alternative – Sugar Creek Design Option is expected to have positive effects on development and thus contribute economic benefits by encouraging and supporting high density land uses, particularly around station locations.

5.2.3.4 Government Finance and Tax Sources

Construction of the Light Rail Alternative – Sugar Creek Design Option would result in the full acquisition of approximately 31 parcels for easements, rights-of-way, stations (including park-and-ride lots or parking garages where applicable), substations and the VLMF. Full acquisitions would result in removal of the parcels from the local tax base, and the annual tax revenue would subsequently be lost. The subsequent annual tax revenue loss would be approximately \$168,000. The property tax estimate is based on 2009 property tax bills. The Light Rail Alternative – Sugar Creek Design Option would be located behind the existing Asian Corners shopping center, thereby reducing the potential for economic impact (*Market Potential Analysis* prepared by Warren & Associates, November 2008). However, the area would have the redevelopment potential to offset the short-term loss in tax revenue.

5.3 Mitigation

5.3.1 Light Rail Alternative

Construction of the proposed Light Rail Alternative would likely result in an increase in population, housing supply and employment, particularly around the proposed transit stations. These changes would be consistent with existing plans and policies. Therefore, no mitigation is warranted.

The Light Rail Alternative is not expected to result in negative impacts to economic output, jobs creation or income. Therefore, mitigation measures are not warranted.

The Light Rail Alternative is not expected to result in significant adverse land use impacts or significant adverse impacts to zoning or public policy. Land use changes would be supportive of existing plans and policies, and existing and future growth along the corridor would enhanced transit access and mobility. The Light Rail Alternative would also facilitate future transit-oriented development called for in existing local and regional plans. Station Area Plans will be formally adopted and implemented for the areas discussed in Section 5.2.2.3. No mitigation is warranted.

Tax revenue would be lost as a result of the proposed Light Rail Alternative. However, the overall loss would be small compared to the City and County’s total tax base. Additionally, to mitigate this potential loss, the City of Charlotte and Mecklenburg County have instituted regional plans and policies to promote increased development, infill development and/or redevelopment. These efforts will mitigate tax revenue losses that would result from the proposed Light Rail Alternative by creating positive effects on development and thus contributing economic benefits.

5.3.2 Light Rail Alternative – Sugar Creek Design Option

No additional mitigation would be required for the Light Rail Alternative – Sugar Creek Design Option beyond what is described for the Light Rail Alternative.