

APPENDIX F – GLOSSARY

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accessibility – A measure of how reachable locations or activities are from a given site; it is influenced by changes in travel time, safety, vehicle operating costs, and transportation choice.

adverse effect – Defined in Section 106 of the National Historic Preservation Act (36 CFR 800.5(a)(1)). An adverse effect to a historic property occurs when the project under consideration alters any characteristic that qualifies the property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property.

Advisory Council on Historic Preservation (ACHP) – An independent federal agency that provides a forum for influencing federal policy, programs, and activities as they affect historic and archaeological resources in communities and on public lands across the nation.

affected environment – Ambient conditions at the time an Environmental Impact Statement is prepared.

alight – To descend and settle or rest; to get off of or dismount from a vehicle.

alignment – The horizontal and vertical location of a roadway, railway or other fixed route.

alternatives – The set of transportation improvements that are compared in the EIS. Alternatives may consist of different configurations, service plans, transportation modes and strategies.

ambient air – A physical and chemical measure of the concentration of various chemicals in the outside air, usually determined over a specific time period (e.g., one hour, eight hours).

Americans with Disabilities Act (ADA) – A federal civil rights law that mandates access to public facilities for all persons with disabilities. Enacted in 1990, it specifically addresses transportation facilities in Title 2.

anaerobic – Active in the absence of free oxygen.

Area of Potential Effect (APE) – The geographic area that a project has a potential to affect historic or archaeological resources.

at-grade – On the ground, at surface level.

at-grade crossing – A crossing of rail tracks at the existing ground level. Vehicles cross at the same level intersection for all modes traveling through the intersection.

attainment area – An area where the quality of air is as good or, in some cases, better than the national ambient air quality standards that are defined in the Clean Air Act.

Base Year – The planning year of a project for which all data is gathered and compared. The year 2008 is the base year for the LYNX Blue Line Extension Northeast Corridor Light Rail Project.

below grade – Placed below the ground level, as in a roadway depressed under rail tracks or a subway that is underground or in a tunnel.

Build Year – The year for which the projections for traffic, population, and land use are used to determine travel demand in the project corridor. The Build Year for the LYNX Blue Line Extension Northeast Corridor Light Rail Project is 2030.

Bus Rapid Transit (BRT) – A newly emerging transit technology in the U.S. that combines the quality of rail transit and the flexibility of buses. It can operate on exclusive transitways, HOV lanes, expressways, or ordinary streets. A BRT system combines *intelligent transportation systems (ITS)* technology, priority for transit, cleaner and quieter vehicles, rapid and convenient fare collection, and integration with land use policy.

capital costs – The one-time expenditure to construct a transit system such as light rail. Costs include design fees, vehicle procurement, environmental mitigation, property acquisition, construction materials, and labor for the construction of a project.

catenary system – Electric power system for light rail vehicles by using an overhead contact wire and supporting poles. The contact wire provides an electrical power source for vehicles via pantographs, the contact mechanism on the roof of the light rail vehicles.

census tract – A small statistical subdivision of a county defined by a local committee of census data users for the purpose of presenting census information every ten years. The census tract boundaries, which are nested within counties, generally follow visible features and often follow governmental unit boundaries or nonvisible features.

Center City – Refers to Charlotte’s Central Business District, or the downtown area.

Clean Air Act Amendment of 1990 – A strategy for the U.S. to address the problem of urban smog. It requires states and the Federal government to reduce emissions from automobiles, trucks, buses, ships, barges, and consumer products, and to meet air quality standards. It particularly addresses the urban problem of ozone, carbon monoxide (CO), and particulate matter (PM₁₀). It defines how areas are designated “attainment” and allows the EPA to classify “nonattainment” areas as those that do not meet the federal air quality standards.

consist – The composition of cars that comprise a train set.

construction impact – The temporary impact that occurs over a short period of time while a project is under construction.

crossing cases – Metal boxes that contain switches to manually control the track crossings for rail applications.

cumulative impact – The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

decibels – A scale to measure sound levels.

De minimus – A legal term that means of insufficient significance. A de minimus impact means that conditions would essentially be the same whether or not the proposed project is implemented. Used to evaluate impacts to Section 4(f) resources for transportation projects.

design speed – The speed used for design and relationship of the physical features of a highway or rail that influence vehicle operation. It is the maximum safe speed that can be maintained over a specified section of roadway or rail when conditions are favorable (i.e. - clear, dry, daylight).

design year – The year for which the facility is designed. The transit facility should be able to handle the traffic forecasted for that year which is generally 20 to 25 years in the future.

determination of eligibility – The decision made by the State Historic Preservation Office (SHPO) regarding whether historic buildings or district are eligible for or listed in the National Register of Historic Places.

double track – Two sets of tracks side by side, most often used for travel in opposite directions.

direct effects – Effects that occur as a direct result of the project and occur at the same time and place.

Draft Environmental Impact Statement (Draft EIS) – A detailed written statement, required by Section 102 (2)(C) of the National Environmental Policy Act, that is required for projects that involve a federal action such as funding. The Draft EIS serves to provide information about significant environmental impacts and informs decision-makers and the public of practical alternatives that would prevent or minimize adverse impacts or improve the quality of the human environment.

dwelt time – the amount of time, in seconds, that a transit vehicle spends at each stop waiting for passengers to board and alight.

effects – Synonymous with impact, includes the result from actions that may have a beneficial or detrimental outcome. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonable and foreseeable.

easement – a temporary or permanent right to use the land of another for a specific purpose. Easements may be purchased from the property owner or donated from the property owner to an agency.

Eminent Domain – Authority of a public agency to acquire property at fair market value for public purposes. Also known as condemnation.

endangered – A species whose prospects for survival within the state are in immediate danger based on a loss of habitat, over-exploitation, predation, competition, or disease. An endangered species requires immediate attention or extinction will likely follow.

Environmental Justice (EJ) – Provides for equal protection from environmental hazards and fair treatment for all people regardless of race, ethnicity, or economic status, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no population of people bear an unequal share of negative environmental impacts of pollution or environmental hazard resulting from industrial, municipal, and commercial operations or the execution of federal, state, or local policies.

Environmental Site Assessment (ESA) Phase I – Involves researching a property's potential for contamination on a cursory level from known databases and reports. An ESA, Phase 1 involves limited site reconnaissance and historical research.

Environmental Site Assessment (ESA) Phase II – Involves gathering primary data based on information gathered in the Phase I. Phase II ESA's include testing for contamination and a determination of its historical duration.

ephemeral stream – Streams that have water flowing only during and shortly after precipitation events in a typical year. Groundwater is not a source of water for the stream.

feasible – Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

Federal Lead Agency – The federal agency that takes the primary responsibility for preparing the Environmental Impact Statement. The Federal Transit Administration is the federal lead agency for the LYNX Blue Line Extension Northeast Corridor Light Rail Project.

feeder bus service – A bus service that connects residential areas, points of interest, or other primary locations in a town or city to the nearest transfer facility such as the Charlotte Transportation Center or a light rail station.

Final Design – The final engineering phase of a project's design process. During final design, contract plans and specifications necessary for bidding are prepared. These contract documents provide all the necessary information needed by suppliers and contractors to construct the project.

Final Environmental Impact Statement (Final EIS) – The document that is published following a Draft Environmental Impact Statement (Draft EIS) that addresses revisions in the design of the proposed project and incorporates public and agency comments received during the public circulation period of the Draft EIS and during the Draft EIS public hearing.

Financially Constrained Long Range Plan (FCLRP) – The regional long range plan that has funding sources identified for all strategies and improvements included in the plan.

fugitive dust – Dust that leaves a property during construction, demolition, or other induced activity that can alter the air quality at a given location.

Geographic Information System (GIS) – A computer system capable of storing and manipulating spatial data.

grade – Refers to a rise in elevation within a specified distance.

grade crossing – An intersection where a roadway crosses a railway at the same elevation.

grade separation – The separation of the elevations where different roads or railroad tracks intersect one another in order to avoid traffic conflicts.

greenfield – Land that has not been previously developed or land that was previously developed but turned back to its natural state with few, if any, signs of previous development, i.e. the old development has become part of the natural landscape.

habitat – The area or environment where an organism or ecological community normally lives or occurs.

hazardous materials – Materials, often waste, that pose a threat to human health and/or the environment.

headway – The scheduled time between transit vehicles operating on a particular transit route.

hydric – Having high water content.

household income – The amount of money income received in the preceding calendar year by all household members 15 years old and over, including all household members not related to the householder.

independent utility – A project is said to have independent utility if it will provide functional improvements that can stand alone and serve a major purpose, even if no other improvements are made in the region.

indirect effects – Effects that are caused by an action and are later in time or farther removed in distance, but are still reasonably foreseeable.

infill development – Development that occurs within an area that is already urbanized. Encouraging infill development helps to reduce urban sprawl to outlying areas and suburbs.

intermittent stream – Streams that have flowing water during certain times of the year. Groundwater driven; runoff from rainfall or snowmelt is a supplemental source of water.

intermodal – The ability to connect between different modes of transportation.

joint development – Development activities that occur in partnership with two or more parties in areas near transit nodes or stations and that supports the use of transit.

Kiss-and-ride – A dedicated area of a mass transit facility where a person is driven to and dropped off by a family member or friend.

Level of service (LOS) – A qualitative measure describing the characteristics of transportation service provided; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Light Rail – An electric-powered rail system characterized by its ability to operate single or multiple car trains along exclusive rights-of-way, in subways, on aerial structures, or on streets with mixed traffic. It is able to board and discharge passengers at station platforms or at street, track, or car floor level. Also known as streetcar, trolley car, or tramway.

Limited English Proficiency – The limited ability to read, write, speak or understand English.

limits of disturbance – The horizontal boundary where soil will be exposed during construction activities. The limits of disturbance includes but is not limited to the limits of excavation, borrow areas, storage areas, staging areas, areas to be cleared and grubbed, and roadways.

Local Lead Agency – The local sponsor of a proposed project requesting federal funding. The Charlotte Area Transit System (CATS) is the local lead agency for the LYNX Blue Line Extension Northeast Corridor Light Rail Project.

Locally Preferred Alternative (LPA) – The alternative chosen at the conclusion of a Major Investment Study (MIS) or an Alternatives Analysis (AA) process. It is the alternative that has local consensus and that meets the purpose and need for a transportation improvement, as defined during the study processes.

logical termini – Rational endpoints for consideration of transportation improvements and for review of environmental impacts.

low-income – Any household with income at or below the U.S. Bureau of the Census poverty thresholds.

Major Investment Study (MIS) – Also called Alternatives Analysis, a study that seeks to find the best capital improvement within a given corridor to solve the need for additional transportation investment.

mass transportation – Transportation that provides regular and continuing general or special transportation to the public; it does not include school buses, charters, or sightseeing transportation.

Minimum Operable Segment (MOS) – A smaller, cost-effective portion of the Locally Preferred Alternative with independent utility and logical termini.

minority – A member of the following races: (1) Black or African American, (2) American Indian or Alaska Native, (3) Asian, (4) Native Hawaiian or other Pacific Islander, (5) Hispanic or Latino Origin.

mitigation – The measures undertaken when impacts remain after efforts to avoid or minimize the impacts have been exhausted.

mixed traffic – The operation of rail vehicles on public roads with car and truck traffic. Where rail tracks are embedded in the road, rail vehicles and cars can share the same road. Rail vehicles must obey all traffic laws, such as speed restrictions and traffic lights, when operating in areas of mixed traffic.

mixed use development – Development with multiple categories of land use typically including residential, commercial, retail and entertainment. Mixed-use areas generally have higher population densities and are pedestrian friendly.

mobility – The degree to which a person is able to move about; it is determined by a person’s economic situation in addition to any physical disabilities she or he may possess.

modal split – The division of travel into different transportation modes; can be defined by the percent of trips made by certain modes or by using the number of miles traveled.

National Register Eligible – Cultural resources eligible for inclusion in the National Register of Historic Places. Eligible resources do not have the full designation of National Register Listed properties but are afforded the same protection under the National Historic Preservation Act.

National Register Listed – Cultural resources included in the National Register of Historic Places.

National Register of Historic Places – A federal list of buildings, sites, district or other properties that have a historic significance. The National Register of Historic Places is maintained by the Keeper of the National Register.

neighborhood – An area that shares homogeneous or similar characteristics.

New Starts – Discretionary federal funding program for the construction of new fixed guideway systems or extensions of existing fixed guideway systems, based on cost-effectiveness, alternatives analysis results and the degree of local financial commitment.

No-Build – The future condition of an area in the absence of a project; assumes that no improvements will be made with the exception of periodic maintenance and minor enhancements needed to maintain safe operation.

off-peak period – Used to describe times where travel is not at its peak, or highest level, during the day. Off-peak travel usually occurs in the midday and evenings in most cities.

operating and maintenance costs – The periodic and usual expenses a company incurs to operate services and maintain equipment used to generate revenue.

Operating plan – An operating plan details the service plan for a transit service. The plan details characteristics such as running times, service frequency, required number of vehicles, changes in frequency throughout the day, and assumptions pertaining to stations.

ozone – A colorless, gas. The most chemically active form of oxygen having three atoms. It is naturally formed in the “ozone layer” of the stratosphere and filters out the most harmful ultraviolet light and high-energy radiation preventing it from reaching the earth’s surface.

park-and-ride facilities – Parking lots or parking garages where people park their vehicle and board a bus, train, or ferry to complete their remaining journey.

passenger boardings – The number of revenue passengers embarking a transit vehicle.

passenger miles – A factor that determines the number of miles a transit vehicle carries passengers. It assumes the transit vehicle is traveling in revenue service and does not include time when the transit vehicle is traveling from the garage or rail yard to initiate service or when it is in transit at the end of a service period.

peak hour – The time of day when the greatest amount of travel occurs; the period of highest transportation service demand. Most cities experience a morning peak and an evening peak period associated with home-to-work and work-to-home trips. Also called rush hour.

Perennial streams – Streams that flow year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow.

Preliminary Engineering – The second phase of FTA project development process, preliminary engineering includes the development of 15 and 30 percent design plans for which the Draft and Final Environmental Impact Statements are based.

Record of Decision (ROD) – A formal decision made by a lead federal agency based on its interpretation of a Final Environmental Impact Statement.

ridership – The number of people using a public transportation system during a given time period.

right-of-way – The area over which a legal right of passage exists; land used for public purposes in association with the construction or provision of public facilities, transportation projects, or other infrastructure.

scoping – The effort taken at the beginning of a study to consider all issues that should be addressed in the study. It is the first phase of activity to prepare an Environmental Impact Statement.

secondary impact – The secondary, or indirect, effect of an action that takes place sometime after a primary event has occurred.

Section 106 – The section of the National Historic Preservation Act that requires federal agencies to consider the potential effects of proposed federal actions on any known or potential historic, architectural, or archaeological resources.

Section 4(f) – Section 4(f) of the U.S. Department of Transportation Act of 1966, which prohibits the use of protected resources for a transportation project unless there is no feasible and prudent alternative and that the project includes all possible planning to minimize harm to the property resulting from such use. Protected resources include: public park and recreation lands, wildlife and waterfowl refuges, and significant historic sites.

signal houses – Buildings where signals are located along a rail line.

significantly – Describes the effects or impacts of a project in an EIS. An action is considered in both context and intensity to determine whether or not the action significantly impacts a habitat, neighborhood, species or other item being assessed.

station platform – The area where passengers board and disembark a train or subway.

State Historic Preservation Office (SHPO) – A state administrative agency responsible for carrying out consultation in accordance with the National Historic Preservation Act of 1966, as amended and other state historic preservation regulations.

streetscape – The space between the buildings on either side of a street that defines its character. Elements of a streetscape can include buildings, set back of buildings, sidewalks, signs, public furnishings, trees, landscaping, street lights, above-ground utilities, bus stop shelters and street furniture.

terminus – An end point on a transportation line or the town in which it is located.

threatened – A species that may become endangered if surrounding conditions begin or continue to deteriorate.

Traction Power Substation (TPSS) – Substations converting alternating current from the power grid to the voltage and type of current needed for a light rail vehicle.

Transportation System Management (TSM) – Different actions and activities designed to make an existing transportation system more efficient.

Travel Demand Forecasting – A technique of estimating the number and travel times of potentials users of a transportation system.

travel time – The time that it takes to travel from one location to another.

trolley – Also called a streetcar, a trolley is a transit vehicle that obtains power from an overhead source and runs on a rail track. Light Rail is the modern day technology of trolley but runs in an exclusive right-of-way unlike historic trolleys that often operated within city streets.

uplands – Land other than wetlands that are well-drained and rarely, if ever, inundated.

Vehicle Maintenance Facility – A site with facilities and buildings for the storage, maintenance, and cleaning of transit vehicles. May also include crew facilities such as locker rooms and break facilities.

vehicle miles traveled (VMT) – The number of miles traveled by an automobile per individual within a given area.

viewshed – Surface area visible to and from a given point or collection of points.

waterfowl – Any birds, such as ducks and geese that frequent the water, or lives about rivers or lakes.

wetlands – Tidal areas or swamps with water saturated soil characteristics and associated vegetation that meet certain criteria on which filling and development are federally- and/or state-regulated.

zoning ordinance – A local land use ordinance that identifies and regulates the use of property within a given municipality. Zoning ordinances prescribe land use type, relationships to nearby uses, densities, height and setback requirements, parking requirements and related elements.

ACRONYMS

AADT	Annual Average Daily Traffic
ACHP	Advisory Council on Historic Preservation
AC&W	Aberdeen, Carolina & Western Railway Company
ADA	American with Disabilities Act of 1990, as amended
ADT	Average Daily Traffic
AEC	Areas of Environmental Concern
AFC	Automated Fare Control
APC	Automated Passenger Counter
APE	Area of Potential Effect
BA	Biological Assessment
BMP	Best Management Practices
BO	Biological Opinion
CAA	Clean Air Act Amendments of 1990
CADD	Computer Aided Drafting and Design
CATS	Charlotte Area Transit System
CBD	Central Business District
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability List
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CIA	Community Impact Assessment
CMPC	Charlotte-Mecklenburg Planning Commission
CO	Carbon Monoxide
CSX	CSX Corporation
CTAG	Citizens Transit Advisory Group
CWA	Clean Water Act of 1972, as Amended

DEIS	Draft Environmental Impact Statement
DOT	Department of Transportation
EIS	Environmental Impact Statement
EJ	Environmental Justice
EMF	Electro-magnetic Field
EO	Executive Order
EPA	US Environmental Protection Agency
ESA	Endangered Species Act of 1973
FCLRP	Financially Constrained Long Range Plan
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FFGA	Full Funding Grant Agreement
FHBMs	Flood Hazard Boundaries Maps
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Maps
FRA	Federal Railroad Administration
FSC	Federal Species of Concern
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographic Information Systems
GPS	Global Positioning System
GSST	Growth Strategy Steering Team
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HOV	High Occupancy Vehicle
HQW	High Quality Waters
IP	Individual Permit
ITS	Intelligent Transportation Systems
JD	Jurisdictional Determination
LUESA	Land Use and Environmental Services Agency
LEP	Limited English Proficiency
LOS	Level of Service
LPA	Locally Preferred Alternative
LRTP	Long Range Transportation Plan
LRV	Light Rail Vehicle
LUST	Leaking Underground Storage Tank
MIS	Major Investment Study
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSATS	Mobile Source Air Toxics
MTC	Metropolitan Transit Commission
MUMPO	Mecklenburg-Union Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standards
NCAC	North Carolina Administrative Code
NCDOT	North Carolina Department of Transportation
NCDWQ	North Carolina Division of Water Quality
NCEEP	North Carolina Ecosystem Enhancement Program
NCNHP	North Carolina Natural Heritage Program
NCRR	North Carolina Railroad
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act of 1966, as amended
NOx	Oxide of Nitrogen
NPL	National Priorities List
NPDES	National Pollutant Discharge Elimination System

NPS	National Park Service
NRHP	National Register of Historic Places
NS	Norfolk Southern Railway Company
NSW	Nutrient Sensitive Waters
NWI	National Wetlands Inventory
O ₃	Ozone
O&M	Operations & Maintenance
ORW	Outstanding Resource Waters
PE/EIS	Preliminary Engineering/Environmental Impact Statement
PHA	Preliminary Hazard Analysis
PM _{2.5}	Particulate Matter of less than 2.5 micrometers in effective diameter
PM ₁₀	Particulate Matter of less than 10 micrometers in effective diameter
PMT	Project Management Team
PST	Project Steering Team
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
R-LPA	Refined Locally Preferred Alternative
ROD	Record of Decision
ROW	Right-of-Way
RR	Railroad
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SCS	Soil Conservation Service
SEL	Source Exposure Level
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SWIM	Surface Water Improvement and Management Program
SWLF	Solid Waste Landfills
TAZ	Traffic Analysis Zone
TIP	Transportation Improvement Program
TDM	Transportation Demand Management
TOD	Transit Oriented Development
TPSS	Traction Power Substation
TSM	Transportation System Management
UNC Charlotte	University of North Carolina at Charlotte
USCOE	U.S. Army Corp of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish & Wildlife Service
USNPS	U.S. National Park Service
UST	Underground Storage Tank
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VPD	Vehicles per Day