

**Department of Transportation's National Infrastructure Investments
Under the Full-Year Continuing Appropriations, 2012**

Opportunity Number: DTOS59-12-RA-TIGER4

Raleigh Union Station Phase I

APPLICANT INFORMATION

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TABLE OF CONTENTS

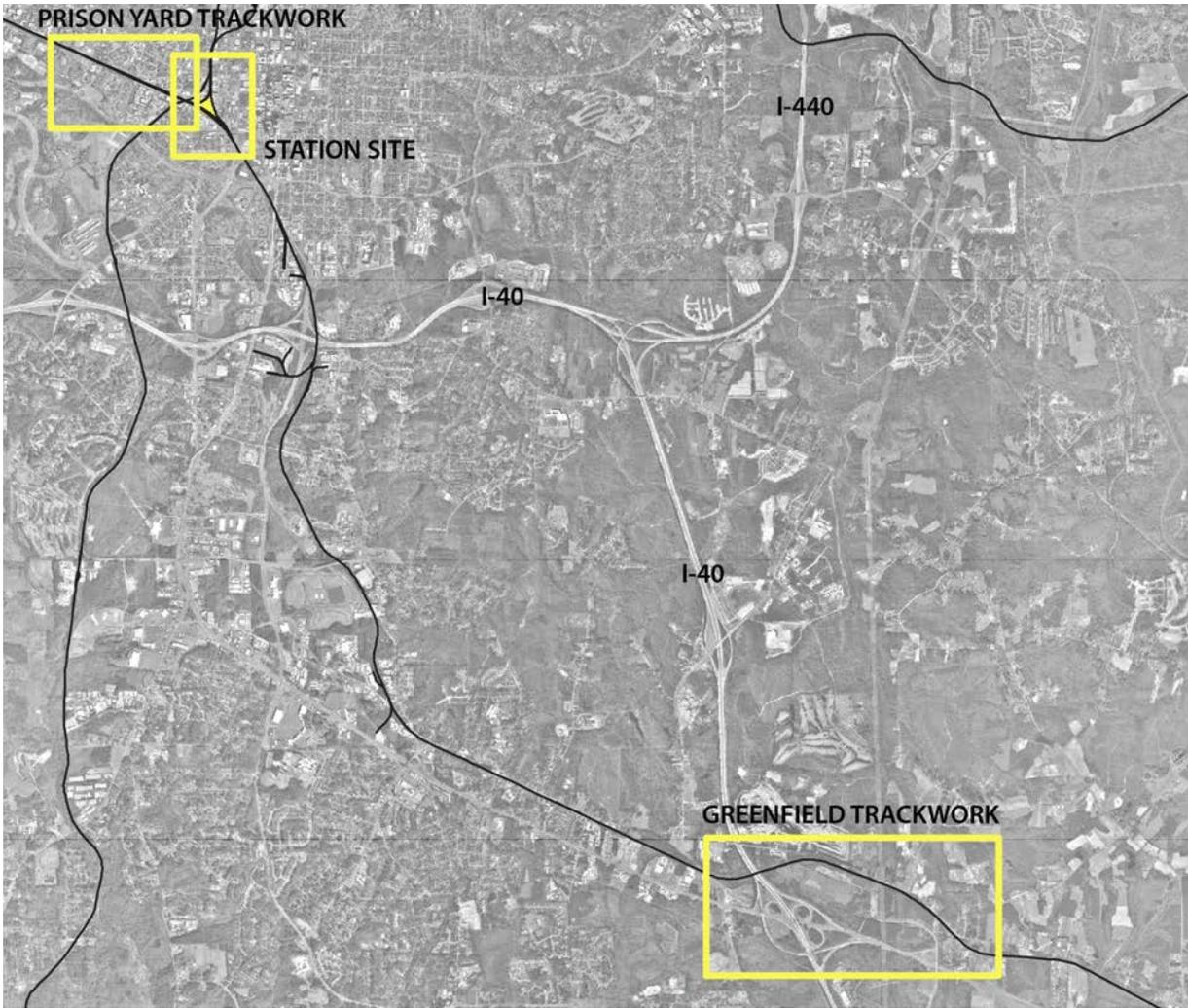
I. Project Description	2
II. Project Parties	13
III. Grant Funds, Sources, and Uses	16
IV. Selection Criteria	17
a. Long-Term Outcomes	17
b. Job Creation	22
c. Innovation	23
d. Partnership	23
e. Results of BCA	24
V. Project Readiness and NEPA	24
VI. Federal Wage Rate Certification	30
VII. Changes to Pre-Application	32
Appendix A: Benefits-Cost Analysis	A-1
Appendix B: Letters of Support	B-1



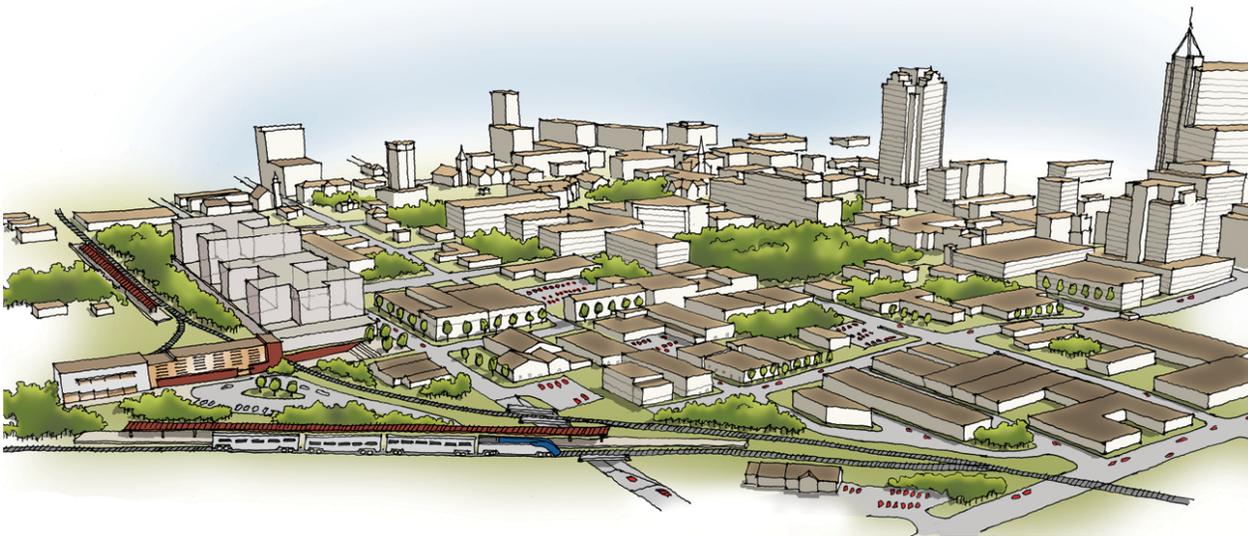
Raleigh's Historic Depot District



Raleigh Skyline



Project Extents



Artist Rendition of Raleigh Union Station

PROJECT NARRATIVE

I. PROJECT DESCRIPTION

The City of Raleigh, state capital of North Carolina, in partnership with the North Carolina Department of Transportation (NCDOT) and Triangle Transit (TTA), is requesting Federal TIGER funding to assist in the construction of the first phase of a multimodal transit center known as the “Raleigh Union Station.” This first phase of construction includes two principal components: 1) the “Raleigh Train Station,” a critically needed train station with associated track and rail siding improvements to increase passenger and freight train capacity, and 2) the “West Street Extension,” which will reconnect a portion of the City’s historic urban street grid and will allow for the closure of two nearby at-grade rail crossings.

Centrally located on the proposed high speed rail corridor planned for the Southeast, as shown in Figure 1, the new Raleigh Union Station is critical to the nation’s future development of high speed rail. The solid line from Washington, DC to Raleigh through Charlotte and on to Birmingham depicts the proposed Southeast High Speed Rail line; the dotted lines depict future concepts for additional segments of high speed rail. With this in mind, this proposal is an outgrowth of many years of collaborative planning at all levels of government and community. The project is ready for “Design, Bid, and Build” pending obligation of TIGER funding and will incorporate the matching contributions documented in this proposal. The required federal environmental review processes will be completed by April 2013. Design and construction will begin following obligation of the TIGER funds, and the train station will open with uninterrupted freight and passenger services in two years following the initiation of construction.

Figure 1. Southeast High Speed Rail Corridors



Over the past ten years, Downtown Raleigh has experienced a transformation from a quiet government center to the civic hub of the Triangle. The urban core of Raleigh offers a popular destination for culture and dining, surrounded by strong residential neighborhoods. Downtown Raleigh has increasingly become a premier target in the Triangle for corporate investment. Since the adoption of the City’s “2030 Comprehensive Plan” in 2009, there has been \$2.5 billion of investment in downtown, of which \$1 billion went towards public projects, such as award-winning streetscape projects like Fayetteville Street and City Plaza, new affordable housing developments, the Raleigh Convention Center, and the Wake County Courthouse. The remaining \$1.5 billion came from private development of large-scale office towers like the RBC Headquarters, residential condos and apartments, adaptive reuse projects, retail shop fronts, and new cultural anchors.

US Census data for Raleigh indicate that for the period of July 2008 to June 2009, in the midst of the deepest economic recession in generations, the Raleigh-Cary Metropolitan Statistical Area (MSA) increased in population by 3.2 percent. This growth rate places the Raleigh MSA third among 366 census-defined areas and first among metropolitan areas of at least 500,000 people. At a regional level, the eight counties surrounding Raleigh are collectively referred to as the Research Triangle, whose name is derived from the Research Triangle Park that is located between Raleigh, Durham, and Chapel Hill. Since 1980, the population in these eight counties has grown by more than a million, from 758,401 to 1,769,977 (2010 US Census), and is expected to grow by another 69% by the year 2030. The Combined Statistical Area for Raleigh-Durham-Cary is forecasted to reach just over 2.6 million by 2035, an average annual increase of 4.5 percent and total increase of 53 percent in just over twenty years.

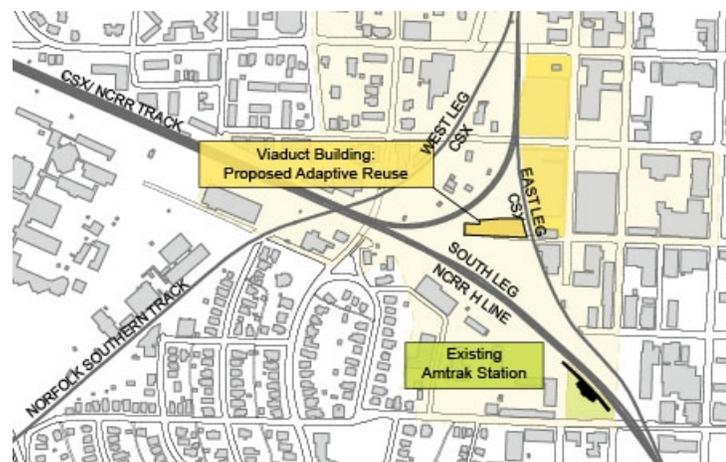
Raleigh is located along a well-traveled railway corridor and currently ranks second in Amtrak ridership among all major cities in the Southeast, as indicated in Table 1. Current consumer demand exacerbates pressures on the existing Amtrak passenger train station in Raleigh, which is outdated, overcrowded, and difficult to access. This existing facility is insufficient to encourage, much less accommodate, future travel demand that will accompany the anticipated population growth.

Table 1. Amtrak Ridership in 2011

Location	Ridership	Trains
Richmond	320,239	20
Raleigh	192,434	8
Charlotte	181,566	8
Orlando	179,142	4
Alexandria	161,687	20
Atlanta	114,938	2
Miami	94,556	4
Charleston	81,180	4
Jacksonville	74,733	4
Savannah	69,379	6

The Raleigh Train Station and its Grand Waiting Hall will be the centerpiece of the Raleigh Union Station project. Centrally located in Downtown Raleigh, the site is surrounded by property offering tremendous development potential. The Raleigh Train Station will be just three blocks west of the city’s center, proximal to the State Capitol and the Raleigh Convention Center. Figure 2 depicts the location of both the existing Amtrak station and the proposed new building inside the “Boylan Wye,” which is a convergence of three railway corridors (NC Railroad, Norfolk-Southern, and CSX).

Figure 2. Boylan Wye



The proposed Raleigh Train Station will involve an adaptive reuse of an existing structure known as the Viaduct Building, which is located within the Boylan Wye. Subsequent plans for future construction and expansion will further integrate other multimodal elements, including Greyhound, Triangle Transit bus, Capital Area Transit bus, regional commuter rail, local light rail, taxis, cyclists, and pedestrians. The nature of the Boylan Wye, with the convergence

of multiple railways, provides a unique opportunity to be innovative in our construction planning and to meet objectives for sustainability (e.g., designing to LEED standards, implementing innovative stormwater practices, the use of native plant material).

The current Amtrak station in use today was built in 1950 and is a remnant of the Southern Railway Company's passenger service. The current station, shown in Figure 3, is deficient in three significant ways. First, with waiting areas of only 1,800 square feet—smaller than the average single family home—there is insufficient waiting space to accommodate present-day Raleigh ridership, with travelers often forced to wait outdoors. Second, the station has only 54 dedicated parking spaces. More than 100 cars regularly spill over into adjoining areas, creating safety concerns and inconveniences for passengers. Third, the ground-level platform at the station is inadequate and unsafe for existing demand, with no space for expansion. For example, the Amtrak Silver Star, which runs between Florida and New York, has to unload passengers in two phases as the length of the train exceeds the length of the passenger boarding platform area. This two-phase passenger loading requires the train to pull forwards and backwards, causing additional delay and blocking an adjacent street crossing. The City has produced a video showing the crowded conditions at the current station and the opportunity for adaptively reusing the Viaduct Building, which can be found at:

<http://www.youtube.com/watch?v=ChJXdLo2FZU>

The potential infusion of TIGER funding affords the City of Raleigh, NCDOT, and TTA an opportunity to replace an obsolete facility and get ahead of the region's dramatic population growth over the lifecycle of the project. The funding will act as a catalyst to the implementation of critical transportation investments and growth plans to enhance quality of life in Raleigh, the Triangle, and the Southeastern US region.

The goals of this project are to:

1. Complete Phase I construction of Raleigh Union Station, constructing the Raleigh Train Station providing service to intercity passenger rail, and accommodating plans for the Southeast High Speed Rail, regional commuter rail, and additional bus transit services;
2. Increase passenger capacity and demand for current and future passenger service;
3. Improve freight operations, velocity and safety;
4. Address safety conditions by eliminating at-grade crossings for vehicles and pedestrians, while maintaining connections to neighborhoods with a revitalized urban street grid; and
5. Enhance commerce associated with rail corridors within Raleigh's urban core and other economic hubs in the Southeast region.

Figure 3. Current Raleigh Amtrak Station



Goal 1: Initiate Raleigh’s intermodal transportation center

Since 1989, fifteen different City, regional, and State plans have supported the concept of a multimodal station in Downtown Raleigh (indicated in Table 7 presented at the end of this narrative). Ridership and feasibility studies have determined that demand is sufficient to warrant such a facility. The City of Raleigh, NCDOT, and TTA have aligned plans, visions, and funding to develop Raleigh’s Union Station and accommodate the current and future demand of passenger and freight rail.

Goal 2: Increase passenger capacity and demand

North Carolinians from all over the state have diverse reasons to visit Raleigh. Many visitors need only a day to conduct business with corporate, State and Federal government offices, visit legislators, tour the museums, attend college classes, etc. With six daily trains between Charlotte and Raleigh, visitors from communities like Salisbury, High Point, Greensboro, Burlington and Durham could leave their cars behind and elect a transportation choice that allows them to rest or work during their round-trip visit to the city. Other North Carolina communities have seen increases in ridership after station upgrades were completed. A 2008 Amtrak study of renovated stations in North Carolina indicated substantial ridership increases occurred in High Point, Greensboro, and Durham. Based on this data, current estimates for the Raleigh Train Station assume a post-construction ridership increase of 18%. The new station will also improve the quality of the passenger experience by alleviating the crowded conditions in the current waiting area, allowing larger numbers of passengers to wait for trains indoors and under cover. The proposed station will also provide adequate parking for the growing ridership.

Goal 3: Improve freight operations and velocity

NCDOT has worked with rail freight companies on multiple infrastructure projects that could impact their business. Standard project objectives include:

- 1) Do no harm to freight operations;
- 2) Improve freight operations, including through and local freight;
- 3) Provide capacity for current and future passenger traffic;
- 4) Improve operating velocity on all tracks; and,
- 5) Minimize and/or eliminate at-grade crossings for trains, vehicles and pedestrians.

The Raleigh Train Station and the West Street Extension will contribute to all of these objectives. Currently all passenger trains stopped at the Raleigh station block all other east/west trains. Only a single train may stop in the station, while other passenger trains are frequently held west or east of the station, incurring significant delays for both passenger and freight rail operations. There are two separate freight yards on opposite sides of the main line, with 10-mph speed restrictions on the west and east legs of Boylan Wye, and 20-mph speed restrictions on the main line. Furthermore the east leg of Boylan Wye is “dark” (non-signaled) and not currently on CSX Transportation or Norfolk-Southern dispatch boards.

The proposed project will create dedicated station track sidings, allowing freight trains to pass when passenger trains are in the station. Multiple passenger trains can be staged at the station simultaneously without impeding through freight movements. The adjacent freight yard tracks will be consolidated and expanded, increasing capacity on a single side of the main line, and switching operations will be moved off the main line and onto sidings. The project also allows

for the future addition of a second main line track. The geometric and signalization improvements on the west and east legs of Boylan Wye will increase maximum speeds from 10 mph to 25 mph, and main line speeds will be increased from 20 mph to 40 mph.

Goal 4: Address safety considerations

The Raleigh Train Station and the West Street Extension projects will positively contribute to improving safety and reducing highway congestion and maintenance. By encouraging greater use of trains and buses at the future Raleigh Union Station for commuting, intercity travel, and travel throughout the Southeast, there will be less congestion on the highway system. This will result in concomitant lower highway maintenance costs and fewer deaths and/or injuries not incurred as a result of taking traffic off the highways. Research has indicated that for every 100 million vehicle miles (MVM) traveled, there is at least one death due to a traffic accident. For instance, according to the NCDOT 2010 Annual Report, the FY2011 statewide crash rate was 1.25 per 100 MVM, and the five-year average for North Carolina was 1.47 per 100 MVM (<http://www.ncdot.gov/performance/reports/>). According to the Fatalities Analysis Reporting System data published by the National Highway Traffic Safety Administration (US DOT), the national crash rate in 2010 was 1.14 fatalities per 100 MVM (<http://www-fars.nhtsa.dot.gov/Main/index.aspx>). Figures derived in the Benefits-Cost Analysis submitted with this proposal estimate that there could be as many as 130,000+ additional passengers encouraged to ride the trains by 2044 due to building the Raleigh Train Station, in addition to background growth in passenger travel expected under the “No Build” condition. The value of this benefit is not included in the Benefits-Cost Analysis submitted with this proposal due to the difficulty of attributing this benefit directly to the new Raleigh Train Station; however, it can be assumed that there is a safety value associated with lives saved and injuries prevented.

At the Boylan Wye, other safety benefits can also be identified. The new elevated platforms will allow passengers to easily board and detrain without the need for a step box. And, the new platforms will be of sufficient length to allow the longest trains to stop in a single position for boarding. By eliminating the current train repositioning and movement, the potential for bodily injury is greatly reduced. The elimination of two nearby at-grade street crossings will also contribute to improving safety for trains, cars, bicycles, and pedestrians.

Goal 5: Enhance commerce

The Raleigh Train Station will anchor the Raleigh Union Station complex and catalyze new residential and commercial development in the area. Figure 4 provides a depiction of how the area surrounding the Wye may be expected to develop in the coming years, with mixed residential and commercial use. Public investments in

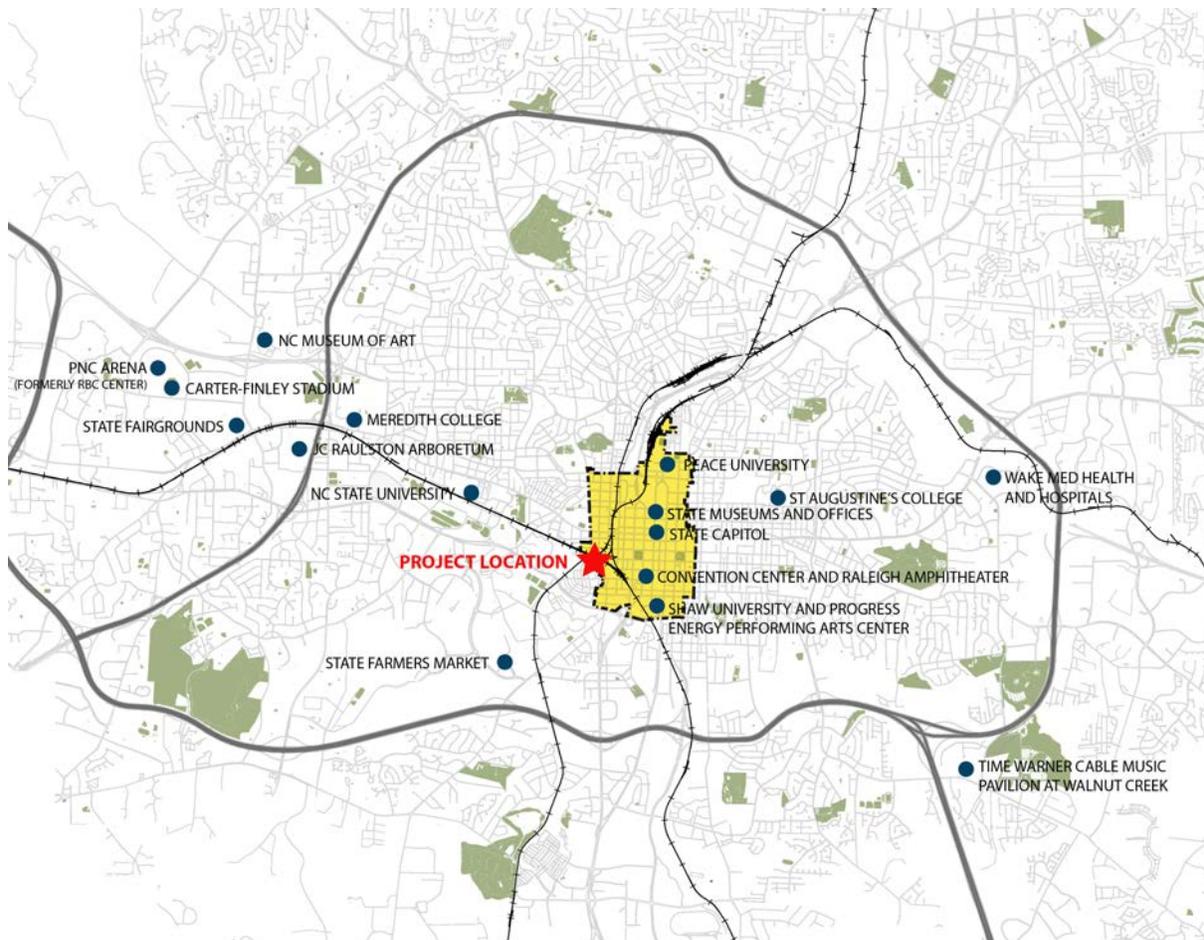
Figure 4. Prospective Development Surrounding Boylan Wye



Raleigh Union Station will help revitalize what is currently an industrial warehouse district by supplying a transit hub large enough to drive private investment. After evaluating recent City-initiated projects, the Downtown Raleigh Alliance estimates that every \$1 of public funds invested in Downtown Raleigh resulted in a \$2 match of investment by the private sector. This finding is substantiated with research indicating that investment in public infrastructure results in economic output of 2 to 1 over a two-year period, and that every dollar spent generates \$3.21 in economic output over a 20-year period (Cohen, Frieling, & Robinson, 2012).

Within walking distance of the planned Raleigh Union Station, Downtown Raleigh functions as the metropolitan center of the eight-county Triangle region. Continued development in the city’s core highlights Downtown Raleigh as the region’s largest employment center. Examples include the Royal Bank of Canada (now PNC Financial), which in 2008 established its US headquarters in Downtown Raleigh in a 33-story, 730,000-square-foot building containing corporate offices, residential units, and retail space. Also in 2008, the Raleigh Convention Center added 500,000 square feet of exhibition and meeting space in the center of the city, contributing to Raleigh’s economic attractiveness and competitiveness.

Figure 5. Proximity of Major Venues to the Proposed Raleigh Train Station



Downtown Raleigh is also home to several historic sites and state museums, including the NC State Capitol, the NC Museum of History and the NC Museum of Natural Sciences, which is currently expanding with a landmark new 80,000-square foot Nature Research Center. Surrounding Downtown Raleigh, there are numerous other venues and attractions which draw daily visitors, many whom could ride trains into Raleigh. Five colleges and universities call Raleigh home, including North Carolina State University (NCSU). The city has two major sports facilities, which include the 57,000-seat Carter-Finley Stadium, and PNC Arena, which houses the National Hockey League’s 2006 Stanley Cup Champion Carolina Hurricanes, and NCSU’s two-time NCAA National Championship men’s basketball team. These facilities are adjacent to the State Fairgrounds, which are all a short drive or bus trip from the planned Raleigh Train Station. These and other visitor attractions are indicated in Figure 5.

Amtrak and Other Train Operations

Amtrak intercity passenger rail service currently provides eight daily trips through Raleigh; additional trips are currently planned to accommodate increasing service demands. The “Piedmont” runs from Raleigh to Charlotte; the “Carolinian” runs from Charlotte to New York; and the “Silver Star” runs from New York to Miami. As mentioned previously, the current station’s platform length requires double stops of the Silver Star. Other trains passing through the Boylan Wye on a daily basis include freight trains operated by Norfolk-Southern and CSX Transportation. Table 2 provides conservative projections for increases in intercity Amtrak ridership under two conditions: 1) “No Build” should there be no change in the current station and track facilities, and 2) “TIGER Build”. Projections are built based on historical data, with an 18% increase in ridership projected for the first year following opening of the new Raleigh Train Station with smaller increases subsequent years (5.31% through 2027, and 2.89% thereafter through 2044). Based on this conservative analysis, over 130,000 additional users can be attributed to the new Raleigh Train Station construction by 2044.

Table 2. Projected Increases in Ridership

Transportation Mode	2011		No Build		TIGER Build	
	Daily Passenger Trains	Annual Ridership	2044		2044	
			Daily Passenger Trains	Annual Ridership	Daily Passenger Trains	Annual Ridership
Intercity Rail	8	192,434	12	600,399	12	730,503

The Raleigh Union Station project described herein meets TIGER’s “high priority” for intercity and high speed rail projects and is consistent with national priorities for intermodal transportation. Since the implementation of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, federal transportation policy has sought to encourage and promote intermodal passenger connections. In a 2007 special report, the Bureau of Transportation Statistics notes, “The intermodal terminal is a key building block for developing connectivity because travelers can only transfer directly between modes if there is a place to do so.”

(http://www.bts.gov/publications/special_reports_and_issue_briefs/special_report/2007_09_18/html/entire.html)

Raleigh’s vision for passenger travel is for the Raleigh Train Station to be that “key building block” that will support additional multimodal connectivity. This station will anchor the Raleigh Union Station complex and catalyze new residential and commercial development in the area. As the Raleigh Union Station facility grows, future phases will add features that contribute to intermodal and high speed rail connections. The facility will complement the existing Moore Square Transit Station, which currently serves all Capital Area Transit (CAT) Downtown routes and all TTA Downtown Raleigh regional bus routes. Moore Square Station is now over capacity, resulting in buses stacking up on adjacent streets. Later phases of Raleigh Union Station will allow significant portions of these bus services to be shifted to the new complex, which will permit CAT and TTA to expand their services to keep up with anticipated growth in population and ridership. The development described in this “Raleigh Union Station Phase I” proposal for TIGER funding must be completed before Phase II can proceed.

Overview of Raleigh Union Station Project

With TIGER support, Phase I of the Raleigh Union Station project will adaptively reuse an existing building known as the Viaduct Building located inside the Boylan Wye and shown in Figure 6. The 26,054-square foot building dates to 1960 and owes its name to its proximity to the now-demolished Martin Street Viaduct which it formerly adjoined. Within the Boylan Wye, there is ample room for expansion of the building and site improvements as future demand requires it.

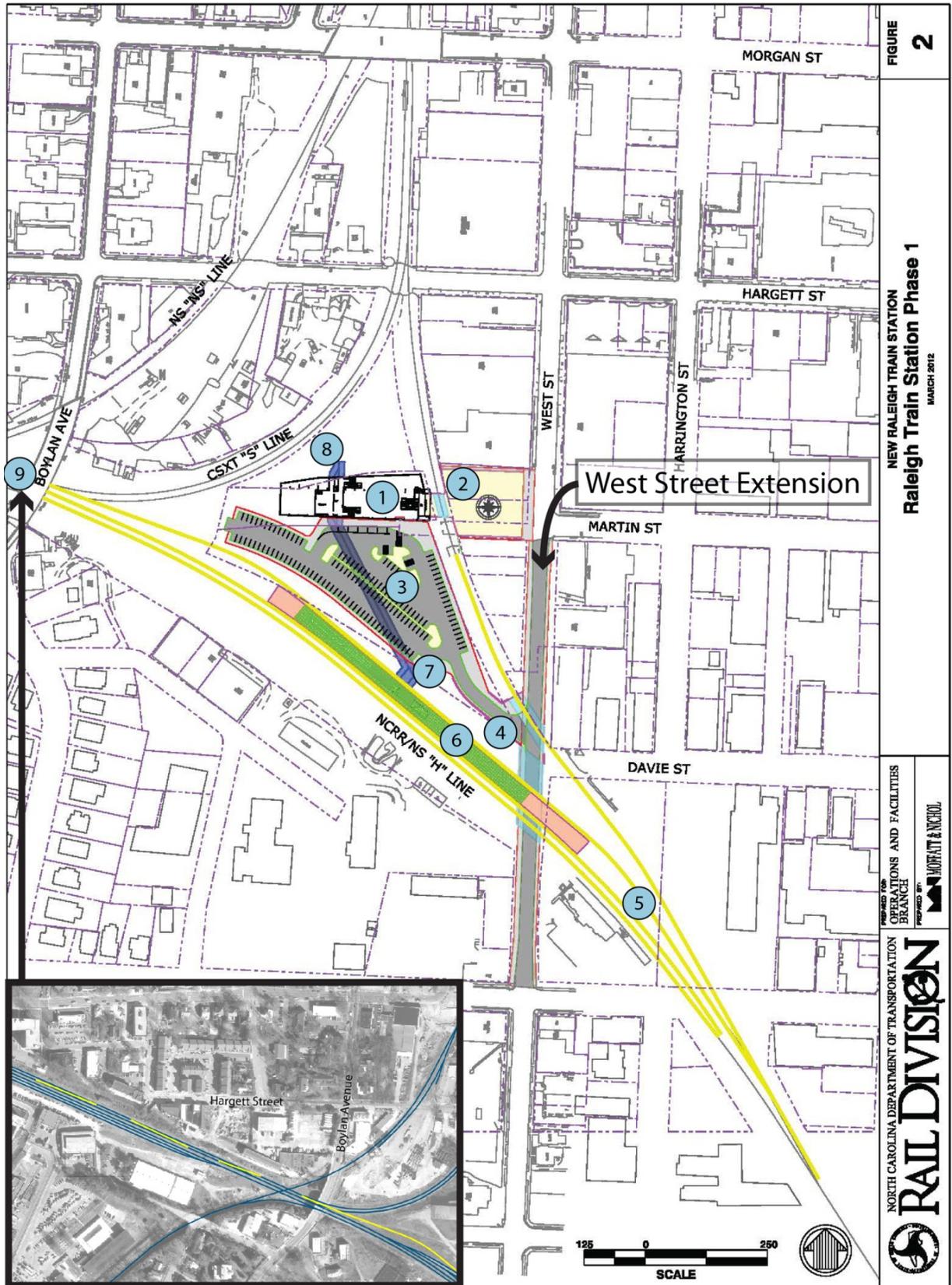
Figure 6. Viaduct Building



The two waiting rooms at the existing station have only 1,800 square feet of floor space, with the building as a whole having only 2,500 under cover. In contrast, Phase I construction of the Raleigh Train Station will have approximately 34,000 square feet of total space including the Grand Waiting Hall, vendor retail services, Amtrak offices, and baggage handling spaces. The Raleigh Train Station will triple the number of off-street parking spaces from the existing 54 spaces, taking existing overflow station parking off of side streets and providing much greater convenience for connections to buses and taxis, as well as tourist conveniences such as horse carriages and rickshaws. Along with innovatively reusing the Viaduct Building, this proposal for TIGER funding will also make substantial improvements to rails, passenger platforms, and street connectivity, all of which are necessary for the future integrity and success of the Raleigh Union Station complex. The Raleigh Train Station and associated railroad track improvements represent a single “segment” of this proposal for TIGER funding with a variety of construction elements that are necessary to the functionality of the train station. Along with the Raleigh Train Station segment, this proposal for TIGER funding also seeks support for a separate segment known as the West Street Extension.

Figure 7 depicts the major construction elements necessary to complete the Raleigh Union Station segment of this proposal, followed by a brief discussion of each element. Discussion of the West Street Extension segment follows discussion of the Raleigh Union Station segment.

Figure 7. Raleigh Train Station Construction Elements 1 Through 9



Raleigh Train Station TIGER Construction Elements (Reference Figure 7 for location)

1. Raleigh Train Station. Figure 8 provides a schematic depicting construction plans for the main floor of the Raleigh Train Station. The first floor provides a connection from the entry plaza to the Grand Waiting Hall on the second (main) level, as well as connections to the pedestrian concourses leading to the platforms. Along with the Grand Waiting Hall, the second level will also have retail lease areas, ticketing, and Amtrak “back of house” services. The third level will support Amtrak administrative offices.

Figure 8. Schematic of Main Floor at Raleigh Train Station



2. Pedestrian Plaza. The Pedestrian Plaza will allow for a grade-separated crossing under the existing east leg of the Wye. It will allow safe access to the facility for pedestrians and cyclists. Upon subsequent build-out of the entire complex in later phases of this endeavor, the plaza will allow for public art and additional vending opportunities.
3. Surface Parking Lot. An expanded parking lot will provide passengers and staff with adequate parking and easy access to the station.
4. Entrance Drive. A grade-separated driveway will be constructed under the east leg of the Wye to allow vehicles safe access to the surface parking lot.
5. Station Track. A new station track will allow passenger trains to dwell in the station, allowing freight trains to pass on the adjacent main line track.
6. Raleigh Train Station passenger platform. A new 800-foot long platform will accommodate longer trains and will eliminate the need to stop more than once during boarding/alighting.
7. Pedestrian Concourse A. This underground concourse will connect the Grand Waiting Hall to the boarding platform. The controlled access concourse will allow Raleigh Train Station to meet increasing security requirements for rail travel and will provide safe access to platforms for both passengers and baggage handlers.
8. Pedestrian Concourse B. Partial construction of this concourse will connect to the future Southeast High Speed Rail platform.
9. Prison Siding Extension. The existing Prison Siding will be extended to 7,000 feet with power switches at both ends. This siding would handle trains that otherwise would enter Norfolk-Southern’s “Glenwood Yard” north of downtown, passing through Boylan Wye, and includes yard air (compressed air stations for charging the brakes).
10. Greenfield Siding. This new 7,000-foot uncontrolled siding at Greenfield Parkway near the Town of Garner would allow freight trains to service customers east of downtown without impacting the congested tracks in and around Boylan Wye. Being south of the Raleigh Train Station, this area is depicted in Figure 9.

Figure 9. Greenfield Siding



West Street Extension Segment

This road and bridge project is envisioned as an extension of the existing West Street via a grade-separated structure under the tracks and platform, as depicted in Figure 10. An extension of West Street will create a new gateway entry providing connections from Interstate 40 to the Raleigh Train Station area. The West Street extension will further allow a safe and attractive means to reconnect neighborhoods south of the track with the Historic Depot District, the Warehouse District, the planned Raleigh Union Station complex, and other downtown destinations whether travelling by car, bicycle, or on foot.

Figure 10. West Street Extension Segment

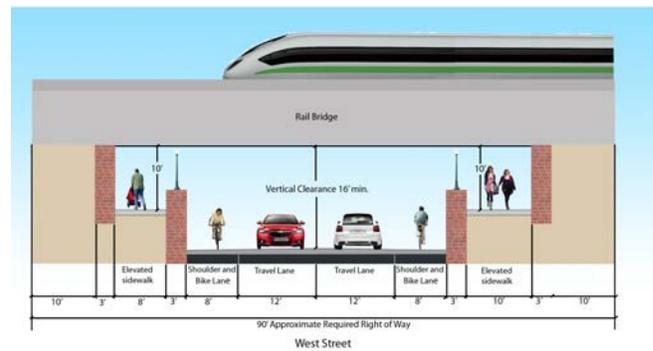


Figure 11. Historic and Warehouse Districts

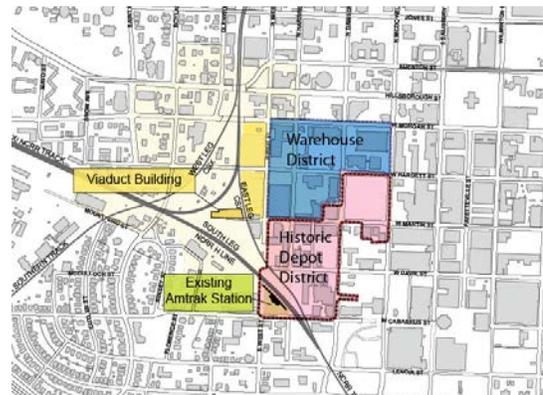


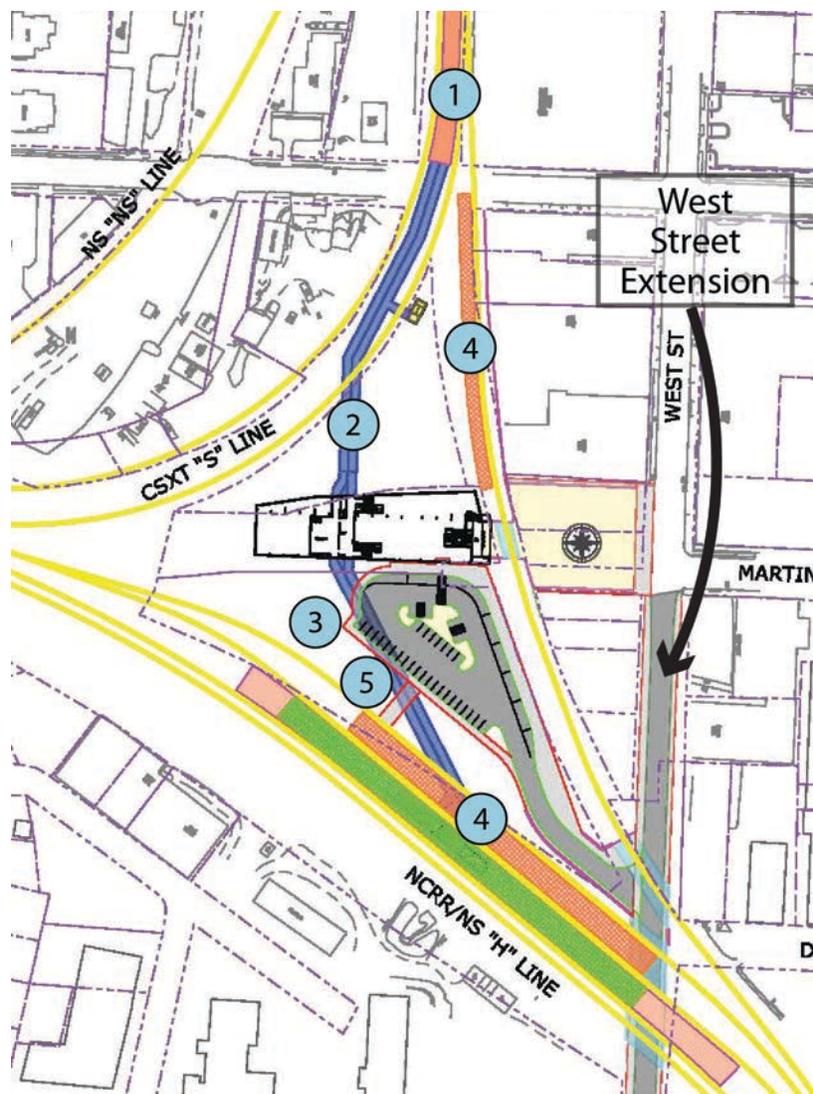
Figure 11 depicts the proximity of the Raleigh Train Station to the Warehouse and Historic Depot districts. Visitor attractions located in the Historic Depot District include Raleigh Contemporary Art Museum, multiple arts galleries, boutique manufacturing facilities for products such as chocolate and high-end denim, award-winning restaurants, and startup office space. Attractions located in the Warehouse District include multiple condominium and apartment buildings, nightlife destinations, independently owned shops and restaurants, office spaces, and a church. The new, safe crossing provided by the West Street Extension will allow for a planned greenway connection from downtown to Raleigh’s Walnut Creek Greenway, which is under consideration to be included in the East Coast Greenway corridor (<http://www.greenway.org/nc.aspx>). The increased connectivity provided by this new rail crossing will also mitigate the loss of an interconnected street grid that would result from the closing of at-grade crossings at Hargett Street, Martin Street, and Cabarrus Street to accommodate rail infrastructure and platform elements at full build-out of the complex.

Future Phase Construction of the Raleigh Union Station Complex

TIGER funding will permit the City of Raleigh, NCDOT and TTA to make significant progress towards completing its vision for the Raleigh Union Station. Figure 12 illustrates construction elements already planned for the next phase of

construction, titled Phase II. These elements include a High Speed Rail platform (#1 in Figure 12), completion of Pedestrian Concourse B (#2 in Figure 12, to be initiated in Phase I and completed in Phase II), additional site improvements to the surface parking (#3), commuter rail platforms at two locations (#4), and pedestrian access (#5) to the southern commuter rail platform. Plans for development in subsequent phases include a bus hub for local, regional and commercial buses, expanded parking facilities, accommodations for taxis, rental car accommodations, connections to light rail providing access to downtown Cary through downtown Raleigh and up to Triangle Town Center, expanded bike facilities, and private development in a series of mixed-use towers for residential and office purposes.

Figure 12. Future Phase Construction Elements



II. PROJECT PARTIES

Three partners are collaborating on this project: 1) the City of Raleigh is the applicant and fiscal agent for the project; 2) the North Carolina Department of Transportation (NCDOT) will collaborate with the City and serve as a sub-awardee with significant involvement in helping the City to carry out project activities; and 3) Triangle Transit (TTA) will also collaborate with the City and make a significant in-kind contribution of real estate with associated buildings for the construction of the Raleigh Train Station and enhancement of associated rail tracks. Brief descriptions of these three partners are provided in this section of the narrative.

City of Raleigh

The City of Raleigh was incorporated in 1792 and is the capital of North Carolina. As described previously, population growth in the city, the surrounding Wake County, the Metropolitan Statistical Area of Wake, Franklin and Johnston counties, and the region known as the Research Triangle has been unremitting since the 1970s and 1980s. Presently, the racial makeup of the city is 53.3% White, 28.7% African-American, 11.4% Hispanic or Latino, and 6.3% other; 14.6% of the city’s residents meet the Federal definition of living in poverty.

Raleigh is situated in the heart of North Carolina, in a section called the Piedmont region, 150 miles from the Atlantic Ocean and 190 miles from the Great Smoky Mountains. The city forms one point of “The Triangle,” named for Research Triangle Park which began development in 1959 for industrial, governmental and scientific research. The City of Durham and the Town of Chapel Hill comprise the other two points of The Triangle. The city is located in a metropolitan area consisting of Wake, Durham, Orange, Franklin, Chatham, Granville, Harnett, and Johnston counties. The current population for this area is estimated to be 1.7 million, which reflects a 34.4% increase over the past decade.

Raleigh is recognized by independent sources as one of the nation’s most attractive metropolitan areas. Recent accolades include:

- 1st on list of “America’s Best Cities” (September, 2011 – BusinessWeek.com)
- 4th on list of “America’s Top 10 Places to Live” (August, 2011 – RelocateAmerica)
- 2nd on list of “Next Big Boom Towns” (July, 2011 – Forbes.com)
- 4th “Smartest City” (October, 2010 – US Census Bureau)
- 5th Greatest Job Growth since 2005 (July, 2010 – US Bureau of Labor Statistics)
- “Best Place to do Business” (June, 2011 – Forbes Magazine)
- “Healthiest of the 100 largest US Housing Markets” (March, 2011 – Builder Magazine)

Table 3. City of Raleigh Financial Highlights

The assets of the City of Raleigh exceeded its liabilities by \$1.7 billion (net assets). This amount is a \$64.3 million increase from last year.
The City’s governmental funds reported combined ending fund balances of \$334.2 million.
Assigned fund balance for the general fund was \$73.0 million or 22.1% of total general fund expenditures. Unassigned fund balance is \$58.2 million and represents a traditional fund balance reserve maintained for emergencies, liquidity and overall financial strength
The City of Raleigh maintained its AAA/Aaa general obligation bond rating from all three major rating agencies.
The City received a Certificate of Achievement for Excellence in Financial Reporting for its Comprehensive Annual Financial Reports (CAFR) presented by the Government Financial Officers Association of the United States and Canada.

Raleigh’s excellent business environment, its nationally ranked universities, and the outstanding health care facilities are some of the many attributes that attract people to the area. The mild climate, diverse work force and proximity to Research Triangle Park combine to make the city a great place to live. As the capital of the state, the city derives its economic profile from a diverse combination of business and employment centers, including Federal and State government, higher education, information technology and retail trade.

Any use of TIGER funding will adhere to the City's policy to provide small disadvantaged minority and women-owned businesses equal opportunities to receive and participate in all aspects of the City's contracting and procurement program. This program includes but is not limited to construction projects, supplies and material purchases, and professional and personal services contracts. The City's Certified Annual Financial Report for the year ending June 30, 2011 can be viewed online at

<http://www.raleighnc.gov/home/content/Finance/Articles/FinanceReports.html>

North Carolina Department of Transportation (NCDOT)

NCDOT will function as a sub-awardee in this project and will administer design and construction activities. NCDOT's mission, "Connecting people and places in North Carolina – safely and efficiently, with accountability and environmental sensitivity," directly correlates to building and developing "livable communities" throughout the state. North Carolina is one of only 14 states to actively invest in intercity passenger rail service routes. The State's investments have been primarily in support of the two services initiated by the State in the 1990s: the Piedmont (Raleigh to Charlotte) and the Carolinian (Washington to Charlotte). North Carolina funds Amtrak-operated services by subsidizing direct operating costs not covered by fare revenue. North Carolina has also supported intercity passenger rail by investing heavily in rail infrastructure. Between 2002 and 2008, NCDOT invested more than \$46 million in improvements to the North Carolina Railroad (NCR). Amtrak service currently operates along the NCR corridor between Charlotte and Selma. Improvements made by NCDOT in this corridor resulted in greater average speeds, improved safety, and better reliability. NCDOT was the recipient of \$545 million in American Reinvestment and Recovery Act (ARRA) funds to make additional improvements to tracks and facilities. Those projects are well underway, and will result in still better passenger train reliability and will facilitate additional trains serving the Charlotte to Raleigh corridor. With continued investments in intercity passenger rail across the state, and the continued investment in the Piedmont and the Carolinian services, NCDOT continuously demonstrates its commitment to intercity passenger rail and a coordinated/integrated plan that includes future development of the corridor services.

Triangle Transit

The Research Triangle Regional Public Transportation Authority (dba Triangle Transit) was created in 1989 by the State of North Carolina to serve as the regional transit authority in Wake, Durham, and Orange counties. It is governed by a 13-member Board of Trustees. Triangle Transit's (TTA) principal responsibilities are providing regional vanpools, regional bus service, and regional transit planning and project development. TTA has a long history of collaboration with the City of Raleigh, including continuous collaboration through the years with the City's local transit system; Capital Area Transit; the Triangle Fixed Guideway Study (1992-1995); the Phase I Regional Rail Project (1998-2006); prior multimodal transportation center studies, regional rail transit station planning and station area planning; multimodal corridor studies; the "Go Triangle" seamless regional transit initiative; working with the City's Passenger Rail Task Force; and on the Raleigh Train Station and Union Station complex. Presently, TTA is leading a regional effort to significantly expand transit service in the region and in Wake County, which would have a major service focus at the Raleigh Union Station complex and enhance the attractiveness of the Raleigh Train Station. In 2005, TTA acquired several properties in the vicinity for its Phase I Regional Rail Project. Although this transit project was never fully funded

or constructed, TTA still maintains ownership of the property. As a partner with the City and NCDOT on the Raleigh Train Station project and Raleigh Union Station complex, TTA will provide its assets in the project area, which include over eight acres of land holdings and the Viaduct Building. Pending a successful transit tax referendum in Wake County in November 2012, there will be opportunities to allocate additional local revenues to the development of the multimodal complex.

III. GRANT FUNDS: SOURCES / USES OF PROJECT FUNDS

With this TIGER proposal, the City is requesting \$66,020,108 in Federal funds through the TIGER program to develop Phase I of its Raleigh Union Station project. Collectively, for the entire project, the three partners to this proposal are providing at least 21.63% (\$18,220,466) in matching cash and in-kind contributions to the Federal funds, bringing the total value of this project to \$84,240,574, including TIGER Federal funds (78.37% of the total) and the partners' cash and in-kind matching contributions (21.63% of the total). Federal funds have not been used in any of the cash or in-kind matching contributions. Table 4 provides a breakdown of costs for the two project segments described in this narrative.

Table 4. Costs Associated with Each Segment of the Proposed Project

Segment	Type of Cost	Cost
Raleigh Train Station Segment		
Station	Station construction	\$16,450,000
	Site construction	\$4,325,000
	Platform and concourses	\$4,450,000
	Bridge at Wye east leg	\$5,475,000
	Professional services	\$2,650,000
	Right-of-Way acquisition	\$625,000
	TTA in-kind contribution of building and land	\$1,470,466
Track Improvements	Track construction for station and prison siding	\$7,950,000
	Station area signal construction	\$4,250,000
	Greenfield siding track construction	\$2,425,000
	Greenfield siding signal construction	\$150,000
	Flagging services	\$100,000
	Contingency, mobilization, permits, insurance	\$5,450,000
	Professional services	\$3,850,000
	Right-of-Way acquisition	\$950,000
Raleigh Train Station Subtotal		\$60,570,466
West Street Extension Segment		
West Street Extension	Railroad Bridge	\$7,200,000
	Street and Retaining Walls	\$5,574,000
	Street construction	\$1,983,472
	Contingency and mobilization	\$5,607,839
	Professional services	\$3,054,797
	Right-of-Way acquisition	\$250,000
West Street Extension Subtotal		\$23,670,108

Table 5 provides a breakdown of the funding strategy for this Phase I Raleigh Union Station project.

Table 5. Anticipated Funding Strategy

Agency	Funding Committed		% Share
Raleigh Train Station Segment			
City of Raleigh	\$3,000,000	Cash	4.95%
NC Department of Transportation	\$9,000,000	Cash	14.86%
Triangle Transit *	\$1,470,466	In-kind	2.43%
Federal TIGER Contribution	\$47,100,000	Cash	77.76%
Station Total Value (Cash + In-kind)	\$60,570,466	Cash + In-Kind	100.0%
West Street Extension Segment			
City of Raleigh	\$4,750,000	Cash	20.07%
Federal TIGER Contribution	\$18,920,108	Cash	79.93%
Extension Total Value (Cash)	\$23,670,108	Cash	100.00%
Entire Project			
Total Project Matching Contribution	\$18,220,466		21.63%
Total Project TIGER Contribution	\$66,020,108		78.37%
Total Project Value	\$84,240,574	Cash + Match	100.00%

* Note: Triangle Transit will make an in-kind contribution of the Viaduct Building and associated land, valued at \$1,470,466. This value is derived from the 2008 tax assessment conducted by Wake County and only considers 50% of the tax-assessed value which represents the non-Federal portion of the funding that was available to Triangle Transit to acquire the property.

IV. SELECTION CRITERIA

IV.A. Long-Term Outcomes

IV.A(i). State of Good Repair

(1) *State of Good Repair, Consistent with relevant State, local or regional plans.* Table 7, provided at the end of this narrative, details a history of technical studies and reports beginning as early as 1989, all which have had a cumulative effect leading up to the current planning for the Raleigh Union Station complex.

(2) *State of Good Repair, Rehabilitate, Reconstruct, or Upgrade Assets.* The current Amtrak station in Downtown Raleigh is functionally obsolete. To paraphrase the TIGER Notice of Funding Availability, this project will rehabilitate, reconstruct and upgrade surface transportation assets found at the Boylan Wye that, if left unimproved, threaten future transportation network efficiency, mobility of goods, accessibility of people, and economic growth due to their poor condition and current design features. Of note, it is important to point out that construction of the Raleigh Train Station described in this proposal will further the use of previous Federal funds which, in part, supported acquisition of the Viaduct Building that will be renovated for the Raleigh Train Station.

If left unimproved, the current train station will restrict the future of rail and intermodal transportation in the City of Raleigh, across the State of North Carolina, and throughout the Southeast. Supporting the Raleigh Train Station, the surrounding Raleigh Union Station complex will dramatically improve the allure of the region for residential and commercial development

and will enhance economic development in neighboring low-income areas of the city. The City's plan for Raleigh Union Station reflects a greatly enhanced focus on providing and supporting a truly modern, well maintained, and multimodal transportation system.

(3) State of Good Repair, Project is Appropriately Capitalized and Uses Asset Management. The City of Raleigh adheres to best practices for asset management, using a systematic process of operating, maintaining, and upgrading its assets in a cost-effective manner. The City's assets currently exceed \$2.5 billion in value as indicated in the City's latest Comprehensive Annual Financial Report. Raleigh has also maintained its strong AAA/Aaa bond rating during the recent economic recession. Sufficient funds have been pledged by the City of Raleigh and by NCDOT to adequately capitalize the project with local funding.

(4) State of Good Repair, Sustainable Source of Revenue is Available for Long-Term Operations and Maintenance. Operation and maintenance costs for the Raleigh Train Station will be supported by multiple revenue sources. Vendors leasing space at the train station will provide income; passenger service for travel by train will also provide income, as will bus service in future years; and the City will provide additional support for the operation and maintenance costs. Costs for other features of the Raleigh Union Station will also be supported. For instance, maintenance of the track will be the responsibility of NCDOT and NCRR, and maintenance of the West Street Extension will be the responsibility of the City of Raleigh.

IV.A(ii). Economic Competitiveness

(1) Economic Competitiveness, Improve Long-term Efficiency, Reliability or Cost-Competitiveness in the Movement of Workers or Goods. An expanded station facility will enable additional train capacity to Charlotte, and support the development of an economic corridor that reaches from Maine to Virginia, to Raleigh and Charlotte in North Carolina, and to Alabama and Florida. Improved amenities and a nicer facility with additional parking will encourage an increase in discretionary rail travel for business and recreational travelers between cities along the rail corridor. The proposed track improvements will enable enhanced freight movement as it will remove the interruption in service that currently exists due to passenger rail boarding.

Improvements to the track will also increase the permissible maximum speed and overall efficiency of operations, saving time in transport of both passengers and freight and contributing to increased profitability. Existing freight rail service operates along a 317-mile rail corridor that is owned by NCRR and stretches from Morehead City through Raleigh to Charlotte. Within the area defined by the Boylan Wye, CSX operates freight trains, on average four trains per day, on their track, and track in the area is also used and maintained by Norfolk-Southern based on a trackage rights agreement. Norfolk-Southern regularly operates about 10 to 12 freight trains (five or six in each direction) through the area, and prior agreements stipulate that passenger trains not impede the flow of Norfolk-Southern freight trains. Improvements resulting from this initial phase for the Raleigh Union Station and subsequent development will have a significant effect on reducing the costs of transporting freight.

(2) Economic Competitiveness, Improvements to the Economic Productivity of Land, Capital or Labor. In parallel with population growth, economic growth in the Triangle region has flourished

in the last 10-20 years; however, without improvements described in this narrative, hampered mobility into 2035 will likely diminish the long-term competitiveness of the region. Research has shown that a transit system which provides good access to regional employment centers is likely to stimulate higher land value premiums. One study (Adams and VanDrasek, 2007) shows increases to property values of 5-15%. A meta-analysis (Debrezion, Pelz, & Rietveld, 2007) has shown that rent for commercial properties increases 0.1% for every 250 meters (approximately 840 feet) closer they are built to a station and residences are valued 2.3% higher.

Research on regional rail studies has also shown that there is a statistically significant positive relationship between the presence of regional passenger rail and long-term economic growth of a region. As financial and natural resources are stretched farther, communities are demanding that transportation efficiency be emphasized, and the Raleigh Union Station will lay the foundation of a hub for transportation choices. Future commuter rail will utilize the central transportation hub and will provide a low cost travel option to driving on the region's increasingly congested highways, which would help reduce dependency on foreign oil, increase energy efficiency, and increase freight capacity along the NCRF freight corridor.

IV.A(iii). Livability.

(1) *Livability, Reduce Average Cost of User Mobility.* When fully developed, the Raleigh Union Station complex will provide convenient access to both train and bus modes with connections throughout the City of Raleigh for residents and visitors alike, to neighboring cities for commuters, to cities at a greater distance for business and overnight stays, and to points throughout the Southeast. Connectivity to the Raleigh-Durham International Airport will also facilitate air travel. Vehicle operating costs will be reduced along with lower vehicle miles traveled, and door-to-door time savings will be realized for rail, automobile, bus and air travelers. It is a truism that travel by train and bus is cheaper than travel by car, and the average cost of user mobility will be less to the extent that the population makes greater use of these modes. Locating both train and bus services in a common hub at the Raleigh Union Station will make access to these services more convenient for all.

(2) *Livability, Improvements to Modal Connectivity, Number of Modes, and Congestion.* Raleigh and the surrounding Triangle region are expected to see continuing population growth over the next 30 years. Many highways in the area are already at or over capacity. Traffic jams are frequent, especially on the I-40 corridor that connects the major municipalities in the area. Time and productivity are lost while sitting in the "parking lot" that I-40 can become. Additional lanes have been added to many roads and highways, and this construction continues. Still, there is a limit to what the roads and highways can bear and this limit is being approached. Even with the limited space that remains for expansion, new highway construction cannot keep the pace with population growth, and travel by train and bus must be expanded.

The City of Raleigh's "2030 Comprehensive Plan" adopted in 2009, envisions several important themes that will greatly impact regional transit investments, including expanding housing choices, managing growth, coordinating land use and transportation, and focusing on sustainable development. The plan prioritizes the coordination for transportation planning, seeking to redirect a full 60% of future growth into Downtown Raleigh and a series of seven city growth centers, 12 transit-oriented centers, and over 40 mixed-use community centers. Multimodal

transportation design elements also include pedestrian walkways and bikeways. Raleigh Union Station will permit an expanded transit system, accommodating bus, future regional rail, and high speed rail in the Southeast. Once in place, the future mobility of commuters will improve, thus improving the Triangle region's overall livability by decreasing commuter congestion. Modal connectivity by bus to sites across Raleigh, by commuter train to nearby work destinations, and by passenger train and high speed rail to more distant localities will improve access to existing assets and reduce congestion by taking cars off the roads and highways.

Raleigh Union Station will also provide for safer and more accommodating access for pedestrians and bicycle users, who must now negotiate two at-grade rail crossings. The extension of West Street will additionally improve access by restoring a portion of the City's historic street grid and providing connectivity from surrounding neighborhoods and greenways to the station area. As with most upgrades in transit service, by providing an alternative to driving there are also particular mobility advantages for non-drivers and those who are economically disadvantaged or otherwise do not use automobiles.

(3) Livability, Improve Accessibility for Economically Disadvantaged. The location for Raleigh's Union Station's site is surrounded by large concentrations of transit-dependent populations. The site is adjacent to a number of neighborhoods with concentrations of low-income populations, and many prospective riders in the area rely on transit as their primary mode of transportation. Typical demographic groups include persons who do not own a vehicle, youth, seniors, and persons below the poverty level. The proximity of Raleigh Union Station to these populations will improve accessibility for the economically disadvantaged populations, non-drivers, senior citizens, and persons with disabilities. Additionally, completing the West Street Extension will create a more convenient route to the Raleigh Union Station for populations that live at a greater distance from the station. And, the transport of goods and commodities to and through Raleigh Union Station will be improved for CSX Transportation and Norfolk-Southern. The Raleigh Union Station complex is expected to become a shopping destination, and many vendors can be housed in the Station, offering goods and services to those who live in the area.

(4) Livability, Is the Result of a Planning Process Encouraging Community Participation. In May 2010, the Raleigh City Council appointed an eleven-member citizen Passenger Rail Task Force. The task force's principal role is to advise the Council on issues related to the future provision of passenger rail, including local, regional and long-distance services. This task force holds open public meetings on a monthly basis and has taken up consideration of the Union Station plans on multiple occasions. Members of the task force have also led tours of the proposed Raleigh Train Station site for citizens, elected officials, and news media.

Please see Table 7 at the end of this narrative for a list of the major studies and reports conducted since 1989. Beginning with the earliest study in 1989, community participation has been a common theme in all of these planning initiatives. And, community participation remains a common theme today. For instance, Capital Area Friends of Transit and Downtown Living Advocates are hosting tours of the Viaduct Building to provide the community with information on plans for the Raleigh Union Station complex and to receive input from the community for continued improvements. Other advocacy groups such as WakeUP Wake County are assisting with publicizing events, and the local newspaper takes an active role in reporting on current

developments, including this TIGER proposal. A March 11, 2012 article in *The News & Observer* led with the headline, “Raleigh to set aside \$7 million for rail hub”.

IV.A(iv). Sustainability.

This project will be a national model for transportation infrastructure improvement in that it positively affects all three aspects of sustainability. It will provide a social value to the heart of the city, an economic value to both the adjacent community and cities along the rail corridor where passengers will travel, and it will be built in an environmentally responsible way.

(1) Environmental Sustainability, Improve Energy Efficiency. The City of Raleigh is committed to energy efficiency in the design of the Raleigh Train Station. While the new station will be considerably larger than the current station, one objective of the design and construction of this facility is to add capacity without significantly increasing energy demand. This will be accomplished by placing an emphasis on eliminating energy demand for lighting during the day by supplying natural light. Windows will be positioned to take advantage of all day lighting. Clear story windows will bounce light throughout the space. Opportunities also exist for passive natural ventilation that can reduce energy costs. Integrating control systems for lighting and heat/air systems will also add energy savings.

(2) Environmental Sustainability, Maintain, Protect or Enhance the Environment. The site of Raleigh’s Union Station will be built on an abandoned brownfield. The train station will revitalize and reuse an existing building, recognizing that reuse of existing infrastructure is more environmentally efficient than to replace it with something new. Also, the reuse of existing infrastructure will reduce site disturbance and, renovation with energy efficiency in mind will reduce natural resource use, for instance, through recycling what is being demolished. Leadership in Environmental and Energy Design (LEED) will be implemented for the construction of the proposed train station and associated buildings, and the facility will likely meet the standards of LEED Silver designation. The City of Raleigh will work with the designers to meet requirements needed to achieve LEED certification which will maximize debris diversion from landfills, increase the use of locally manufactured products, and reuse recycled materials.

The transition of automobile passengers to rail has a significant positive impact to sustainability, reduction of pollution, and energy efficiency, with one primary benefit of Raleigh Union Station being a reduction of environmental emissions. The partners in this proposal recognize the important role that rail transportation can play in reducing greenhouse gas emissions, thus improving regional air quality in the near term and in the long term making strides towards reducing carbon in the atmosphere. In addition to emission savings, the transition from automobiles to rail also has major benefits in the areas of fuel savings, highway safety, reduction of congestion, and highway maintenance. Future additions of more daily roundtrips of the Piedmont between Raleigh and Charlotte will help to shift travel from automobiles to intercity passenger rail. In fact, future operations following build out of the Raleigh Union Station are projected to divert nearly 73,000 intercity auto trips and approximately 9.2 million vehicle miles of travel from the Charlotte to Raleigh highway corridor in its first full year of service.

IV.A(v). Safety

The more travel choices the public has at its disposal, opportunities will exist to reduce crashes on the road. Improving the Raleigh rail experience will take passengers off of the interstate highway corridors of Raleigh to Greensboro/Charlotte on I-40/I-85, and Raleigh to New York/Florida on I-95. Ridership projections detailed in the attached Benefits-Cost Analysis (BCA), indicate the Raleigh Train Station is expected to encourage greater use of trains for commuter, intercity, and Southeastern travel, taking cars off the road, relative to a “No Build” condition. While the attached BCA does not attempt to quantify the value of this safety “benefit”, there is good evidence that fewer vehicular miles traveled due to increases in passengers taking the trains will contribute to fewer deaths and injuries.

Locally at the Boylan Wye, other safety benefits can be identified. The existing Raleigh station grade-level platforms are substandard and do not comply with ADA requirements. Passengers must use a two-step box as the platform is below the top of rail elevation, and there is an increased risk of falling associated with two-step boxes. The new platforms will allow passengers to more easily board and detrain without the need for a step box. The platforms will also be of sufficient length to allow the longest trains to stop in a single position to board all cars without repositioning. Each time a train must move, there is potential for bodily injury. Furthermore, the Raleigh Train Station will alleviate the crowded conditions in the waiting area, allowing individuals to wait indoors, and will provide adequate parking for the growing ridership, taking cars off of the side streets and eliminating the jockeying for a parking space that now occurs. Finally, the elimination of two at-grade street crossings will also contribute to pedestrian and vehicular safety.

IV.B. Job Creation & Near-Term Economic Activity

Businesses decide whether to locate in the Triangle based on a number of factors. One such factor is a comparison with metropolitan areas of similar size and population. The Triangle must remain competitive at the national and international levels to entice businesses to locate and to remain here. The types and mix of land uses and densities within the city center of Raleigh and the location of the proposed Raleigh Union Station will foster the growth of jobs within a community and region. Improved city center transportation will make the city more economically competitive, reducing overall transportation costs.

Jobs will be created in a number of ways and timing. Jobs will be created as a result of:

1. Direct Construction Jobs (Near Term) related to the construction activities associated with the two segments described in this proposal: the Raleigh Train Station and the West Street Extension. It is projected that the immediate impact will be the creation of 1,095 construction jobs within the hardest hit sector of the state. Please see the attached Benefits-Cost Analysis in Appendix A.
2. Construction Jobs (10-year period starting in 2016) related to the construction of transit-oriented development projects. It is projected to create 21,200 short-term jobs. A multiplier factor for these jobs is further examined in the attached Benefits-Cost Analysis.
3. Resulting new employment in the region, attracted to this transit-oriented new development (2016-2044). The scale of development expected over the lifecycle of the

project, detailed in the Benefits-Cost Analysis, would generate 6,800 indirect jobs with a spin off estimate of additional 16,500 jobs within the region.

4. Direct Operations, Maintenance Jobs, and Retail Service Jobs (Recurring) related to the Raleigh Train Station. It is projected that additional operational and maintenance jobs will be added related to the incremental increase in railroad-related employment as well as economic activities made possible within the train station.

IV.C. Innovation

Building the train station within the “Wye” design of the existing tracks offers a very innovative opportunity for station placement. The proposed Raleigh Union Station will maximize the track alignments on a piece of property that will allow the station to service incoming passenger rail, future high speed rail, and future light rail from four directions. The majority of the land and the existing Viaduct Building are publically owned by Triangle Transit. The new station will take advantage of adaptive reuse technologies, as this vacant industrial building will be transformed into a multimodal transportation facility. Concourses will be used to direct train passengers to their trains safely, underneath surface parking. Remediation of the full parcel rather than limiting remediation efforts to the immediate project area is also considered innovative by LEED.

The track improvements will be consistent with AREMA and NCDOT design guidelines and criteria. The improvements will also solve railroad-related problems that have persisted for decades in some cases, because there have not been financial resources to resolve them. The maximum speeds in the area are very low, which results in trains taking much longer to pass through the Wye and Downtown Raleigh. Many of the switches are manually operated and will be upgraded to higher speed and automated switches. The new sidings will consolidate freight train storage well away from the station area, thereby allowing more efficient switching without disrupting through train movements. This project will add electro-mechanical traffic controls and dispatching to a presently uncontrolled, or “dark”, section of track along the east leg of the Wye. Operating in “dark” territory can be more hazardous than in signalized territory.

IV.D. Partnership

One of the greatest strengths of this project exists in the collaborative effort undertaken by the three partners: the City of Raleigh, NCDOT, and TTA, all of whom share the same vision of the need for a new train station in Raleigh to accommodate current and future rail infrastructure needs. While this project has been under study since 1989, the act of preparing this TIGER proposal has further served to establish a working team of experts from each partner. This has strengthened our understanding of the challenges of coordinating a realistic solution for this station to meet present-day rail transportation needs, while planning efficiently for future high speed, regional commuter, and light rail passenger services. The three principal partners are committed to work together to build a new train station that will serve the pressing need for the expansion and improvement of rail transportation infrastructure in Raleigh, the Triangle, the State of North Carolina, and the East Coast. The City of Raleigh will lead the project oversight on all aspects of the project; NCDOT will serve as the sub-awardee and technical experts; and TTA makes an in-kind contribution of a building and land for the Raleigh Train Station. Further extending the impact of the three main partners to this proposal, the City has collected an impressive list of support letters for this project, which are included in Appendix B.

IV.E. Results of Benefit-Cost Analysis

An analysis, conducted by a third party for this project, measured the environmental and external benefits/cost of rail, road and station improvements. The results, detailed in the Benefits-Cost Analysis (Appendix A) show a benefit to cost ratio of 3.82 to 1. In the analysis, the cumulative benefits of the project, adjusted by net present values, are valued in monetary terms at \$321.40 million. With project costs of \$84.24 million, this level of benefit then represents a 382 percent “return on total investment” during the lifecycle of the project.

V. PROJECT READINESS

Raleigh Union Station Phase I is ready for design, bid, and build, evidence for which includes that the development strategy has considered potential zoning solutions needed to achieve implementation. The majority of parcels in the vicinity have a base zoning that allow industrial and business uses and allow transit facilities. The area is also covered by the City’s Downtown Overlay District, a zoning overlay category in the Raleigh City Code that allows the most dense mixed-use environments in the city. The Downtown Overlay District allows residential densities of up to 320 units per acre, includes significantly reduced parking requirements, and allows for mixed-use high-rise construction. Major investments in design have already been made and the project is ready to begin. Other evidence regarding project readiness include:

- **Environmental Approvals:** Two separate federal NEPA documents are required: one for the train station and trackwork to be completed by December 2012, and one for the West Street Extension to be completed by April 2013.
- **Permitting:** Local permits are required for this project, including a building permit and Historic Districts permission for the roadway extension project. Certain additional environmental permits may be identified during the NEPA documentation process.
- **Legislative Support:** The North Carolina General Assembly funds NCDOT operations and there is every expectation that the legislature will support this project. See the NCDOT letter of support in Appendix B for documentation of the matching cash contribution NCDOT is prepared to make to the project. There is also broad legislative support at the local, state and national level, including US Senator Kay Hagan, US Congressman Brad Miller, US Congressman David Price, and NC Secretary of Transportation Gene Conti.
- **State and Local Planning:** Raleigh’s Union Station is supported by Raleigh’s 2030 Comprehensive Plan and a series of plans and studies detailed in Table 7 below.
- **Technical Feasibility:** A study conducted by NCDOT in 2011, including preliminary engineering plans, concluded that the project is feasible. There are no outstanding technical issues.
- **Financial Feasibility:** All partners stand ready to provide the match funding, and the City is fiscally sound and capable of successfully administering the project.

The following table provides a timeline and major milestones for the Raleigh Train Station and West Street Extension segments.

Table 6. Timeline of Project Schedule and Major Milestones

Estimated Start Date	Estimated End Date	Activity and Milestone	Lead Agency
5/2012	8/2012	Station and Trackwork Environmental Assessment (EA)	NCDOT
8/2012	12/2012	Station and Trackwork Finding of No Significant Impact (FONSI)	NCDOT
1/2013	6/2013	Station and Trackwork Design Completion	NCDOT
6/2013	9/2013	Station and Trackwork Bid	NCDOT
9/2013	9/2015	Station and Trackwork Construction	NCDOT
3/2012	12/2012	West Street EA	COR
1/2013	4/2013	West Street FONSI	COR
4/2013	7/2013	West Street Design Completion	COR
7/2013	8/2013	West Street Bid	COR
10/2013	10/2015	West Street Construction	COR

The table below is provided in support of the previous discussion pertaining to Livability, demonstrating that this proposal is a result of a planning process begun in 1989 and which has incorporated community participation throughout the process.

Table 7. History of Technical Studies and Reports

Note: The following plans and studies can be found on the City's webpage at:

<http://www.raleighnc.gov/business/content/PlanUrbanDesign/Articles/MultimodalPlanningCoordination.html>

Title & Sponsor	Findings and Present-Day Relevancy
March 1989 Interim Report of the Governor's Rail Passenger Task Force, North Carolina Department of Transportation (NCDOT)	Executive Order Number 71 mandated the study of present, near-term and long-term rail passenger needs. Recommended the preservation of existing rail corridors and implementation of a clear long-term direction, supported by adequate funding, to promote rail passenger service to complement existing transportation options in congested corridors. <ul style="list-style-type: none"> Forms basis for 1993 NCDOT Report of the Governor's Rail Task Force.
January 1993 Report of The Governor's Rail Task Force, NCDOT	This report focused on near- and long-term opportunities for improving rail transportation in the state. Determined that NCDOT "should continue to promote and press for intermodal stations wherever feasible." <ul style="list-style-type: none"> Forms basis for 1996 City of Raleigh (COR) study.
1996 Downtown Intermodal	A feasibility study of ridership demands for a multimodal facility in Downtown Raleigh. Ridership estimations for CAT bus, commuter rail, and intercity rail supported concept and determined that ridership was high

Transportation Center Feasibility Study, City of Raleigh (COR)	<p>enough to warrant such a facility.</p> <ul style="list-style-type: none"> Forms basis for City of Raleigh (COR) 2002 Downtown Raleigh Intermodal Facility Study.
April 1999 Southeast High Speed Rail (SEHSR) Corridor Feasibility Study Summary & Implementation Plan, NCDOT	<p>A feasibility study of the approximately 500 mile Federally designated high speed rail corridor running from Washington, DC through Richmond, VA, Raleigh, NC to Charlotte, NC. This corridor was one of five national high speed rail corridors designated for improvements to high speed status under the Intermodal Surface Transportation Efficiency Act of 1991. Report identifies Raleigh, NC as one of the stations requiring improvements to accommodate the increased demand from improvements in the transportation network.</p> <ul style="list-style-type: none"> Informs COR 2002 Downtown Raleigh Intermodal Facility Study.
2002 Downtown Raleigh Intermodal Facility Phase II Conceptual Study, Partnership: COR, NCDOT, TTA	<p>A conceptual study that recommended a planning study area, design, and programming for an intermodal facility in downtown. This served as a Planning refinement of the 1996 study and included conceptual architecture.</p> <ul style="list-style-type: none"> Forms basis for 2010 COR study.
2007-2008 Regional Transit Vision Plan/ Special Transit Advisory Commission of the MPO	<p>Recommends major regional transit capital investments, including enhanced bus service, local circulators, and over 50 miles of fixed-guideway transit. Also recommends pursuit of local transit tax. STAC recommendations became the baseline for the transit element of the MPO's Joint 2035 LRTP.</p> <ul style="list-style-type: none"> Informs Transit Element in LRTP, 2009.
2008 North Carolina Railroad Company (NCRR) Shared Corridor Commuter Rail Capacity Study, NCRR	<p>Demonstrates the feasibility of running commuter rail between Greensboro and Goldsboro. Total infrastructure cost for new tracks, sidings, and bridges along the 141-miles is \$650 million, and equipment and support facilities are estimated at \$350 million. The study concludes that there is enough room in the 200-foot wide corridor to build both a commuter rail system and a light rail system. Recommends that NCRR and interested communities take an active role in protecting the corridor.</p> <ul style="list-style-type: none"> Informs 2012 NCDOT feasibility study.
2009 Transit Element of the Joint LRTP, Durham-Chapel Hill-Carrboro MPO and Capital	<p>Recommends phased implementation of regional transit investments through 2035. Implementation of fixed-guideway and bus transit service recommendations require detailed technical and financial analysis. Jointly adopted by the two MPOs.</p> <ul style="list-style-type: none"> Informs COR 2010 study and forms basis for Triangle Transit Alternatives Analysis.

Area MPO	
May 2010 S. West Street Extension Alternatives Study, COR	<p>This alternatives analysis was prepared to address construction costs, impacts, and feasibility of providing extension of South West Street, including a grade separated crossing of NS and NCRR rail tracks in the vicinity of the proposed multimodal center.</p> <ul style="list-style-type: none"> • Forms basis for COR NEPA study of West Street Extension.
September 2010 Union Station: Raleigh's Multi- Modal Transit Center, Partnership: COR, NCDOT Rail Division	<p>A feasibility study that reevaluated the ridership, physical location, and development strategy for a multimodal facility near the Boylan Wye. Proposes a phased implementation of Union Station, an 82,000 square foot multimodal center in Downtown Raleigh. The facility is planned to accommodate multiple modes of transportation: intercity passenger rail, SEHSR, regional commuter rail, local light rail, commercial and local bus service, taxi, bicyclists, and pedestrians.</p> <p>Presented a conceptual program and functional plan for Union Station.</p> <ul style="list-style-type: none"> • Informs 2012 NCDOT feasibility plan.
2010 Triangle Regional Transit Program Transitional Analysis/ TTA	<p>Analyzes and prioritizes fixed-guideway transit corridors from the adopted 2035 Joint LRTP to be studied in further detail in an Alternatives Analysis (AA) process. The Wake Corridor is identified as one of the high-priority corridors. Priority corridors ratified by both MPOs.</p> <ul style="list-style-type: none"> • Forms basis for Triangle Transit Alternatives Analysis, 2011.
July 2011 Durham-Wake County Corridor Alternatives Analysis/ TTA	<p>A follow-up to the Transitional Analysis, this study provides analysis of a commuter rail service between Durham, Raleigh and Garner within the existing rail corridor.</p> <p>The study recommends a platform adjacent to the Viaduct Building property. It is awaiting adoption by local MPOs.</p> <ul style="list-style-type: none"> • Incorporated into Wake County Transit Plan.
January 2012 Proposed Raleigh Station and Track Configuration - Feasibility Study, NCDOT	<p>Analyzed the possibility of the adaptive reuse of the existing Viaduct Building into a passenger rail facility. Study results determined that the facility could serve as the first phase of the overall Union Station concept and recommended a 10% design for a new station and platforms which accommodate and enhance freight operations and emergency response vehicles; provides capacity for current and future passenger traffic (intercity, commuter, and SEHSR); and minimizes or eliminates at-grade crossings for trains, vehicles, and pedestrians.</p> <ul style="list-style-type: none"> • Forms basis for NCDOT NEPA study for Station and Track elements and is the impetus for 2012 TIGER application.
2012 Wake County Transit Plan, Wake County	<p>Using information from TTA's Alternatives Analysis and the COR's Bus Plan, this plan recommends a two-pronged approach to meeting increasing transit needs in the County: the Core Transit Plan which expands local and commuter bus service and builds a rush-hour commuter rail service; and</p>

	<p>the Enhanced Transit Plan which builds light rail service from Downtown Cary through Downtown Raleigh to Millbrook Road. Proposes two revenue sources: a half-cent sales tax, which must be approved by voters and an increase of \$10 to vehicle registration fees. Awaiting adoption by County Commissioners. Upon adoption, the sales tax may be placed on the November 6, 2012, ballot.</p> <ul style="list-style-type: none"> • A successful referendum would provide an additional funding source for many future elements of the Union Station facility.
<p>Ongoing Southeast High Speed Rail- Richmond, VA to Raleigh, NC, Tier II DEIS, NCDOT Rail Division and Virginia DOT Rail Division</p>	<p>Proposes implementation of approximately 162 miles of high speed rail as part of an overall plan to extend high speed passenger rail service from the Northeast Corridor (Boston to Washington, DC) Southward through Virginia to Charlotte, NC. Proposes a platform location in Downtown Raleigh</p> <p>On February 1, 2012 NCDOT released a Draft Recommendation Report that recommends alignment NC5 which was later endorsed by Raleigh City Council October 4, 2011.</p> <ul style="list-style-type: none"> • Informs NCDOT Proposed Raleigh Station and Track Configuration – Feasibility Study, and NCDOT NEPA study for Station and Track elements.

REFERENCES

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Cohen, I., Frieling, T., & Robinson, E. (2012, February 1). "The Economic Impact and Financing of Infrastructure Spending." Retrieved from http://www.aednet.org/government/pdf-2012/infrastructure_report.pdf

Debrezion, G., Pelz, E., Rietveld, P. (2007, June 19). "The Impact of Railway Stations on Residential and Commercial Property Value: A Meta-analysis." *Journal of Real Estate and Finance Economics*, 35:161–180.



City Of Raleigh
North Carolina

ASSURANCE
Davis-Bacon Act

The City of Raleigh in North Carolina will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (Federal wage rate requirements), as required by the FY 2010 Appropriations Act.

J. Russell Allen

J. Russell Allen
City Manager

3/7/12

Date



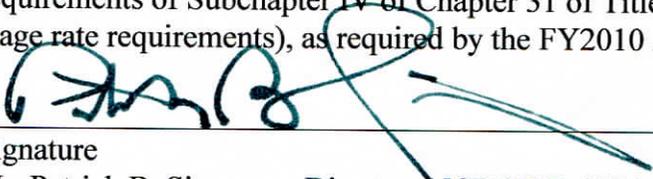
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

ASSURANCE
Davis-Bacon Act

In regards to TIGER funding granted by USDOT for a new Raleigh Train Station, the North Carolina Department of Transportation in North Carolina will comply with the requirements of Subchapter IV of Chapter 31 of Title 40, United States Code (Federal wage rate requirements), as required by the FY2010 Appropriations Act.



Signature

Mr. Patrick B. Simmons, Director, NCDOT Rail Division

3-13-12
Date

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VII. CHANGES FROM PRE-APPLICATION

This application contains material changes to the budget as described in the pre-application form and are indicated in the table below. Significant work has been completed on creating cost estimates that reflect the current construction environment. Additionally, an “in-kind” match in the form of the land and building required to complete this project has been included in the total for non-federal funds committed to the project.

Table 8. Changes from Pre-Application

Field Name per Pre-Application	Pre-application Entry	TIGER Grant Application Entry
Total Amount of TIGER funds requested	\$60,080,000	\$66,020,108
Total Amount of non-Federal funds Committed to the Project	\$15,020,000	\$18,220,466