

Department of Transportation's National Infrastructure Investments Under the Full-Year Continuing Appropriations, 2013

Opportunity Number: DTOS59-13-RA-TIGER5

Raleigh Union Station Phase IB

APPLICANT INFORMATION

Applicant: Name	City of Raleigh
Contact Name:	Roberta Fox, AIA, Raleigh Urban Design Center Assistant Manager
Mailing Address:	220 Fayetteville Street, Suite 200, Raleigh, NC 27601
Email Address:	roberta.fox@raleighnc.gov
Phone Number:	(919) 996-4638
Proposal Date:	June 3, 2013

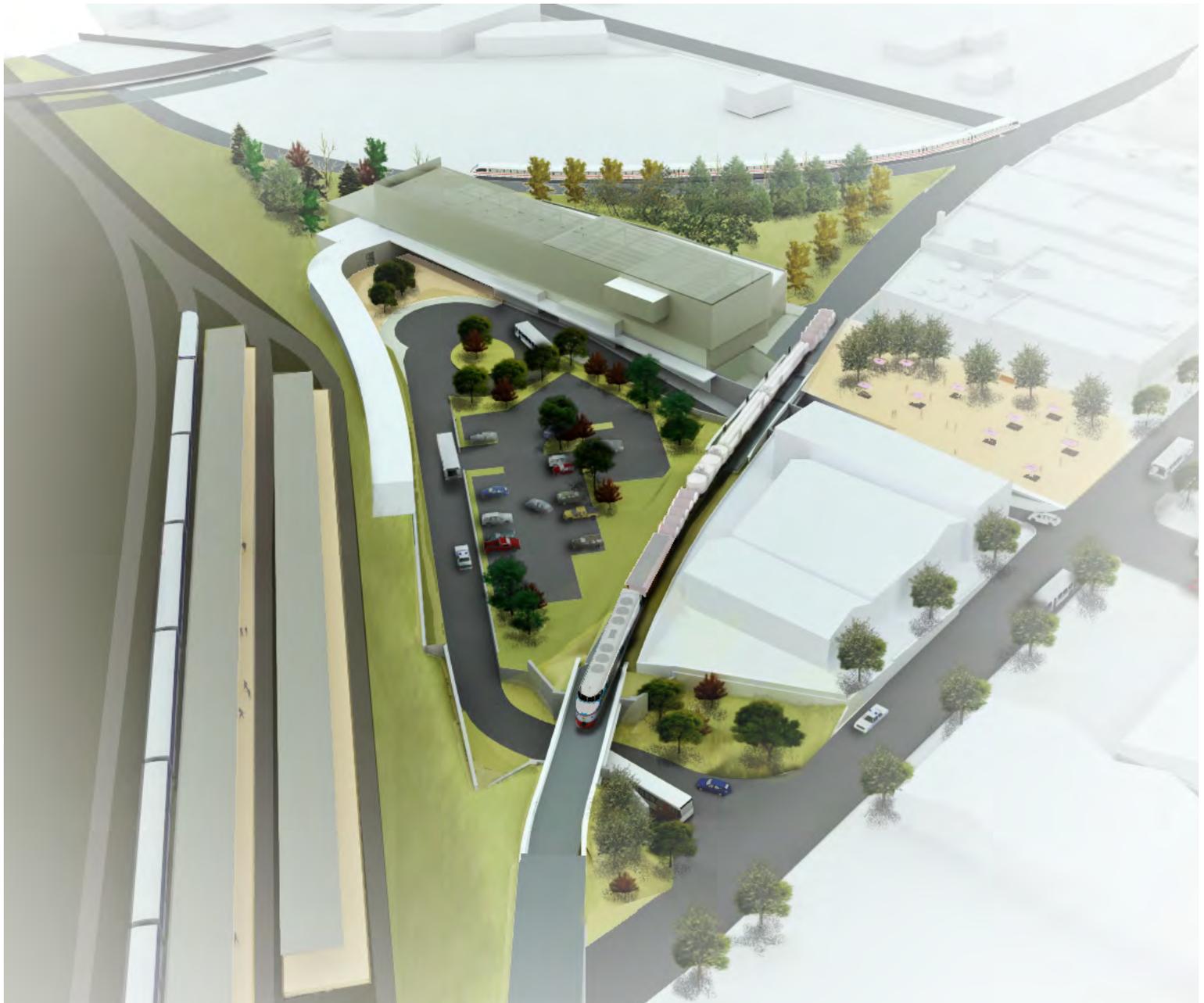


TABLE OF CONTENTS

- I. Project Description1
- II. Project Parties9
- III. Grant Funds and Sources/Uses13
- IV. Selection Criteria14
 - a. Long-Term Outcomes14
 - b. Innovation24
 - c. Partnership24
 - d. Results of BCA25
- V. Planning Approvals, NEPA25
- VI. Federal Wage Rate Certification30
- Appendix A: Benefits-Cost AnalysisA-1
- Appendix B: Letters of SupportB-1



Raleigh’s Depot Historic District

Site for the Relocated Raleigh Union Station with Raleigh Skyline in Background



PROJECT NARRATIVE

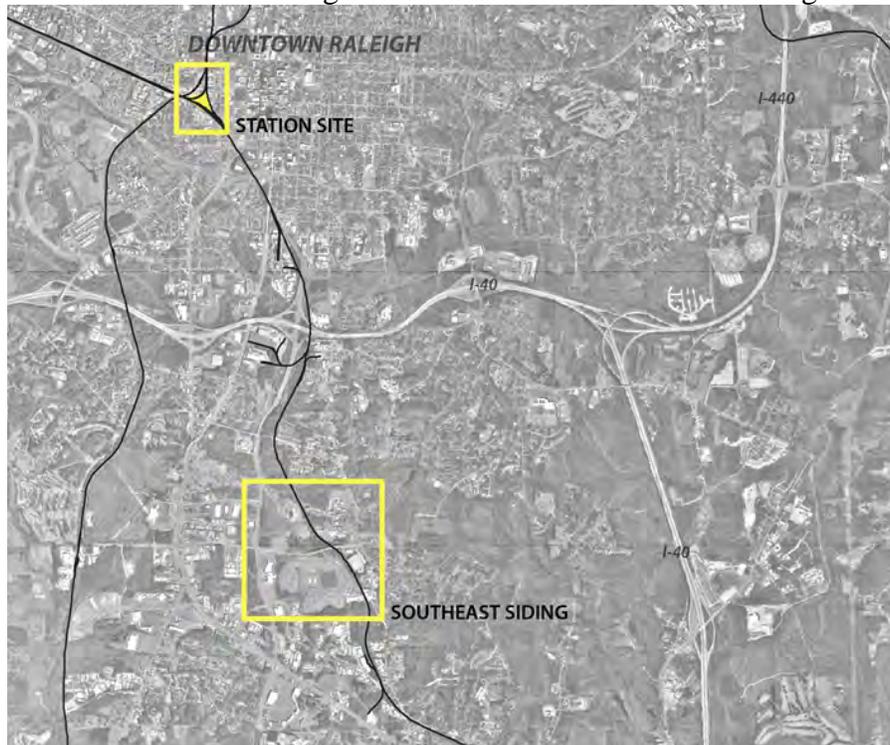
INTRODUCTION

The City of Raleigh, state capital of North Carolina, is pleased to submit this proposal to the U.S. Department of Transportation TIGER V grant program. This proposal builds upon a TIGER IV grant that has been awarded to the City but which did not fully fund the project. The relationship between the present status of the TIGER IV project and this request for TIGER V funding is outlined in the Project Description below. Our proposal for TIGER V funding will permit the City to more completely implement the original plan described in the TIGER IV proposal and allow the City to realize the full benefits of a major overhaul of the City’s railway infrastructure.

I. PROJECT DESCRIPTION

The City is requesting TIGER V funding to assist in the construction of a multimodal transit center known as the “Raleigh Union Station”, including a critically needed train station with associated track improvements to increase passenger and freight train capacity, efficiency, and speeds. TIGER V will support construction elements that are part of the much larger construction plan first described in the City’s TIGER IV proposal. Figure 1 indicates the locations of major construction activities associated with both the TIGER IV project and TIGER V proposal.

Figure 1. Locations of the Raleigh Union Station and Southeast Siding Construction



So as to place this request for TIGER V funding in the context of the overarching construction plan first described in the City’s TIGER IV proposal, the following updates the reviewer on the status of the current TIGER IV grant project and explains how this proposal for TIGER V funding complements the City’s TIGER IV project now underway.

In partnership with the North Carolina Department of Transportation (NCDOT) and the Research Triangle Regional Public Transportation Authority (dba Triangle Transit – TTA), the City of Raleigh submitted a TIGER IV proposal in March 2012. This proposal was budgeted for \$84,240,574, with \$66,020,108 (78.4%) of this being requested Federal funding and \$18,220,466 (21.6%) of this being matching contributions. The TIGER IV proposal described two major segments each having related but independent utility: 1) Raleigh Union Station (consisting of train station and track improvements), and 2) West Street Extension. Subsequently, the U.S. Department of Transportation in June of 2012 offered to make an award to the City in the amount of \$21 million in Federal funding to be put towards the Raleigh Union Station segment described in the City’s TIGER IV proposal. In conjunction with the U.S. Department of Transportation, the City is finalizing the Cooperative Agreement to accept the award and will concentrate all work on the track and platform improvements for the Raleigh Union Station segment; the City will seek other funding for completing the West Street Extension segment.

In the City’s TIGER IV proposal, the Raleigh Union Station segment was budgeted for \$60,570,466 with \$47,100,000 (77.8%) of this being Federal funding and \$13,470,466 (22.2%) being matching cash and in-kind contributions. As a result of the announcement that less than half of the original TIGER IV Federal ask (\$21,000,000) is being offered, the City has had to reconsider what can be done with the available TIGER IV funding. The original TIGER IV proposal has now been divided into Phase 1A and Phase 1B. The \$21M awarded to the City for TIGER IV will be put towards construction activities in Phase 1A, and construction activities in Phase 1B will be funded through future appropriations including any offers resulting from this TIGER V opportunity. Table 1 provides a breakdown of the City’s budgetary strategy for use of the Phase 1A TIGER IV funds, including the matching contribution.

Table 1. Funding Strategy for Raleigh Union Station Complex – TIGER IV Only

Component	As Submitted with Original TIGER IV Proposal	Current Plans for Phase 1A Construction Components	TIGER IV and Matching Funds Allocated to Construction
Station	\$35,445,466	Station Construction	
		Site Construction	\$3,441,400
		Platform and Concourse	\$2,389,900
		Professional Services	\$1,510,242
Track	\$25,125,000	Track Construction for Station	\$4,100,000
		Martin and West Entry drives	\$750,000
		Cabarrus Yard Replacement	\$7,000,000
		Contingency/Mobilization/Permits/Insurance	\$2,000,000
		Professional services	\$1,200,000
		S-Line Relocation Work	\$2,000,000
		East Leg of Wye Realignment	\$2,600,000
		Right-of-Way Acquisition (track)	\$2,000,000
Right-of-Way-Acquisition (other)	\$1,000,000		
Totals	\$60,570,466 *		\$29,991,542 **

Notes

* Original TIGER IV total included \$13,470,476 in matching cash and in-kind contributions

** Current planning for TIGER IV includes \$9,000,000 in matching cash contributions (30% non-federal match)

Relationship Between TIGER IV and TIGER V Proposals

The City's proposal for TIGER V funding will permit the City to more completely implement the original concept for the Raleigh Union Station. It is helpful to review the original TIGER IV proposal and identify the changes that have been necessitated in that proposal due to its being only partially funded.

Being centrally located on the high speed rail corridor planned for the Southeast, as depicted in Figure 2, the Raleigh Union Station project is critical to the nation's future development of high speed rail. In Figure 2, the solid line from Washington, DC, to Raleigh through Charlotte and to Atlanta illustrates the Federally-designated Southeast High Speed Rail corridor; the dotted lines depict future concepts for segments of high speed rail. With high speed rail in mind, the TIGER IV and TIGER V proposals are an outgrowth of many years of collaborative planning at all levels of government and community. The City is excited to be able to move past the planning phase and, with the support of TIGER funding, to begin the construction phase. The NEPA environmental review processes necessary for the TIGER IV construction and this TIGER V proposal are expected to be completed by mid-August 2013. Final design will begin following obligation of the TIGER IV funds in June 2013, construction is scheduled to begin in early 2015 and, following completion of Phase 1B construction, the train station will open in early 2017.

The principal aim of the Raleigh Union Station project is to move from the existing outdated Raleigh Amtrak station and dramatically improve station capacity, functionality and utility. The current Amtrak station in use today was built in 1950 and is a remnant of Southern Railway Company's passenger service. The current station, shown in Figure 3, is deficient in three significant ways. First, with only 1,800 square feet of waiting area—smaller than the average single family home—there is insufficient space to accommodate present-day Raleigh ridership, with travelers often forced to wait outdoors or in their cars. Second, the station has only 54 parking spaces with more than 100

Figure 2. Southeast High Speed Rail Corridors



Figure 3. Current Raleigh Amtrak Station



ridership, with travelers often forced to wait outdoors or in their cars. Second, the station has only 54 parking spaces with more than 100

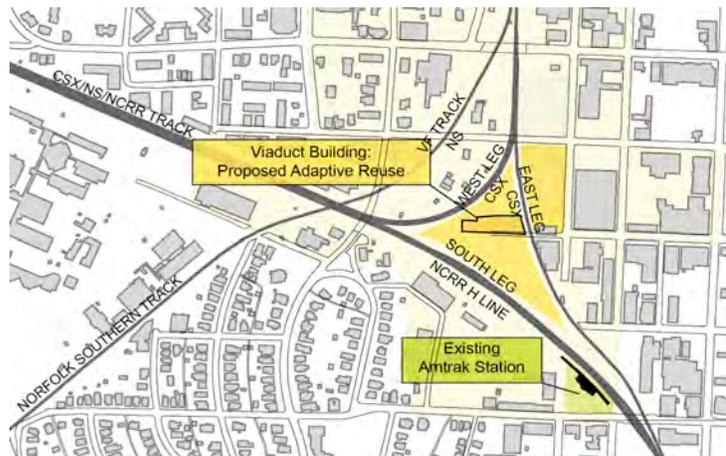
cars regularly observed as spillover into adjoining commercial and residential areas, creating an unsightly neighborhood and safety concerns. Third, the short platform at the station is inadequate in length, with no room for extending and unsafe for existing demand. The Amtrak Silver Star, which runs between Florida and New York, has to partially unload passengers then move the train forward to offload the remaining passengers, thus blocking the Cabarrus Street crossing. The City has produced a video showing the crowded conditions at the current station, found at <http://www.youtube.com/watch?v=ChJXdLo2FZU>

Figure 4 depicts the at-grade crossing at Cabarrus Street that pedestrian passengers must navigate to reach the existing train station. Figure 5 depicts the location of the current Amtrak station just a few blocks west of the City’s center, and also shows the location of the proposed new Raleigh Union Station, inside what is referred to as the “Boylan Wye” where there is an intersection of railways. Situated within the Wye, there is a building known as the “Viaduct Building” that is to be converted into the new Raleigh Union Station with the support of TIGER V funding. Following renovation, the Viaduct Building will have 40,000 square feet of station and mixed use space, including 13,000 square feet of station and operations, 15,000 square feet of leasable area, a 9,000 square foot grand waiting hall, and a 3,000 square foot roof terrace. With the convergence of multiple railways, the Wye provides a unique opportunity to be innovative in the construction of the new train station and to meet objectives for sustainability (e.g., designing to LEED standards, implementing innovative stormwater practices, using native plant material). Along with relocating the train station to sit within the Wye, there are many associated improvements to the railways and nearby railway crossings that must be made in order to make the new train station functional.

Figure 4. Unsafe Crossing at Cabarrus Street



Figure 5. Boylan Wye



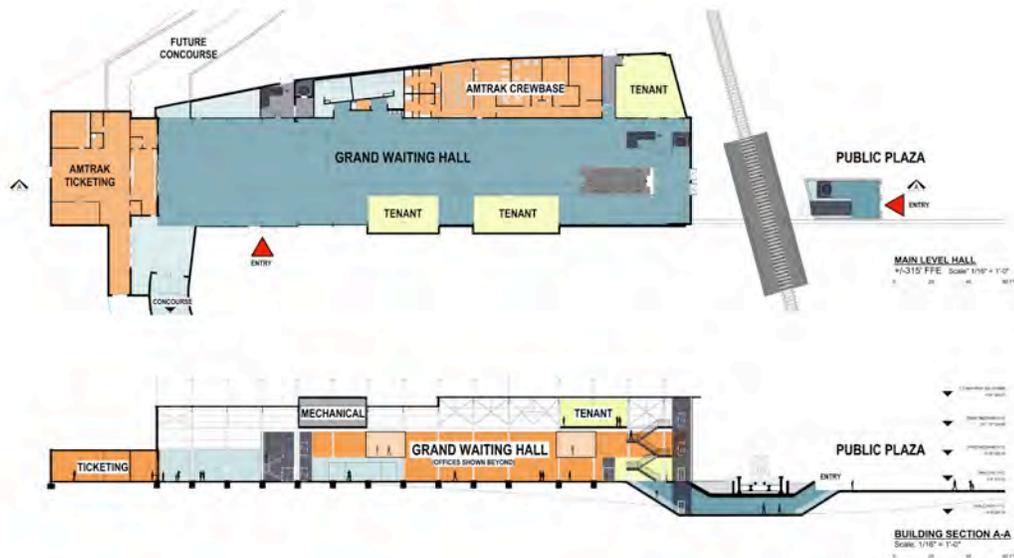
The collection of construction elements that were identified for the Raleigh Union Station project in the original TIGER IV proposal are described below, indicating how these plans have been

updated to reflect the U.S. Department of Transportation's \$21 million TIGER IV funding. Current "Updated Plans" for construction are discussed, and an explanation is provided for how "TIGER Resources" will be allocated to Phase 1A construction activities from the TIGER IV award and how Phase 1B construction activities will be funded under TIGER V, should the City receive a TIGER V award. The locations of the various construction elements for both TIGER IV, and this proposal for TIGER V, are depicted in Figures 9 and 10.

Raleigh Union Station Construction Elements (Reference Figures 9 and 10 for location of all construction elements)

- Raleigh Union Station Updated Plans.** Figure 6 depicts the current plan for the main floor of the Raleigh Union Station, primarily a new Grand Waiting Hall on the main level. There is a lower level connection from the public plaza to the Grand Waiting Hall, as well as pedestrian concourses leading to the platforms. The main level will also have leasable retail areas, ticketing, baggage handling, and other Amtrak back-of-house services. The mezzanines will support Amtrak administrative offices, leasable tenant spaces, and an outdoor roof-top terrace.
 - TIGER Resources.** Current plans for Phase 1B, with support of TIGER V funds, are to follow the general aspects of this schematic but will not include build out of some of the ancillary spaces such as the Amtrak offices, Amtrak crew base, and leasable spaces. Space on the main floor will be arranged so as to permit large civic gatherings for City presentations, banquets, weddings and similar activities at the direction of input received during the public participation process.

Figure 6. Proposed Train Station Plan and Section



- Public Plaza Updated Plans.** The Public Plaza was originally planned to be sunken, but the public requested that it be constructed at street level. The Plaza will include a grade-separated underpass of the east leg of the Boylan Wye for safe access to and from the Grand Waiting Hall. Upon subsequent build-out of the entire Raleigh Union Station complex in later phases of this endeavor, the plaza will allow for public art, performance space, additional vendor opportunities, as well as connections to development to the north and east.

- **TIGER Resources.** Current plans for Phase 1A with funds available in TIGER IV are to remove a building to accommodate improvements to Martin Street. No funds are being requested in TIGER V for the Public Plaza. The City plans to seek other sources of funding to complete the Public Plaza.
- 3. Surface Parking Lot Updated Plans.** Following announcement of TIGER IV funding, citizen input expressed the desire for changes to the design to make vehicle circulation easier and to keep the passenger concourse (discussed below) from being completely below grade. The current plan will maximize the parking while meeting the public's request for improvements to the design. In addition, off-site parking is being evaluated as the City is developing a parking strategy for the Warehouse District, including Raleigh Union Station.
- **TIGER Resources.** Current Plans for Phase 1A include moderate improvements to the parking area to allow for handicapped parking and a modest amount of passenger parking. The funds being requested from TIGER V will allow the full-build-out of the surface parking lot, drop-off circle/ kiss-and-ride, and entry drive improvements.
- 4. Entrance Road Updated Plans.** With the reduced TIGER IV funds, the City will not be able to pay for a West Street grade separation that had been planned. Additionally, in response to public comment and Fire and Life Safety review, a second entrance to the site has been proposed. This entry drive will allow the renovated Viaduct Building to permit safe egress from the facility directly to a public right-of-way in the event of an emergency. The Martin Street Driveway provides transit patrons a more inviting entry, whereas the West Street entry drive will be used primarily by large trucks, buses, and emergency vehicles. The Martin Street Driveway will provide a grade separated passenger-vehicle-only entrance which will permit space for a taxi queue, kiss-and-ride, and an alternate pedestrian entrance helping to meet mandated entrance and exit requirements. This grade-separated underpass (rail over road) will be constructed to allow vehicles safe access to and from the Station and surface parking lot.
- **TIGER Resources.** A West Street grade separation (shown as item 4A on Figure 10) and the Martin Street Driveway grade separation (shown as item 4B on Figure 10) are both included in this request for TIGER V funding.

Figure 7. Proposed Martin Street Grade Separation

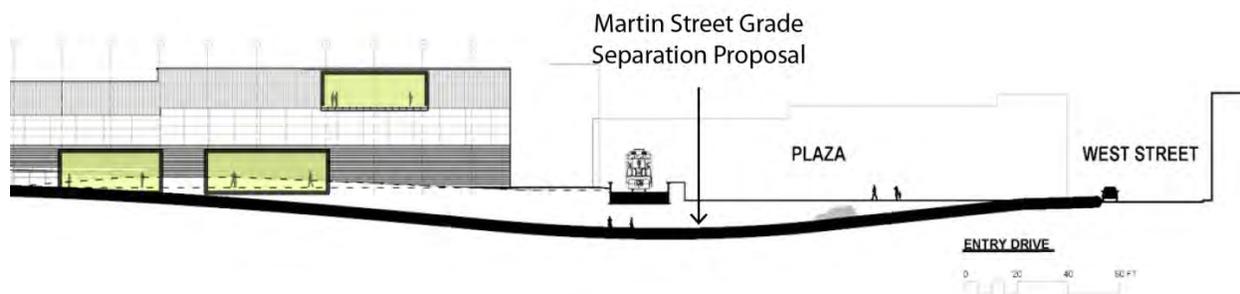


Figure 8. Proposed West Street Driveway Grade Separation



5. Station Track Updated Plans. Two new station tracks will allow up to two passenger trains to dwell in the station at the same time, and allow freight trains to pass on the adjacent main line.

- **TIGER Resources.** Station track development will be funded through TIGER IV and TIGER V. Presently, under TIGER IV the City will be able to build one new track (shown as 5A on Figure 9) to serve one side of the platform. As ridership increases, there will be a need for a second station track and the transition to a center island platform, between the two tracks. The City's request for TIGER V funding will support building the second station track (shown as 5B on Figure 10).

6. Passenger Platform Updated Plans. An 800-foot long platform was proposed in the TIGER IV application.

- **TIGER Resources.** TIGER IV funding will permit construction of a 400-foot platform and canopy. TIGER V resources will allow the full build-out to an 800-foot long platform and 600-foot long canopy.

7. Passenger Concourse Updated Plans. The original proposal for TIGER IV funding included an underground concourse that would connect the Grand Waiting Hall to the boarding platform. Public input has been in favor of a day-lit concourse with minimal underground passage. Plans now are for the concourse to be mostly at grade, sloping downward along the contour of the site, with only a short section below grade where it passes under the tracks. The access from the concourse to the platform will include escalators, stairs, and elevators. This controlled access concourse will meet increasingly strict security requirements for rail travel and provide safe access to platforms for passengers.

- **TIGER Resources.** TIGER V funds are requested to build this Passenger Concourse.

8. Railroad Siding Updated Plans. The project will displace a freight yard used by Norfolk Southern. The original TIGER IV proposal included Cabarrus Yard Capacity Replacements for freight storage near both the NC Prison and Greenfield Parkway. Per conversations with

Norfolk Southern and NC Railroad Company, current plans are to build the Cabarrus Yard Capacity Replacement in a location south of downtown Raleigh near Tryon Road—the Southeast Raleigh Siding.

- **TIGER Resources.** TIGER IV and non-federal match will support the construction of the Southeast Raleigh Siding. No TIGER V resources are necessary for this component.

As indicated in Table 1 above, the City estimates that it will be able to secure \$29,990,642 in TIGER IV and matching funds to commit to Phase 1A of the Raleigh Union Station project, a shortfall of \$30,579,824 relative to the original budget submitted with the City’s TIGER IV proposal. Due to this shortfall, the City has reviewed all elements described in the original proposal and redesigned or eliminated a number of these elements so as to ensure that the Raleigh Union Station project can be completed with integrity to its original purpose. The City is now conceptualizing two construction phases—Phase 1A and Phase 1B—which together are comparable to what was originally proposed for the Raleigh Union Station segment in the TIGER IV application. As now conceptualized, Phase 1A will permit the City to complete construction of rail improvements but will not lead to any gains in train ridership. Phase 1B, described in this proposal for TIGER V funding, will permit the City to complete the Raleigh Union Station and associated grade crossings, which will contribute to gains in ridership. It will be possible to carry out construction activities in both Phases 1A and 1B concurrently should funding for Phase 1B be secured. Figures 9 and 10 depict the locations of the major construction elements discussed above.

Figure 9. Phase 1A:
Showing Building
Removal at Public Plaza
(2), Parking Area (3),
First Track (5A),
Passenger Platform and
Canopy (6), and
Southeast Raleigh
Siding (8)



Figure 10. Phase 1B:
Showing Construction at
Train Station (Viaduct
Building (1), Parking lot
(3), West Street grade
separation (4A), Martin
Street Driveway grade
separation (4B), Second
Track (5B), Passenger
Platform and Canopy (6),
and Passenger Concourse
(7)



II. PROJECT PARTIES

The City of Raleigh is the sole applicant for this TIGER V proposal. Other agencies partnering with the City in its TIGER IV proposal, including the North Carolina Department of Transportation and Triangle Transit continue to participate in developments associated with the Raleigh Union Station and have had and will continue to have input into the TIGER V developments proposed herein. Along with these parties, there are a variety of agencies, institutions and organizations committed to the City's TIGER IV and TIGER V projects as evidenced in the letters of support submitted with this proposal.

Location. The City of Raleigh was incorporated in 1792 and is North Carolina's capital. Raleigh is situated in the heart of the state, in a section called the Piedmont, 150 miles from the Atlantic Ocean and 190 miles from the Great Smoky Mountains. The City forms one point of the Research Triangle Park which was initially developed in 1959 for industrial, governmental and scientific research, with Chapel Hill and Durham being the other two points. The City is located in a metropolitan area consisting of Wake, Durham, Orange, Franklin, Chatham, Granville, Harnett, and Johnston counties.

Population. The 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

placed the Raleigh-Cary MSA third among 366 census-defined areas and first among metropolitan areas of at least 500,000 people. Since 1980, population in the eight counties comprising the metropolitan area surrounding Raleigh 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. Presently home to more than 1.7 million people in 2010, 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. Presently, the racial make-up 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.

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

- #1 "America's Most Wired Cities" (www.forbes.com/places/nc/raleigh)
- #1 "America's Safest Cities" (www.forbes.com/places/nc/raleigh)
- #2 "Best Places for Business and Careers" (www.forbes.com/places/nc/raleigh)
- 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)
- 4th "Smartest City" (October, 2010 – U.S. Census Bureau)
- 5th Greatest Job Growth since 2005 (July, 2010 – U.S. Bureau of Labor Statistics)
- "Healthiest of the 100 largest U.S. Housing Markets" (March, 2011 – Builder Magazine)

The Raleigh Union Station project will significantly enhance the economic viability of downtown Raleigh and the surrounding community. The train station will anchor the Raleigh Union Station complex and catalyze residential and commercial development. Figure 11 provides a depiction of potential development envelopes in the area surrounding the Wye which may be expected in the coming years, including mixed residential and commercial uses. Public investment in Raleigh Union Station will revitalize what is now largely an industrial warehouse region, by supplying a transit hub large enough to drive private investment. Per recent Downtown Raleigh Alliance estimates regarding city-initiated projects, for every \$1 of public funds invested in Downtown Raleigh, the private sector has responded with a \$2 match of investment. This finding is substantiated with research that has indicated that investment in public infrastructure results in economic output of 2:1 over two years, and every dollar spent generates \$3.21 in economic output over a 20-year period (Cohen, Frieling, & Robinson 2012).

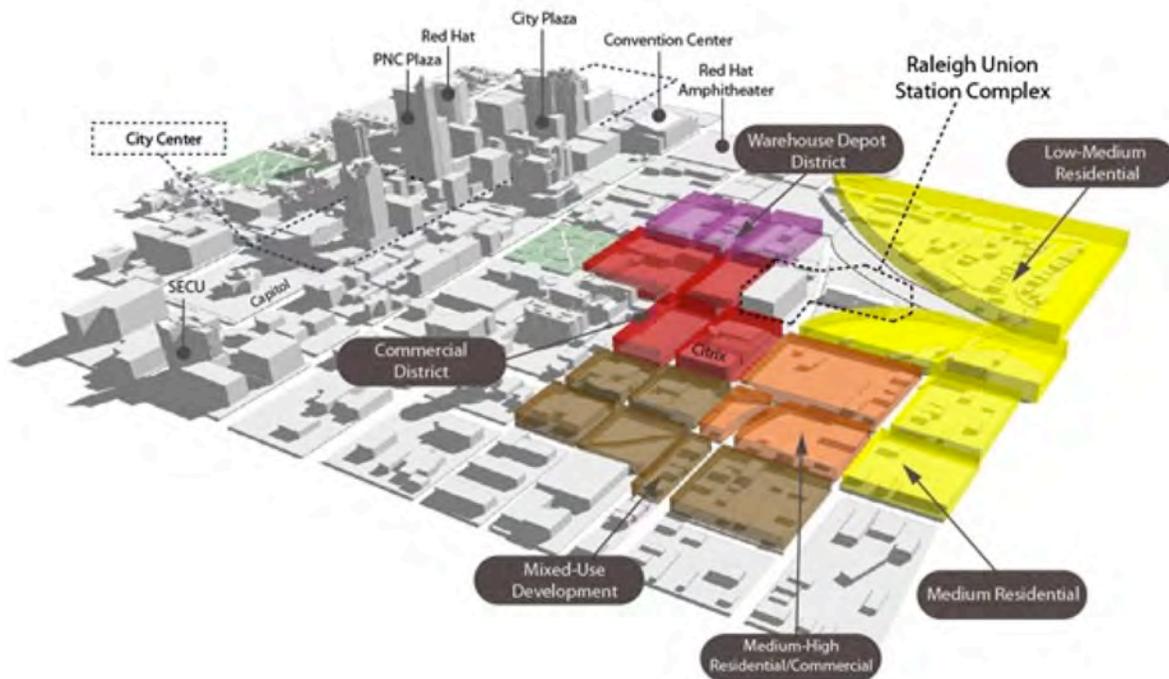
In fact, Raleigh is already seeing economic development that may be attributed directly to the impact of work beginning on the Raleigh Union Station complex. Citrix Systems, a provider of virtual computing solutions, is redeveloping the Dillon Supply Warehouse just north of the proposed Raleigh Union Station for its new downtown Raleigh headquarters. The current 55,000 square foot building is to be converted into a four-story, 170,000 square foot office complex featuring a structured parking deck, 14,000 square feet of retail space, and a pedestrian amenity area. The office complex will house 339 new permanent full time positions with the potential to increase to over 800 employees over the next five years. The average Citrix employee has a wage of \$70,914.

Another large employer headquartered in Downtown Raleigh is Red Hat. Its 1,000 employees and contractors, with a median age of 28 and salary of \$80,000, fill downtown restaurants,

retailers, and bars with young, smart, and savvy people. Many of the types of companies that choose to locate in Raleigh's Central Business District are innovative, high tech, and entrepreneurial, and employ professionals who are increasingly demanding alternative transportation options where they live and work.

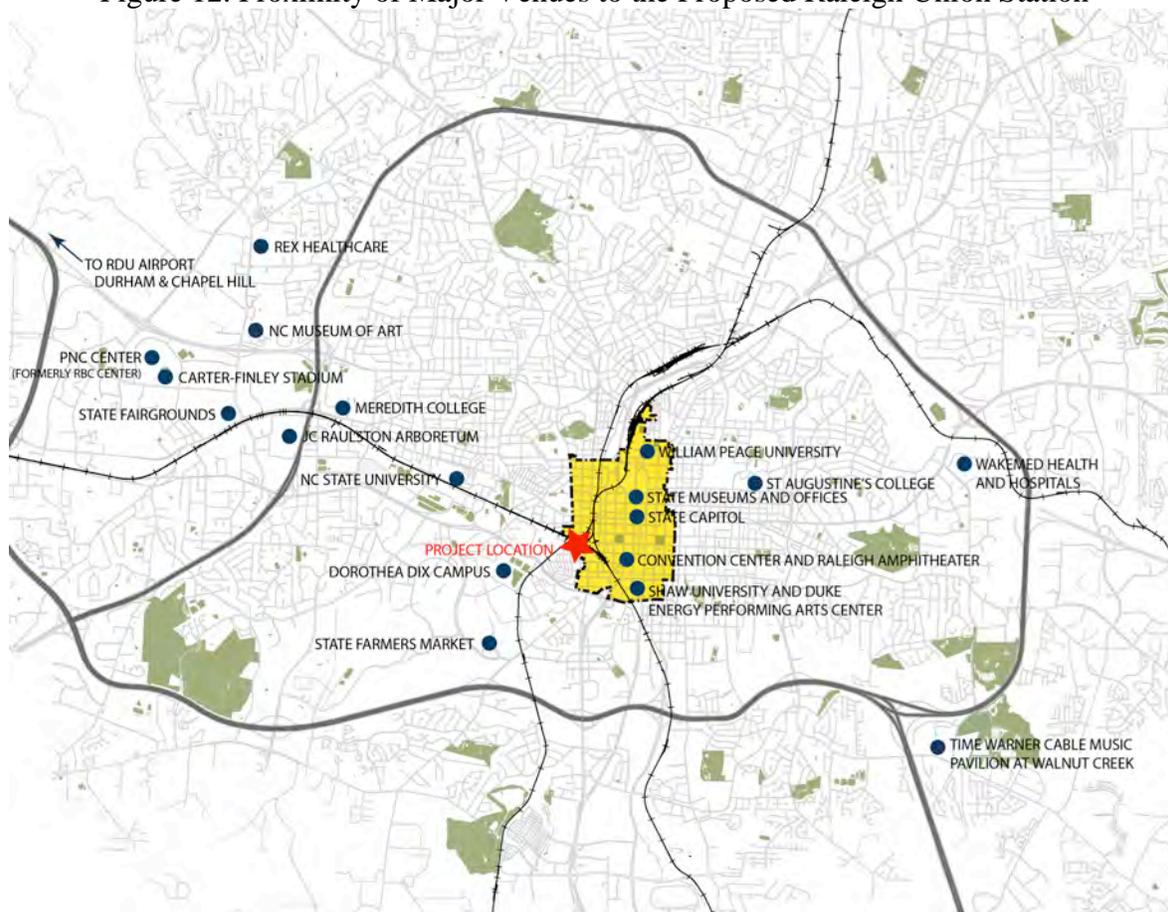
Continued development in the City's core highlights Downtown Raleigh as the region's largest employment center. Along with Citrix and Red Hat, earlier examples include the Royal Bank of Canada which in 2008 established its U.S. headquarters in Downtown Raleigh in the RBC Tower, a 33-story, 730,000-square-foot building that contains corporate offices, residential units, and retail space and now known as the PNC Plaza. Also in 2008, the Raleigh Convention Center was built, which added 500,000 square feet of exhibition and meeting space in the core of the City, contributing to the economic attractiveness of the heart of the city.

Figure 11. Prospective Development Envelopes Surrounding Boylan Wye



Surrounding Downtown Raleigh, there are numerous other venues which attract daily visitors, many whom ride trains into Raleigh. Six colleges and universities are located within Raleigh, along with a major sports venue supporting the National Hockey League's 2006 Stanley Cup Champion, the Carolina Hurricanes (PNC Arena), and two-time National Champion North Carolina State University basketball team. The State Fairgrounds is a short drive or bus trip from the planned Raleigh Union Station. These and other visitor attractions are indicated in Figure 12.

Figure 12. Proximity of Major Venues to the Proposed Raleigh Union Station



Train Ridership. Raleigh is located amid a well-traveled railway and ranks high in Amtrak ridership among all major cities in the Southeast, as indicated in Table 2. Raleigh ranked second in Amtrak ridership in the southeast in 2011 but fell to fifth in 2012. This may be attributed to the fact that the Town of Cary—10 miles to the west of Raleigh—completed an expansion of its train station in late 2011. The improvements lured many riders to embark and debark from Cary rather than Raleigh. Cary now offers many of the same amenities as in Raleigh such as Amtrak staffing, checked baggage, and a Quik-Trak ticket kiosk. However the Cary Depot has more parking and is considered to be a safer station. The existing Raleigh station is difficult to access, outdated, and

Table 2. Amtrak Ridership in Recent Years

Location	FY 2011 Ridership	FY 2012 Ridership	Trains
Richmond	320,239	345,657	20
Raleigh	192,434	163,698	8
Charlotte	181,566	193,144	8
Orlando	179,142	172,502	4
Alexandria	161,687	169,746	20
Atlanta	114,938	104,854	2
Miami	94,556	91,019	4
Charleston	81,180	84,956	4
Cary, NC	44,962	78,278	8
Jacksonville	74,733	77,512	4
Savannah	69,379	72,321	6

Source: Amtrak fact sheets

overcrowded. It is inadequate to encourage, much less accommodate, future demands that will accompany the population and ridership growth expected for this metropolitan region. As suggested in Table 2, Raleigh’s loss of ridership to an expanded neighboring train station makes it clear that there is commercial value in developing a more attractive and accessible Raleigh station. TIGER V funding will allow the City to complete the Raleigh Union Station as originally conceptualized in the TIGER IV proposal. Without the improvements TIGER V will make possible, there is significant likelihood that Raleigh’s ridership will stagnate or decline.

Economics. Raleigh’s excellent business environment, its nationally ranked universities, and 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 the 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, medical and pharmaceutical, information technology and retail trade.

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 \$65.2 million increase from the previous year.
The City’s governmental funds reported combined ending fund balances of \$461.3 million.
Assigned fund balance for the general fund was \$34.3 million or 10.4% of total general fund expenditures. Unassigned fund balance is \$62.8 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 presented by the Government Financial Officers Association of the United States and Canada.

III. GRANT FUNDS AND SOURCES/USES OF PROJECT FUNDS

With this TIGER V proposal, the City is requesting \$21,699,537 in Federal funds through the TIGER program to develop Phase 1B of its Raleigh Union Station project and the City commits another \$5,750,000 in matching cash, bringing the total cost of Phase 1B project to \$27,449,537. Use of the TIGER V funding will adhere to the policy of the City of Raleigh 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 including but 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, 2012 can be viewed online at <http://www.raleighnc.gov/home/content/Finance/Articles/FinanceReports.html>

Table 4 summarizes the principal construction activities that will be carried out in Phase 1A with the support of TIGER IV funding and those construction activities that are proposed for Phase 1B with the support of TIGER V funding.

Table 4. Funding Strategy for Raleigh Union Station Complex – TIGER IV and TIGER V

Component	Phase 1A Construction Components with TIGER IV Support	Phase 1A Costs	Phase 1B Construction Components with TIGER V Support	Phase 1B Costs
Station			Station Construction	\$2,315,925
	Site Construction	\$3,441,400	Site Construction	\$8,198,550
	Platform and Concourse	\$2,389,900	Platform and Concourse	\$5,469,525
	Professional Services	\$1,510,242	Professional Services	\$1,165,637
			Building and Land Acquisition	\$4,999,900
Track	Track Construction – Station Track #1	\$4,100,000	Track Construction – Station Track #2	\$800,000
	Martin and West Entry Drives	\$750,000	Martin and West Rail Bridges	\$3,700,000
	Cabarrus Yard Track Replacement	\$7,000,000	Cabarrus Yard Track Replacement	
	Contingency/Mobilization/Permits/Insurance	\$2,000,000	Contingency/Mobilization/Permits/Insurance	\$800,000
	Professional Services	\$1,200,000	Professional Services	
	S-Line Relocation	\$2,000,000	S-Line Relocation	
	East Leg of Wye Realignment	\$2,600,000	East Leg of Wye Realignment	
	Right-of-Way Acquisition (track)	\$2,000,000	Right-of-Way Acquisition (track)	
Right-of-Way Acquisition (other)	\$1,000,000	Right-of-Way Acquisition (other)		
Totals		\$29,991,542*		\$27,449,537**

Notes

* Total includes \$9,000,000 (30%) in matching cash contributions

** Total includes \$5,750,000 (20.95%) in matching cash contributions

IV. SELECTION CRITERIA

This proposal for TIGER V funding builds on plans for the awarded TIGER IV project, and is similar to the TIGER IV proposal in many of the ways in which it addresses primary and secondary 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 the technical studies and reports beginning as early as 1989, all which have contributed to the current planning for the Raleigh Union Station complex.

(2) *State of Good Repair, Rehabilitate, Reconstruct, or Upgrade Unimproved Assets.*

As noted in the proposal for TIGER IV funding, the current Amtrak station in Downtown

Raleigh is functionally obsolete. 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 layout features. Specifically, Phase 1A of the Raleigh Union Station project will complete track improvements, and it is essential to complement these track upgrades with Phase 1B station improvements outlined in this proposal for TIGER V funding.

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 Union Station, the surrounding Raleigh Union Station complex will dramatically improve the appeal of the region for residential and commercial development and will enhance economic development in many areas of the city, and especially neighboring low-income areas. The City's plan for Raleigh Union Station reflects a greatly strengthened commitment to provide and support a 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 liabilities by \$1.7 billion as indicated in the City's latest Comprehensive Annual Financial Report. Raleigh has also maintained its strong AAA/Aaa bond rating. Sufficient funds have been pledged by the City of Raleigh and by NCDOT to adequately capitalize the project with local funding. For details, see Table 3 on Raleigh's financial highlights.

(4) State of Good Repair, Sustainable Source of Revenue is Available for Long-Term Operations and Maintenance.

Operation and maintenance costs for the Raleigh Union Station will be supported by multiple revenue sources. Rent proceeds payable by Amtrak and vendors will provide income. In addition, the City will provide additional support for the operation and maintenance costs. Costs for specific elements of this proposal will also be supported. For example, future improvements to the station will provide opportunities for vendor leasing space that will provide income. Maintenance of the track improvements will be the responsibility of NCDOT and the host railroads.

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 growth in train ridership within the Raleigh-to-Charlotte corridor and beyond, and support the development of an economic corridor that reaches from Maine to Alabama and Florida. The proposed track and station improvements will enable enhanced freight movement, since it will reduce current interruptions in service during passenger rail boarding. Improvements to the track will also increase the 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 rail corridor that is owned by N.C. Railroad Company and stretches from Morehead City through Raleigh to Charlotte.

Within the area defined by the Boylan Wye, various tracks are owned and maintained by Norfolk Southern and CSXT. Each company has agreed to allow the other to share tracks under a joint facilities agreement. CSXT operates trains on average four trains per day, and Norfolk Southern operates six to eight trains per day through the Boylan Wye. Improvements resulting from Phase 1A and 1B for the Raleigh Union Station and subsequent development will have a significant effect on reducing the costs of transporting freight.

The proposed track and station improvements will have a strong effect on movement of workers as well as freight. As noted in Table 2, during FY 2012 Raleigh's annual ridership dropped by more than 28,000, a decline that can be largely attributed to improvements of the Cary Depot that resulted in a gain of ridership there of approximately 24,000 during the same time period. Absent the improvements proposed in this application for TIGER V funding, ridership in Raleigh will reach a ceiling due to limits on the capacity of the station and site, further reducing the economic competitiveness of the Boylan Wye area. On the other hand, the improvements proposed here will allow Raleigh to regain lost ridership as well as accommodate projected growth in ridership (see Appendix A for the Benefit Cost Analysis).

(2) Economic Competitiveness, Improvements to the Economic Productivity of Land, Capital or Labor.

Economic and population growth in the Triangle region has flourished in the last 10-20 years. However, without improvements described in this narrative, future mobility will be hampered and this likely will diminish the long-term competitiveness of the region. The area immediately around the Raleigh Union Station is relatively low in economic productivity; the project is starting from a low baseline and thus the proposed development is likely to substantially improve nearby property values and commercial rents. Research has shown that a transit system which provides good access to regional employment centers is likely to result in higher land value premiums. One study (Adams and VanDrasek, 2007) showed increases to property values of 5-15%. A meta-analysis (Debrezion, Pels, & 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 transit 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.

(3) Economic Competitiveness, Job Creation and Opportunities for Small and Disadvantaged Businesses.

Businesses decide whether to locate in the Triangle based on a number of factors. One 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 the

community and region. As noted above, Raleigh has already seen job growth that may be attributed to the Raleigh Union Station plans, as firms like Citrix and Red Hat have relocated to the city. Improved city center transportation will make the city more economically competitive, reducing overall transportation costs.

Jobs will be created as a result of:

- a. Direct Construction Jobs (Near Term) related to the construction activities associated with the Raleigh Union Station Phase 1B activities. It is projected that the immediate impact will be the creation of 143 job-years, many which will be construction jobs within the hardest hit sector of the state. Please see the attached Benefits-Cost Analysis in Appendix A.
- b. Construction Jobs (10-year period starting in 2015 related to the construction of transit-oriented development projects. It is projected to create 11,205 short-term jobs. A multiplier factor for these jobs is further examined in the attached Benefits-Cost Analysis.
- c. 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.
- d. Direct Operations, Maintenance Jobs, and Retail Service Jobs (Recurring) related to the Raleigh Union 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.

Many of these jobs, especially maintenance and retail positions, should be suitable for low-income workers. Small businesses and disadvantaged businesses, including veteran-owned and disabled-owned enterprises, also should be competitive for the near-, mid, and long-term job opportunities mentioned above.

IV.A(iii). Livability

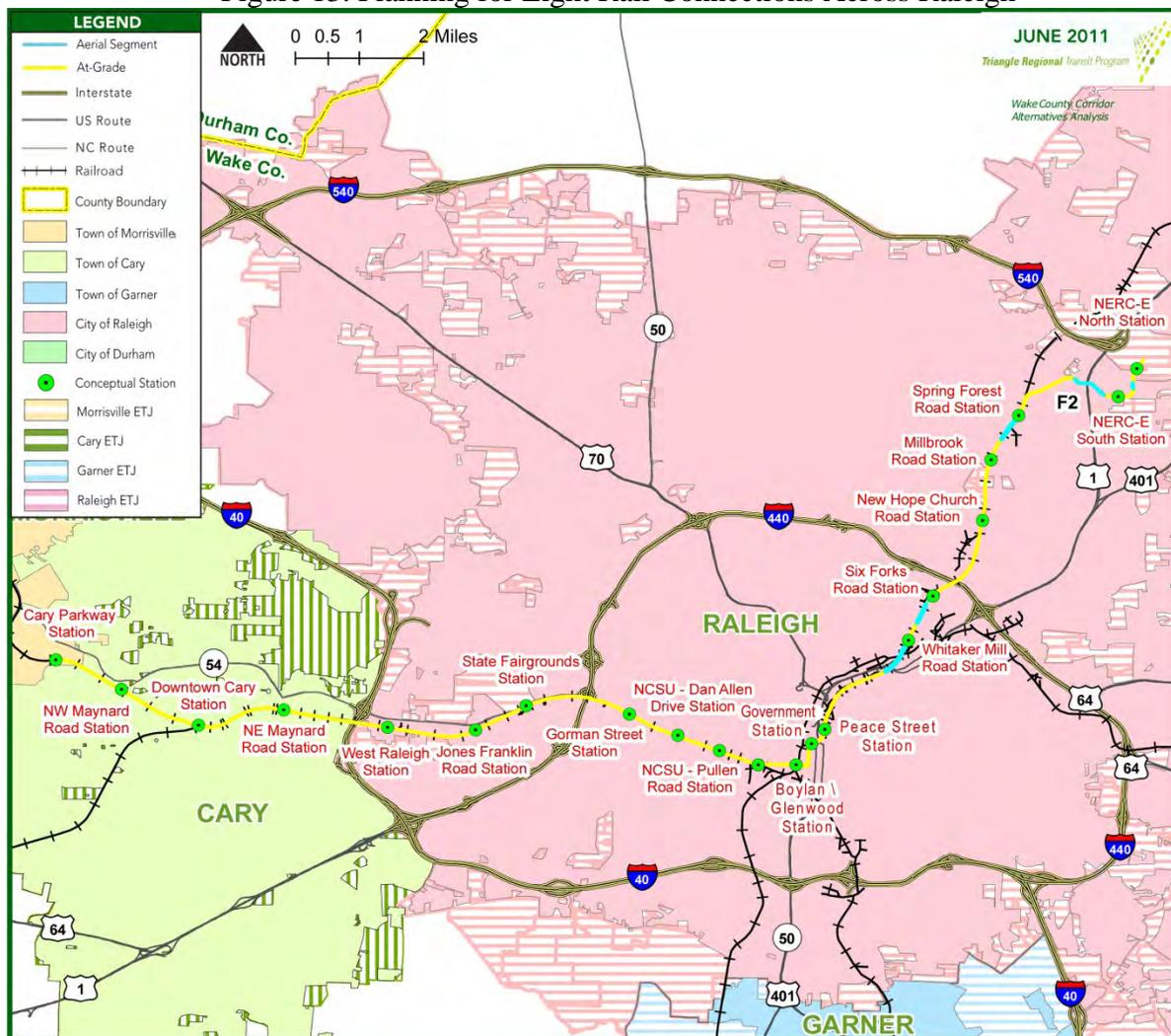
This project will further all six livability principles developed by DOT with the Department of Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA) as part of the Partnership for Sustainable Communities. It will also focus specifically on livability for economically disadvantaged populations:

(1) Livability, Provide more Transportation Choices.

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. The Triangle Transit Alternatives Analysis for light rail, completed in 2012, proposes a light rail station adjacent to the Union Station complex. Connections to light rail depicted in Figure 13 (also see www.ourtransitfuture.org) will facilitate connections to points both within Raleigh and throughout the Triangle region. Miles travelled and vehicle operating costs will be reduced, and door-to-door travel time savings will be realized for rail, automobile, bus and air travelers. Travel by train and bus is less expensive than travel by car, and thus the Raleigh Union Station will provide an important transportation option for economically disadvantaged populations, non-drivers and persons with disabilities. 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.

Figure 13. Planning for Light Rail Connections Across Raleigh



The Raleigh Union Station location 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.

(2) Livability, Promote Equitable, Affordable Housing

Raleigh Union Station redevelopment is consistent with the City of Raleigh’s “2030 Comprehensive Plan” adopted in 2009. The plan envisions several important themes that will greatly impact regional transit investments, including coordinating land use and transportation, and focusing on sustainable development. Expanding affordable housing choices is also a critical

element in the plan. Raleigh recognizes that affordable housing is a key factor for community vitality and economic growth: it provides stability for families and improves opportunities for education and jobs for low-wage households. As Figure 11 illustrates, we expect that the Raleigh Union Station complex will be an integral component of the city's future residential development. The area around Raleigh Union Station is home to many low- and moderate-income families and the improvements to the site should not only enhance transportation access for the current residents but should also expand the range of affordable housing options in the region by making it a more desirable destination for new families in search of housing in a revitalized neighborhood.

(3) Livability, Enhance Economic Competitiveness.

The Raleigh Union Station complex will enhance the economic competitiveness of Raleigh and the surrounding region in several ways: it will improve the efficiency of movement of workers and goods, increase the economic productivity of land, and provide several near- and long-term job opportunities. See IV.A(ii) above for details.

(4) Livability, Support Existing Communities, and (6) Livability, Value Communities and Neighborhoods.

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 held open public meetings and has taken up consideration of the Union Station plans on multiple occasions. As we noted above, public meetings were essential in shaping the revised and final plans for Raleigh Union Station, after the TIGER IV project was awarded. Members of the task force have also led tours of the proposed Raleigh Union Station site for citizens, elected officials, and news media.

The community has had many opportunities to be involved in the planning process for over two decades. 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 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. Since the beginning of 2013, there have been two public input sessions during the schematic design phase for the station and five more sessions are anticipated prior to construction commencing in 2015.

Once developed, the station will continue to benefit the community and improve livability. It will be a hub to a multimodal complex that will integrate bus, taxi, light rail and bike facilities providing many ways for community residents to access destinations in Raleigh and the surrounding Research Triangle Park area. Additionally the station will provide civic space for public and private events.

(5) Livability, Coordinate policies and leverage investment.

The vision for the Raleigh Union Station complex is the product of extensive planning and policy coordination at all levels of government. 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). The City of Raleigh, NCDOT, and TTA have aligned plans, visions, and funding to develop Raleigh Union Station and to accommodate the current and future demand of passenger and freight rail. Investments in Raleigh Union Station have come from the Federal government, the TIGER IV award, as well as from the City of Raleigh and the State of North Carolina.

IV.A(iv). Environmental Sustainability

(1) Environmental Sustainability, Reduce Energy Use, Air or Water Pollution.

The City of Raleigh is committed to developing Raleigh Union Station as a model of energy efficiency and air and water quality for the City's civic facilities. Energy use will be addressed in multiple ways: A continuous clerestory window around the entire building and at the concourse will naturally daylight all public spaces and the majority of work areas to virtually eliminate electric lighting energy requirements during the day. A combination of carefully designed roof overhangs and decorative solar screening will minimize heat gain to reduce cooling demands for the facility, and a lighting control system will reduce lighting demands for less-occupied areas of the building during evening hours. A high-efficiency air-cooled chiller and high-efficiency condensing boiler will be the basis for an HVAC system that is carefully tailored to each of the different use areas. For instance, the high volumes of the main hall and concourse will be heated by radiant floor to keep occupants warm without conditioning the entire volume while cool air will settle from overhead ducts when needed. All air handlers will be designed to operate in economizer mode to minimize energy requirements when outside air conditions are favorable and a DDC control system will adjust automatically to maintain optimum energy efficiency. Air and water quality are equally important design criteria. All stormwater from the building and plaza will be naturally filtered in a constructed wetlands prior to release. Most importantly, Raleigh Union Station will serve as the hub of a multimodal transportation facility that integrates heavy and light rail, bus, car and bike share facilities and provides the infrastructure necessary to provide a viable means to help reduce individual vehicle miles. Collectively, these and other measures are expected to contribute to a LEED Silver rating or higher for the facility.

(2) Environmental Sustainability, Avoid Adverse Environmental Impacts.

Raleigh Union Station will be located on an abandoned industrial site and will be a part of the state's Brownfields Program to encourage the safe and productive reuse of the property with a mutually-agreed upon environmental approach to the site. The facility will also adaptively use the existing Viaduct Building. The design of the station will take full advantage of the embodied energy in the existing steel structure and masonry shell of the building. Other materials that have outlived their useful life—like the exterior steel panels—will be repurposed as interior finishes, to help further reduce material waste. Collectively, the reuse of the building and site and the selective reintroduction of natural areas will minimize the impact on the site and will contribute to a LEED Silver rating or higher for the facility.

(3) Environmental Sustainability, Provide Environmental Benefits.

Moving automobile passengers to rail travel will significantly improve sustainability and enhance energy efficiency. In addition to emission savings, the transition from automobiles to rail also has major benefits in the areas of fuel savings, highway safety, congestion and highway maintenance. Starting in 2025, passengers and passenger miles will significantly increase as the system accommodates high speed rail. For the purpose of this TIGER V proposal and its

analysis, it is assumed that only 50% of the passengers are diverted from automobiles (the other 50% is diverted air passengers). Based on these assumptions, 6.8 million automobile passengers and a cumulative 2.2 trillion automobile miles will be diverted through 2045.

IV.A(v). Safety

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 Union 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 provide level boarding, allowing 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 injury. Furthermore, the Raleigh Union 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 double parking and jockeying for a parking space that now occurs.

Raleigh Union Station will also provide safer and more accommodating access for pedestrians and bicycle users, who must now negotiate an at-grade rail crossing. The West Street entrance and Martin Street grade-separated crossings will improve access to the site with accommodations for cars, pedestrians and bicyclists. 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.

IV.A(vi) Project Readiness

Raleigh Union Station Phase 1B is ready for design, bid, and build. The majority of parcels in the vicinity have a base zoning that allow industrial and business uses, including 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. Major investments in design have already been made and the project is ready to begin. Other broad evidence regarding project readiness relates to strong State and regional support:

- **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. 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 Chief Deputy Secretary of Operations, James H.

Trogdon.

- **State and Local Planning Support:** Raleigh’s Union Station is supported by Raleigh’s 2030 Comprehensive Plan and a series of plans and studies detailed in Table 7 at the end of this narrative.

In addition to these broad supports, specific evidence of readiness is as follows:

(a) Technical Feasibility

A study conducted by NCDOT in 2011, including preliminary engineering plans, concluded that the project is feasible. NCDOT subsequently was awarded an FRA Planning Grant in 2012, and a 25% design and project cost estimate will be completed in June 2013. There are no outstanding technical issues.

(b) Financial Feasibility

The City of Raleigh is capable of providing the matching funds needed for this TIGER V proposal, and the City is fiscally sound and capable of successfully administering the project.

(c) Project Schedule

Table 5 provides a timeline and major milestones for the Raleigh Union Station. Following the table we address key issues related to necessary approvals, permits and acquisitions.

Table 5. Statement of Work Timeline of Project Schedule and Major Milestones

Estimated Start Date	Estimated End Date	Activity and Milestone	Lead Agency
underway	8/2013	Station and Trackwork Environmental Assessment (EA) (Phase IA and IB)	NCDOT
underway	8/2013	Station and Trackwork Finding of No Significant Impact (FONSI) (Phase IA and IB)	NCDOT
underway	7/2013	Station and Trackwork Schematic Design (Phase IA and IB)	NCDOT & City of Raleigh
8/2013	9/2014	Station and Trackwork Design Completion (Phase IA and IB)	City of Raleigh & NCDOT
10/2014	12/2014	Station and Trackwork Bid (Phase IB)	City of Raleigh & NCDOT
1/2015	12/2016	Station and Trackwork Construction (Phase IB)	City of Raleigh & NCDOT

It is important to note that Phase 1A and 1B construction activities can occur concurrently. To ensure that Phase 1B of the Raleigh Union Station project is ready to begin quickly upon receipt of the TIGER V grant, we will have all critical preconstruction activities completed before June 30, 2014:

- **Environmental Approvals:** A federal NEPA document is required for the train station and trackwork, and an EA/FONSI is expected to be completed by mid-August 2013, as the Project Schedule demonstrates.
- **Permits:** Local permits are required for this project, including a building permit.
- **Property or right-of-way acquisition:** Right of Way appraisals are complete and property

acquisition may commence upon completion of the EA/FONSI, and full execution of the TIGER IV cooperative agreement.

(d) Assessment of Project Risks and Mitigation Strategies

We have analyzed the risks to the Raleigh Union Station project, both Phase 1A and Phase 1B, and summarize these in the following table.

Table 6. Description of Possible Risks, Their Potential Impact, and the City’s Response

Description of Possible Risks and Impact	Response Strategy	Response Actions
Construction activities could interfere with station operations.	Mitigate	Coordinate construction phasing with operational staff.
Inclement weather could delay construction activities.	Accept	Common risk in construction industry. Accept risk and set project duration to accommodate.
Consultant design may not be to department expectations. Revisions to design could delay schedule and increase costs.	Mitigate	Coordinate review with multiple internal City and NCDOT units and staff.
Construction activities could impact adjacent businesses. Lawsuits and complaints to local government could delay the project.	Avoid	Coordinate construction activities that impact traffic at off-peak times, limit noise producing activities to daylight hours.
Inaccurate contract or construction times in preliminary estimates. Project duration is longer than expected.	Mitigate	Coordinate review of preliminary data with in-house staff and construction industry experts.
Unexpected environmental or site conditions could remain undetected until Construction, With -potential to increase costs and delay schedule.	Mitigate	Continue with the robust subsurface investigation program that has been developed and implemented.
Compliance with Roadway Worker Protection Rules and Regulations under Title 49 Code of Federal Regulations Part 214, will require extensive use of railroad flagmen. Given the overall NCDOT <i>Piedmont</i> Improvement Program, there may be a shortage of qualified flagmen. Potential to delay schedule and subsequent cost increases to maintain project schedule.	Mitigate	NCDOT will work with NS to establish a Flagman Program such that a sufficient number of Flagmen are available to efficiently construct the project.
Locations of subsurface utilities, both public and private, are not known with a high degree of certainty at the current stage of project development, although current information suggests that there will be utility conflicts and associated relocations. Potential to increase costs and delay schedule.	Mitigate	Implement appropriate use of Level A SUE to definitively identify utility conflicts and initiate early coordination efforts with utility owners.

Obtaining permits from the various agencies could take longer than anticipated. Potential to delay schedule and subsequently increase costs in order to recover lost time.	Mitigate	Continue coordination efforts with Agencies throughout Final Design. Submit Permit Drawings and Applications at the earliest possible time.
The construction market, and its associated bid prices, is often volatile. Procurement costs for major project components could be higher than estimated. Potential to increase costs.	Mitigate	Monitor bid prices and trends to determine if the influx of work is causing undue inflation. Consider rejecting bids when more than 10% above the engineer's estimate. Prudently use project contingency when necessary.
Key staff members within the City and NCDOT, who have significant historical perspective and institutional knowledge of the project, could be promoted or otherwise depart, thereby creating potential hardships.	Mitigate	Ensure that all project-related decisions are properly documented and that project files contain all relevant information.

IV.B. Innovation

Building the train station within the “Wye” layout of the existing tracks offers a very unique opportunity for innovative station placement on an otherwise inaccessible property. The proposed Raleigh Union Station will maximize the track alignments on a piece of property that will allow the station to service intercity passenger rail and commuter rail on the NCRR H-Line, future high speed rail on the CSX S-Line, and future light rail one or two blocks away along Hargett or Morgan Street. 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. Environmental remediation of the entire project area is also considered innovative by LEED standards.

IV.C. Partnership

One of the greatest strengths of the Raleigh Union Station project exists in the collaborative effort undertaken by the three local partners—the City of Raleigh, NCDOT, and TTA—all of whom share the same vision for a new train station in downtown Raleigh to accommodate current and future rail infrastructure needs. The current grant proposal is submitted solely by the City of Raleigh, but the partnerships created and strengthened during the TIGER IV application process have been maintained and all parties are moving forward in a collaborative planning effort. This partnership 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 intercity rail service expansion, high speed, regional commuter, and light rail passenger services. The three principal partners are committed to working 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. 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.D. 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 26 to 1 based on an adjusted net present value (3%) that is valued in monetary terms of \$725 million.

V. PLANNING APPROVALS, NEPA AND OTHER ENVIRONMENTAL REVIEWS/APPROVALS

(a) National Environmental Policy Act

(i) Information about the NEPA status of the project. The NEPA environmental review processes necessary for the TIGER IV construction and this TIGER V proposal are expected to be completed by mid-August 2013. Final design will begin following obligation of the TIGER IV funds in June 2013. Construction is scheduled to begin in early 2015 and, following completion of Phase 1B construction, the train station will open in early 2017. When the environmental assessment/FONSI is completed, it will be available at

<http://www.ncdot.gov/projects/raleighunionstation/>.

(ii) Information on reviews by other agencies, (iii) Environmental studies or other documents.

No other environmental reviews are required.

(iv) A description of discussions with the appropriate DOT modal administration field office.

The NEPA process has been coordinated with Federal Railroad Administration.

(b) Legislative Approvals

There are no significant legislative barriers to timely completion. As noted above, the North Carolina General Assembly funds NCDOT operations and there is every expectation that the legislature will support this project. See the NCDOT letters of support in Appendix B. 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 Chief Deputy Secretary of Operations, James H. Trogon .

(c) State and Local Planning

Raleigh Union Station is supported by the City's 2030 Comprehensive Plan and a series of plans and studies detailed in Table 7 at the end of this narrative. As a freight and passenger rail project, the Raleigh Union Station project is not required to be on the State Rail Plans called for in the Passenger Rail Investment and Improvement Act of 2008, consistent with the exemption for high speed and intercity passenger rail projects under the Recovery Act. However, as noted above, we have demonstrated that the project fits into a prioritized list of capital needs and is consistent with long-range goals for Raleigh.

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 Transportation Center Feasibility Study, City of Raleigh (COR)	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 enough to warrant such a facility. <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	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. <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	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. <ul style="list-style-type: none"> • Forms basis for 2010 COR study.

Title & Sponsor	Findings and Present-Day Relevancy
2007-2008 Regional Transit Vision Plan/ Special Transit Advisory Commission of the MPO	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. <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	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. <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 Area MPO	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. <ul style="list-style-type: none"> • Informs COR 2010 study and forms basis for Triangle Transit Alternatives Analysis.
May 2010 S. West Street Extension Alternatives Study, COR	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. <ul style="list-style-type: none"> • Forms basis for COR NEPA study of West Street Extension.
September 2010 Union Station: Raleigh's Multimodal Transit Center, Partnership: COR, NCDOT Rail Division	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. Presented a conceptual program and functional plan for Union Station. <ul style="list-style-type: none"> • Informs 2012 NCDOT feasibility plan.
2010 Triangle Regional Transit Program Transitional Analysis/ TTA	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. <ul style="list-style-type: none"> • Forms basis for Triangle Transit Alternatives Analysis, 2011.

Title & Sponsor	Findings and Present-Day Relevancy
<p>July 2011 Durham-Wake County Corridor Alternatives Analysis/ TTA</p>	<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.
<p>January 2012 Proposed Raleigh Station and Track Configuration - Feasibility Study, NCDOT</p>	<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.
<p>2012 Wake County Transit Plan, Wake County</p>	<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 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.</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.
<p>Proposed Raleigh Station and Track Configuration NEPA Study, NCDOT</p>	<p>An ongoing environmental assessment of the proposed Raleigh Union Station the first phase of Union Station implementation), station site elements, related track, siding, and signal work. Finding of no significant impact (FONSI) expected August 2013.</p> <ul style="list-style-type: none"> • Incorporated into 2012 TIGER application.

Title & Sponsor	Findings and Present-Day Relevancy
West Street Extension NEPA Study, COR, NCDOT, and FRA	The City of Raleigh is studying the proposed extension of West Street adjacent to the proposed Raleigh Union Station. While the project is currently unfunded, this study will facilitate options for securing funding for this project. FONSI expected end of 2013 <ul style="list-style-type: none"> • Incorporated into 2012 TIGER application.
Raleigh Union Station Phase 1A TIGER IV Grant Application, Partnership: City, NCDOT, TTA	The City of Raleigh in partnership with the North Carolina Department of Transportation (NCDOT) and Triangle Transit (TTA), requested Federal TIGER funding to assist in the construction of the first phase of a multimodal transit center known as the "Raleigh Union Station." The City of Raleigh is completing work with the FRA on a cooperative agreement for the \$21M award. <ul style="list-style-type: none"> • Informs the 25% schematic design for the station. • Informs the TIGER V proposal.
Bus Facilities Master Plan	Due to the need to provide an increased and significant level of local bus service to the Raleigh Union Station site, the City of Raleigh is conducting a study to identify suitable sites for a new bus transfer facility in the station vicinity. The planning process began in April 2013 and is expected to be completed in late 2013. <ul style="list-style-type: none"> • Informs future phase planning for Raleigh Union Station Complex

REFERENCES

Adams, J. S., & VanDrasek, B. J. (2007). *Transportation as Catalyst for Community Economic Development*, Center for Transportation Studies, University of Minnesota (www.cts.umn.edu) for the American Institute of Architects. Retrieved from www.cts.umn.edu/pdf/CTS-07-07.pdf

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., Pels, 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