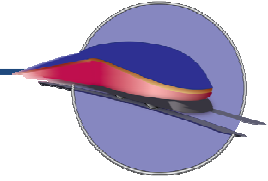


## High-Speed Intercity Passenger Rail (HSIPR) Program

# Application Form



## Track 1a–Final Design (FD)/Construction

## & Track 4–FY 2009 Appropriations Projects

Welcome to the Track 1a Final Design (FD)/Construction and Track 4 Application for the Federal Railroad Administration’s High-Speed Intercity Passenger Rail (HSIPR) Program. Applicants for Track 1a FD/Construction and/or Track 4 are required to submit this Application Form and Supporting Materials (forms and documents) as outlined in Section G of this application and in the HSIPR Guidance.

We appreciate your interest in the program and look forward to reviewing your application. If you have questions about the HSIPR program or this application, please contact us at [HSIPR@dot.gov](mailto:HSIPR@dot.gov).

### Instructions:

- Please complete the HSIPR Application electronically. See Section G for a complete list of the required application materials.
- In the space provided at the top of each section, please indicate the project name, date of submission (mm/dd/yy) and the application version number. The distinct Track 1a and/or Track 4 project name should be less than 40 characters and follow the following format: State abbreviation-route or corridor name-project title (e.g., HI-Fast Corridor-Track Work IV).
- For each question, enter the appropriate information in the designated gray box. If a question is not applicable to your FD/Construction Project, please indicate “N/A.”
- Narrative questions should be answered concisely within the limitations indicated.
- Applicants must upload this completed application and all other application materials to [www.GrantSolutions.gov](http://www.GrantSolutions.gov) by August 24, 2009 at 11:59pm EDT.
- Fiscal Year (FY) refers to the Federal Government’s fiscal year (Oct. 1- Sept. 30).
- Please direct questions to: [HSIPR@dot.gov](mailto:HSIPR@dot.gov)

## A. Point of Contact and Applicant Information

<b>(1) Application Point of Contact (POC) Name:</b> Patrick Simmons		<b>POC Title:</b> Director, Rail Division, NCDOT		
<b>Street Address:</b> 1 South Wilmington Street	<b>City:</b> Raleigh	<b>State:</b> North Carolina	<b>Zip Code:</b> 27601	<b>Telephone Number:</b> (919) 733-7245 ext. 263
<b>Fax:</b> (919) 715-6580		<b>Email:</b> pbsimmons@ncdot.gov		

(2) Name of lead State or organization applying (only States may apply for Track 4 ): NCDOT

(3) Name(s) of additional States and/or organizations applying in this group (if applicable): N/A

(4) Is this project for which you are applying for HSIPR funding related or linked to additional applications for HSIPR funding that may be submitted in this or subsequent rounds of funding?  Yes  No  Maybe  
 If “yes” or “maybe,” provide the following information:

Program/Project Name	Lead Applicant	Track	Total HSIPR Funding Proposed (if known)	Status of Application
NC 3.1b SEHSR █ Raleigh to Richmond & Enabling Facility	NCDOT	Track 1b - PE/NEPA	\$10.14 M	Applied
NC 6.1a █ Congestion Mitigation	NCDOT	Track 1a - FD/Construction	\$26.56 M	Applied
NC 7.3 █ WNC/SENC Intercity Passenger Service Expansions	NCDOT	Track 3	\$3.04 M	Applied
NC 8.1a SEHSR █ Other Speed & Safety Improvements	NCDOT	Track 1a - FD/Construction	\$5.78 M	Applied
NC 12.1a SEHSR █ Current Nds & 3 <sup>rd</sup> Fq'y	NCDOT	Track 1a - FD/Construction	\$22.85 M	Applied
NC 13.2 SEHSR Corridor	NCDOT	Track 2	\$3.8 B (est)	Will Apply

Project Name: NC5.1a SEHSR - Stations

Date of Submission: Aug 24

Version Number: L

## B. Project Overview

<p><b>(1) FD/Construction Project Name:</b> NC5.1a SEHSR - Stations</p>
<p><b>(2) Indicate the Track under which you are applying: Track 1a - FD/Construction</b>  <i>Please note if you are applying for Track 1a–FD/Construction and Track 4 <u>concurrently</u>, you must submit <b>two separate versions</b> of this application into <a href="http://www.GrantSolutions.gov">www.GrantSolutions.gov</a> (one for Track 1a –FD/Construction and one for Track 4–FY 2009 Appropriations Projects).</i></p>
<p><b>(3) Indicate the activity(ies) for which you are applying (check both if applicable):</b>  <input type="checkbox"/> Final Design      <input checked="" type="checkbox"/> Construction</p>
<p><b>(4) What are the anticipated start and end dates for the FD/Construction Project? (mm/yyyy)</b>  <b>Start Date:</b> 2/17/09      <b>End Date:</b> 9/30/11</p>
<p><b>(5) Total Cost of the FD/Construction Project</b> (year of expenditure (YOE) Dollars*): \$ 7,579,806.38</p> <p><b>Please provide proposed inflation assumptions and methodology, if applicable in the space below. Please limit response to 1,000 characters.</b></p> <p>The ARRA Application Templates/Forms require the calculation of YOE dollars. Estimated rates of inflation from current year dollars to future year dollars need to be calculated, derived or otherwise obtained. OMB circular A-94 (“Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs”) does provide guidance, while allowing that “Analysts should avoid having to make an assumption about the general rate of inflation whenever possible”. The guidance then recommends the use of the current Gross Domestic Product deflator. These values are contained in Table 10.1 on the OMB website and provide values through FY 2014 and historic values dating back to 1940.</p> <p>Therefore, the OMB tabulated values are used. Specifically, the “Direct Capital - Nondefense” column was applied. The projects included as part of this application totaled \$7,555,779.00 in base year dollars.</p> <p><b>Of the total cost of the FD/Construction Project, how much would come from the FRA HSIPR Program:</b> (YOE Dollars**) \$ 7,579,806.38</p> <p><b>Indicate percentage of total cost to be covered by <u>matching funds</u></b> 0 %  <i>Applications submitted under Track 4 require at least a 50 percent non-Federal match to be eligible for HSIPR funding.</i></p> <p><small>* Year-of-Expenditure (YOE) dollars are inflated from the base year.  ** This is the amount for which the applicant is applying.</small></p>
<p><b>(6) Project Overview Narrative. Please limit response to 5,000 characters.</b></p> <p>Provide an overview of the main features and characteristics of the FD/Construction Project, including:</p> <ul style="list-style-type: none"> <li>• The location of the project including name of rail line(s), State(s), and relevant jurisdiction(s) (include map if available in supporting documentation).</li> <li>• Identification of service(s) that would benefit from the project, the stations that would be served, and the State(s) where the service operates.</li> <li>• How the project was identified through a planning process and how the project is consistent with an overall plan for developing High-Speed Rail/Intercity Passenger Rail service.</li> <li>• How the project will fulfill a specific purpose and need in a cost-effective manner.</li> <li>• The project’s independent utility.</li> <li>• The specific improvements contemplated.</li> <li>• Any use of railroad assets or rights-of-way, and potential use of public lands and property.</li> <li>• Other rail services, such as commuter rail and freight rail that will make use of, or otherwise be affected by the</li> </ul>

project.

NCDOT has made a concerted effort to make improvements to its passenger railroad stations across the state. <http://www.bytrain.org/istation>.

The project includes parking increases, platform extensions, and passenger waiting area improvements as well as the addition of backup generators and security cameras to several passenger rail stations.

\* The majority of physical upgrades will occur at three stations - Cary, Burlington, and High Point. All three stations are located in NC along trackage and right-of-way owned by the North Carolina Railroad (NCR). The stations are located at the following addresses and mileposts:

High Point - 100 W. High Ave., High Point, NC 27260, NCR MP 299.4

Burlington - 101 North Main Street, Burlington, NC 27217, NCR H-Line MP 21.4

Cary - 211 N. Academy St. Cary, NC 27511, NCR H-Line MP 73.5

A total of 16 stations in NC will be receiving other upgrades that include backup generators and security cameras.

\* These station improvements are located at all stations throughout NC and would benefit all rail service in the state, including the Piedmont, Carolinian, Crescent, Silver Star, Silver Meteor, and Palmetto. The stations receiving the physical upgrades; High Point, Burlington, and Cary; are on the Piedmont Corridor, which is part of the federally designated SEHSR corridor that will connect the NEC at Washington, DC to Atlanta and Florida.

\* The High Point, Burlington, and Cary Stations as well as the other stations proposed for upgrades are currently station stops for the existing Amtrak service in NC provided by the Piedmont, Carolinian, Crescent, Silver Star, Silver Meteor, and Palmetto. The extensive planning completed to date for the SEHSR has been based on maintaining service to all existing stations targeted locations. As such, upgrades to these stations function to support the proposed high speed service in the SEHSR corridor.

\* Railway stations serve the very practical purpose of providing a point for passengers to get on to or off of a train. However, stations serve a much bigger purpose, as they represent the beginning and ending of each passenger's experience with the rail service. As such, they serve as image-builders for the rail service itself and as an enhancement and enticement for passenger comfort and convenience. Finally, stations also can serve as a focus point for local participation and investment in the rail service, because a station serves to enhance not only the rail service, but the city or town in which it is located. The improvements proposed by this project will fulfill this need at a very reasonable cost.

\* All stations slated for improvement are currently in use by riders of Amtrak's existing service. Improvements at these stations will be beneficial to both riders and the towns in which they are located whether or not the SEHSR is completed and becomes operational, thus providing independent utility.

\* The specific improvement proposed as part of this project are as follows: (1) At the High Point station the number of customer parking spaces will be increased from 9 to 29, allowing more customers to find convenient parking. (2) At the Burlington station, the station platform will be extended by 200 linear feet. This will allow the loading of all train cars at the same time. Currently, only a portion of the train cars are loaded, then the train is repositioned, and then the remaining cars are loaded. (3) At the Cary station, several improvements are proposed. First, the number of parking spaces will be increased from 146 to 167 to accommodate additional customers. Second, the passenger waiting room will be increased in size from 500 square feet to 2,400 square feet. Third, a total of five passenger shelters will be added to the train platforms for protection from the weather. Finally, a 200 foot extension will be added to one of the platforms to allow easier boarding. (4) Six emergency generators will be installed, one at each of the following stations: Rocky Mount, Selma, Burlington, Fayetteville, Southern Pines and Wilson (5) Security cameras, digital video recorders, and a dedicated network will be installed at 14 stations: Rocky Mount, Wilson, Selma, Raleigh, Capital Yard, Cary, Burlington, High Point, Salisbury, Kannapolis, Gastonia, Fayetteville, Southern Pines, and Hamlet.

\* The improvements proposed as part of this project will all be located within the existing station buildings, or within their immediate vicinity. Each station has different ownership, but is owned by either NCR, NCDOT, the municipality in which the station is located, a non-profit organization, or a combination of the above.

\* This project will have no negative effect and limited positive effect on other rail services.

**(7) Status of Activities: Are any FD or Construction activities that are part of this planned investment underway or completed?**

Yes (Final Design)     Yes (Construction)     No

**If “Yes,” please describe the activities that are underway or completed in the table below.<sup>1</sup> If more than three activities, please detail in Section F of this application.**

Activity	Description	Completed? (If yes, check box)	Actual Initiation Date (mm/yyyy)	Actual or Anticipated Completion Date (mm/yyyy)
Final Design	High Point Station	<input type="checkbox"/>	03/2006	11/2009
Final Design	Burlington Station	<input type="checkbox"/>	12/2007	11/2009
Final Design	Cary Station	<input type="checkbox"/>	01/2009	11/2009

**(8) Describe the project service objectives (check all that apply):**

- Additional Service Frequencies
- Improved Service Quality
- Improved On-Time Performance on Existing Route
- Increased Average Speeds/Shorter Trip Times
- Other (Please Describe): Additional customer parking, additional customer waiting area, increased baggage handling and ticketing areas, platform improvements, safety improvements, backup generators, and security cameras.

**(9) Types of capital investments contemplated (check all that apply):**

- Structures (bridges, tunnels, etc.)
- Track Rehabilitation
- New or restored sidings/passing tracks
- Major Interlockings
- Station(s)
- Communication, Signaling and Control
- Rolling Stock Refurbishments
- Rolling Stock Acquisition
- Support Facilities (Yards, Shops, Admin. Buildings)
- Grade Crossing Improvements
- Electric Traction
- Other (Please Describe):

**(10) Right-of-Way-Ownership.** Provide information for all railroad right-of-way owners in the FD/Construction Project area. Where railroads currently share ownership, identify the primary owner. *If more than three owners, please detail in Section F of this application.*

Type of Railroad	Railroad Right-of-Way Owner	Route Miles	Track Miles	Status of Agreements to Implement Projects
Regional or Short Line	North Carolina Railroad	n/a	n/a	Master Agreement in Place
Class 1 Freight	CSXT	n/a	n/a	Master Agreement in Place
Amtrak				Master Agreement in Place

<sup>1</sup> Please note: (a) requests for reimbursement of costs incurred prior to enactment of the relevant appropriations will not be considered and (b) supporting documentation for activities may also be required as noted in Appendix 2 of the HSIPR Guidance.

**(11) Services.** Provide information for all existing rail services within project boundaries (freight, commuter, and intercity passenger). *If more than three services, please detail in Section F of this application.*

Type of Service	Name of Operator	Top Speed Within Project Boundaries		Number of Route-Miles Within Project Boundaries	Average Number of Daily One-Way Train Operations <sup>2</sup> within Project Boundaries	Notes
		Passenger	Freight			
Freight	Norfolk Southern Railway	40	40	n/a	Average one way train operations for three stations combined - 22	Average one way train operations for each station: Cary - 5 Burlington - 5 High Point - 22
Freight	CSXT	40	40	n/a	4	CSXT only operates adjacent to the Cary station
Intercity Passenger	Amtrak	40	40	n/a	Average one way train operations for three stations combined - 8	Average one way train operations for each station: Cary - 6 Burlington - 4 High Point - 6

**(12) Rolling Stock Type.** Describe the fleet of locomotives, cars, self-powered cars, and/or trainsets that would be intended to provide the service upon completion of the project. *Please limit response to 1,000 characters.*

Rolling stock is not affected by this project, however North Carolina-owned new and rebuilt standard diesel electric locomotives and passenger cars (all Amtrak compatible) will be utilized for service.

**(13) Intercity Passenger Rail Operator.** Provide the status of agreements with partners that will operate the benefiting high-speed rail/intercity passenger rail service(s) upon completion of the planned investment (e.g., Amtrak).  
 Name of Operating Partner: Amtrak  
 Status of Agreement: Preliminary executed agreement/MOU

**(14) Benefits to Other Types of Rail Service(s).** Are benefits to non-intercity-passenger rail services (e.g., commuter, freight) foreseen?  
 Yes    No  
 If “Yes”, provide further details in Section E, Question 2.

<sup>2</sup> One daily round-trip train operation should be counted as two daily one-way train operations.

Project Name: NC5.1a SEHSR - Stations

Date of Submission: Aug 24

Version Number: L

### C. Eligibility Information

(1) Select applicant type, as defined in Appendix 1.1 of the HSIPR Guidance (only States may apply for Track 4):

- State
- Amtrak

If one of the following, please append appropriate documentation as described in Section 4.3.1 of the HSIPR Guidance:

- Group of States
- Interstate Compact
- Public Agency established by one or more States
- Amtrak in cooperation with a State or States

(2) Establish Completion of Preliminary Engineering. In the space(s) below, please list the documents that establish completion of Preliminary Engineering for the project covered by this application. See HSIPR Guidance Appendix 2.2. If more than four references need to be listed, please place the additional information in Question F.

Document Name	Completion Date (mm/yyyy)
<ul style="list-style-type: none"> <li>• <b>Burlington Platform Extension</b> <ul style="list-style-type: none"> <li>○ <a href="#">Project Location Map</a></li> <li>○ <a href="#">Project Map</a></li> <li>○ <a href="#">Platform Extension Plan</a></li> <li>○ <a href="#">Platform Addition Detail</a></li> <li>○ <a href="#">Electrical Systems Diagram</a></li> <li>○ <a href="#">Lighting Control Diagram</a></li> </ul> </li> </ul>	12/2006
<ul style="list-style-type: none"> <li>• <b>Cary Depot Upfit</b> <ul style="list-style-type: none"> <li>○ <a href="#">Project Location Map</a></li> <li>○ <a href="#">Project Map</a></li> <li>○ <a href="#">Civil Engineering Plans</a></li> <li>○ <a href="#">Architectural Floor Plan</a></li> <li>○ <a href="#">Architectural Elevation-North</a></li> <li>○ <a href="#">Architectural Elevation-South, East, West</a></li> </ul> </li> </ul>	08/2004
<ul style="list-style-type: none"> <li>• <b>High Point Station Parking Expansion</b> <ul style="list-style-type: none"> <li>○ <a href="#">Project Location Map</a></li> <li>○ <a href="#">Project Map</a></li> <li>○ <a href="#">Project Cover Sheet</a></li> <li>○ <a href="#">Plans</a></li> <li>○ <a href="#">Cross Section</a></li> <li>○ <a href="#">Retaining Walls Sheet 1.1</a></li> <li>○ <a href="#">Retaining Walls Sheet 1.2</a></li> </ul> </li> </ul>	01/2009
See Section F.C2	

(3) Establish Completion of NEPA Documentation (the date document was issued and how documentation can be verified by FRA). The following are approved methods of NEPA verification (in order of FRA preference): 1) References to large EISs and EAs that FRA has previously issued, 2) Web link if NEPA document is posted to a website (including www.fra.gov), 3) Electronic copy of non-FRA documents attached with supporting documentation, or 4) a hard copy of non-FRA documents (large documents should not be scanned but should be submitted to FRA via an express delivery service). See HSIPR Guidance Section 1.6 and Appendix 3.2.9.

Documentation	Date (mm/yyyy)	Describe How Documentation Can be Verified
<input checked="" type="checkbox"/> Categorical Exclusion Documentation	08/2009	Most of the reference documents have been attached to this application. For those not attached, please go to <a href="http://bytrain.org/fra">http://bytrain.org/fra</a>
<input type="checkbox"/> Final Environmental Assessment		
<input checked="" type="checkbox"/> Final Environmental Impact Statement	06/2002	see above
<b>(4) Indicate if there is an environmental decision from FRA (date document was issued and web hyperlink if available).</b>		
Documentation	Date (mm/yyyy)	Hyperlink (if available)
<input type="checkbox"/> Categorical Exclusion Determination		
<input type="checkbox"/> Finding of No Significant Impact		
<input checked="" type="checkbox"/> Record of Decision	10/02/2002	<a href="http://www.fra.dot.gov/downloads/RRDev/setier1rod.pdf">www.fra.dot.gov/downloads/RRDev/setier1rod.pdf</a>

## D. Public Return on Investment

- (1) 1A. Transportation Benefits. See HSIPR Guidance Section 5.1.1.1. Please limit response to 8,000 characters: How is the project anticipated to improve Intercity Passenger Rail (IPR) service? Describe the overall transportation benefits, including information on the following (please provide a level of detail appropriate to the type of investment):
- IPR network development: Describe improvements to intermodal connections and access to stations as well as actual and potential expansions to the IPR network that may result from the project (including opportunities for interoperability with other services).
  - IPR service performance improvements (also provide specific metrics in table 1B below): Please describe service performance improvements directly related to the project, as well as a comparison with the existing service (without project). Describe relevant reliability improvements (e.g., increases in on-time performance, reduction in operating delays), reduced schedule trip times, increases in frequencies, aggregate travel time savings (resulting from reductions to both schedule time and delays, expressed in passenger-minutes), and other relevant performance improvements.
  - IPR service results (also provide specific metrics in table 1B below): Describe relevant outcomes of the service improvement such as increases in ridership, passenger-miles, and other results in comparison with the existing service (without project).
  - Suggested supplementary information (only when applicable):
    - Transportation Safety: Describe overall safety improvements that are anticipated to result from the FD/Construction Project, including railroad and highway-rail grade crossing safety benefits, and benefits resulting from the shifting of travel from other modes to safer IPR service.
    - Cross-modal benefits from the FD/Construction Project, including benefits to:
      - ✓ Commuter Rail Services – Service improvements and results (applying the same approach as for IPR above).
      - ✓ Freight Rail Services – Service performance improvements (e.g., increases in reliability and capacity), results (e.g. increases in ton-miles or car-miles of the benefiting freight services), and/or other congestion, capacity or safety benefits.
      - ✓ Congestion Reduction/Alleviation in Other Modes; Delay or Avoidance of Planned Investments – Aviation and highway congestion reduction/alleviation, and/or other capacity or safety benefits. Describe any planned investments in other modes of transportation that may be avoided or delayed due to the improvement to IPR service that will result from the project.

The SEHSR Station Improvement Projects will provide an array of transportation benefits to the passenger railroad system of NC, including the federally designated SEHSR Corridor. Improvements proposed will also benefit the NCRP, and thereby, the State of NC (owner of the NCRP). Those benefits extend beyond state lines to travelers along the entire East Coast. Improving passenger rail service in the Piedmont Corridor and throughout the state, ensures its place as an integral part of the state's vast transportation network and contributes to the economic vitality and quality of not only NC, but all along the East Coast. In the states along the SEHSR Corridor, where population is expected to grow by 21-52% over the next 20 years, (with North Carolina, ranked 7th in the nation at a projected growth of 52%), passenger rail will be counted upon to move more people more efficiently, more reliably and more frequently.

North Carolina has a long history of developing and improving passenger rail service beginning in the 19th century. In addition, it continues the state's tradition of investing in rail service over the years, as one of only 14 States to actively invest in intercity passenger service routes. Primarily, those investments have been in support of the two services initiated by the state in the 1990's – the Piedmont, (between Raleigh and Charlotte) and the Carolinian, (Washington to Charlotte). NC funds Amtrak-operated services by covering direct operating costs not covered by fare revenue. NC has also supported intercity passenger service by investing heavily in rail infrastructure, including stations. Between 2002 and 2008, NC invested more than \$46 million in the state-owned NCRP Corridor. These investments directly benefited passenger rail service by reducing travel times between Raleigh and Charlotte by 34 minutes.

The station improvements described in this application continue an ongoing initiative that NC has been

undertaking in partnership with Amtrak to rebuild many of its historic train stations statewide along the corridor. It will include upgrades to accommodate increased passenger demands created by the implementation of high speed passenger service as well as improvements that will provide greater safety and ease to the travelling public. At the High Point Station, improvements will provide increased parking spaces by three times (from 9 to 29 spaces), leading to a projected 10% ridership increase. At the Cary Station, which is served by 3 passenger trains, the Silver Star, Carolinian and Piedmont and, uniquely, has service East to West and North to South, ridership is projected to increase 18%. This is based on adding 21 additional parking spaces, expanding the passenger waiting room area from 500 to 2400 square feet, and expanding luggage and ticket handling capacity. There will also be platform improvements made at Cary Station benefiting current and future passenger volumes. In both instances, improved operational efficiency, faster boarding times and increased travel times will result, as will increased reliability and customer satisfaction. (See F.D1A) At the Burlington Station, the passenger boarding platform will be expanded by 200 feet. This improvement will allow for faster and safer boarding without the need to reposition the train, therefore leading to decreased travel times and shorter dwell time, both of which will improve air quality. The safety improvements, consisting of security cameras and backup generators, proposed as part of this application will likely result in increased ridership due to travelers experiencing an increased feeling of security. The exact magnitude of the ridership increase, however, cannot be accurately projected.

The sum of these station improvements will encourage economic growth opportunities and urban development in and around the cities in which they are located. This will result in commuter-like activities by passengers who may choose passenger rail to commute to work each day, thus further increasing ridership, frequency, passenger miles traveled, and reduction in highway congestion.

These stations will provide a variety of additional benefits. The Cary Station, for example, located in the heart of downtown Cary, acts as a multimodal epicenter serving multiple purposes. It houses a waiting area for Amtrak passengers, is a transfer point for local and regional transit bus patrons, and serves as a DMV Drivers License Office. It will be better equipped to accommodate increased multimodal/multifunctional services and customers with space accommodations provided by the project improvements to be made.

The Burlington Station is located on the fringe of central downtown and was built in 2003 in the 140 year old former engine house of the NCRR, which is the only remnant of a railroad maintenance facility built nearly 150 years ago. The station also houses the NCRR Whistlestop Museum in its lobby, and city offices, including the police sub-station. It is called the Company Shops Station. It has great potential for community redevelopment and its architectural design has had a positive impact on the look of the downtown section. It has also won an award for excellence from the Main Street, North Carolina Division of the State Department of Commerce.

Throughout NC, safety is a major priority. The cameras and generators proposed for the several stations support this priority. The security cameras will tie in with the command and control structure at the state, including the State Emergency Response Team (SERT). In addition, the cameras will be coordinated with existing local emergency response, security, and law enforcement structures in place. The generators will provide a community asset to the host municipalities, creating a location with an uninterrupted power supply that can allow the facility to operate as a stand-alone civil defense asset for command and control during an emergency.

NC's historic Sealed Corridor Program is another example of NCDOT's commitment to safety. This program was the first such program in the nation and is an ongoing effort to improve protection at or eliminate rail-highway way crossings. The program evaluates crossings for closures, and protects remaining at-grade crossings with median separators, longer gate arms, four quadrant arms, four quadrant gates, and other innovative signage and traffic control devices. For this program, NCDOT has worked with communities across the state to increase the safety of their crossings. In many instances, the communities and the state have worked together to "piggy back" crossing studies as a part of the overall effort to implement the station restoration program.

Even more importantly, the NC Sealed Corridor Program has proven to be effective – it saves lives. According to the USDOT Volpe Center, their Fatal Crash Analysis estimated 19.7 potential "lives saved" with the projects implemented on the Sealed Corridor through December 2007. In fact, as recently as July 24, 2009, in its Safety Strategy Discussion Draft for Public Outreach, FRA stated that "there have been demonstrated successes in deploying 'sealed corridor' technology in designated High-Speed Rail Corridors. The most mature of these corridors is on the North Carolina Railroad, the route of Intercity Corridor Passenger Service sponsored by the

NCDOT”. These historical improvements and technological advances will continue to progress all along the corridor.

Proactive/preventive approaches to safety are key components to the State's highly regarded and highly innovative rail safety program and an integral part of the overall corridor project strategic plan.

**1B. Operational and Ridership Benefits Metrics:** In the table(s) below, provide information on the anticipated transportation benefits and ridership changes projected to result from the project. Please do not include benefits and changes that would occur even if the project is not implemented (for example, as a result of population or economic growth factors).

Project/Program Metric	Actual— FY 2008 levels	Projected Totals by Year (Actual Levels <u>Plus</u> Project-Caused Changes Only)		“X” If N/A or Unsure
		First Full Year After Project Completion	Fifth Full Year After Project Completion	
Annual passenger-trips	32,733	38,298	42,256	<input type="checkbox"/>
Annual passenger-miles (millions)	8.2	9.6	10.6	<input type="checkbox"/>
Annual IPR seat-miles offered (millions)	121	121	121	<input type="checkbox"/>
Average number of daily round train trip operations (typical weekday)	2	2	2	<input type="checkbox"/>
On-time performance (OTP) <sup>3</sup> – percent of trains on time at endpoint terminals	63.2%	63.2%	63.2%	<input type="checkbox"/>
Average train operating delays: minutes of en-route delays per 10,000 train-miles <sup>4</sup>	1,429	1,429	1,429	<input type="checkbox"/>
Top operating speed (mph)	79	79	79	<input type="checkbox"/>
Average scheduled operating speed (mph) (between endpoint terminals)	51	51	51	<input type="checkbox"/>

**(2) 2A. Economic Recovery Benefits.** *This section is required for Track 1a, and optional for Track 4. Please limit response to 4,000 characters. For more information, see Section 5.1.1.2 of the HSIPR Guidance.*

Describe the contribution the FD/Construction Project is intended to make towards economic recovery and reinvestment, including information on the following:

- How the project will result in the creation and preservation of jobs, including number of onsite and other direct jobs (on a 2,080 work-hour per year, full-time equivalent basis), and timeline for achieving the anticipated job creation.
- How the different phases of the project will affect job creation (consider the construction period vs. operating period)
- How the project will create or preserve jobs or new or expanded business opportunities for populations in Economically Distressed Areas (consider the construction period vs. operating period)
- How the project will result in increases in efficiency by promoting technological advances.

<sup>3</sup> As calculated and reported by Amtrak according to its existing procedures and definitions. An example can be found at page E-7 of the May 2009 Monthly Performance Report at <http://www.amtrak.com/pdf/0905monthly.pdf>. ‘On-time’ is defined as within the distance-based thresholds originally issued by the Interstate Commerce Commission, which are: 0 to 250 miles and all Acela trains—10 minutes; 251 to 350 miles—15 minutes; 351 to 450 miles—20 minutes; 451 to 550 miles—25 minutes; and 551 or more miles—30 minutes.

<sup>4</sup> As calculated by Amtrak according to its existing procedures and definitions. Useful background can be found at pages E-1 through E-6 of Amtrak’s May, 2009 Monthly Performance Report at <http://www.amtrak.com/pdf/0905monthly.pdf>

- How the project represents an investment that will generate long-term economic benefits (including the timeline for achieving economic benefits and describe how the project was identified as a solution to a wider economic challenge)
- If applicable, how the project will help to avoid reductions in State-provided essential services.

North Carolina has long recognized the importance of investing in the development of intercity passenger rail service while also being cognizant of the benefits those investments will have on the economic vitality of the state and the region. On October 19, 2007, the NC House Select committee on Expanding Rail Service made a recommendation to the General Assembly that supports the implementation of passenger service to southeastern and western North Carolina and recommended that it "should consider increasing investments in passenger rail and rail transit to increase choice, reduce high congestion, and promote economic development. The communities in these corridors have demonstrated long-term support for renewal of passenger rail service and have stressed the capacity of passenger rail to provide greater choice and opportunity to their citizens and to promote urban and regional economic development".

By increasing mobility options for commuters, business and leisure travelers (leisure travel accounted for approximately \$16.5 billion of NC’s economy in 2007, according to Visit NC prelim data), NC’s passenger rail system fosters labor access and provides an alternative to the state’s (and the region’s) overburdened highway system. NC’s service industries, including finance and professional services, benefit from having the option to use rail to attend face to face meetings and avoid potential highway traffic backups. (Nationally, time delays and fuel consumption associated with congestion were estimated to have reached \$78 billion in 2005.) Additionally, NC’s passenger rail network as connects communities by restoring historic train stations and turning them into thriving epicenters which reinforce NC’s economic viability and create jobs.

The station upgrades included in this application will have a quick stimulus effect with significant job creation and preservation during the construction phase. Jobs will be created rapidly in the corridor communities and the balance of the state. Construction industry workers will enjoy much-needed opportunities that will help to off-set the contracted homebuilding and non-residential construction industries in the current economic downturn.

It is estimated that a total of 123 jobs will be created in the corridor communities with an additional 33 jobs created elsewhere in the state. These job estimates include construction workers hired to perform the station work. They also include jobs created and supported in other industries as construction workers and materials providers spend their earnings, circulating those dollars through the economy.

These upgrades will provide support for workers located in several Economically Distressed Areas during the construction period. High Point Station, located in High Point, NC, borders Davidson and Randolph Counties, both of which meet the definition of Economic Distress.

Notably, these jobs will be created quickly, providing much needed support to these struggling communities, many of which currently have jobless rates in double digits. Guilford County’s (High Point) unemployment rate stands at 11.7% (June, 2009) more than a full percentage point above the US Avg. rate, and Davidson County stands above 13%.

Technologically, the station upgrades will include digital security camera systems which will interface with local emergency services. This state of the art technology will allow for more efficient and effective emergency service and provide a safe and secure environment for the station’s customers.

The economic impacts will grow, as the expanded parking and more spacious passenger waiting areas will enhance the convenience and passenger experience associated with rail travel in the corridor, supporting ridership growth, and representing long term benefits to the state and the region’s economy.

**2B. Job Creation:** Provide the following information about job creation through the life of the FD/Construction Project. Please consider construction, maintenance, and operations jobs.

	FD/ Construction Period	First full Year of Operations	Fifth full Year of Operations
Anticipated number of <u>annual</u> onsite and other direct jobs created (on a 2080 work-hour per year, full-time equivalent basis)	123 in Corridor; additional 33 in balance of state (2009-2011)	None anticipated	None anticipated

**(3) Environmental Benefits.** *Please limit response to 4,000 characters.*

How will the FD/Construction project improve environmental quality, energy efficiency, and reduction in the Nation's dependence on oil? Address project-caused changes in the following:

- Any projected reductions in key emissions (CO<sub>2</sub>, O<sub>3</sub>, CO, PM<sub>x</sub>, and NO<sub>x</sub>) and their anticipated effects. Provide any available forecasts of emission reductions from a baseline of existing service for the first and fifth years of full operation (*provide supporting documentation if available*).
- Any expected energy and oil savings from traffic diversion from other modes and changes in the sources of energy for transportation. Provide any available information on changes from the baseline of the existing service for the first and fifth years of full operation (*provide supporting documentation if available*).
- Use of green methods and technologies. Address green building design, "Leadership in Environmental and Energy Design" building design standards, green manufacturing methods, energy efficient rail equipment, and/or other environmentally-friendly approaches.

As a result of the improvements being made to the stations in this application, there will be significant environmental benefits accrued within North Carolina and beyond. Some of those benefits will be the result the expanded platforms in Cary and Burlington that improve travel time and reduce dwell time producing air quality improvements. There will also be significant benefits of reduced automobile road miles due to the parking expansion projects at High Point and Cary stations. Projections at High Point show that a total of 249,550 passenger miles (207,958 auto vehicle miles) will be diverted within North Carolina air quality non-attainment areas from auto to rail travel.

The High Point parking space expansion projects to divert a total of 138,880 passenger miles (115,734 auto vehicle miles) in NC from auto travel to rail travel within air quality non-attainment areas.

Significant environmental benefits will be realized from this diversion of auto traffic to rail. Amtrak service currently utilizes 2,516 BTUs of energy to provide each passenger mile of transportation. This is significantly less than the 3,514 BTUs of energy for each passenger mile of auto travel. In addition to the energy savings created by the increased ridership, greenhouse gas emissions will also decline. Each passenger mile travelled on Amtrak releases 0.14 fewer pounds of carbon dioxide than a passenger mile of auto travel.

**(4) Livable Communities Project Benefits Narrative.** *(For more information, see Section 5.1.1.3 of the HSIPR Guidance, Livable Communities). Please limit response to 3,000 characters.*

How will the FD/Construction Project foster Livable Communities? Address the following:

- Integration with existing high density, livable development: Provide specific examples, such as (a) central business districts with walking/biking and (b) public transportation distribution networks with transit-oriented development.
- Development of intermodal stations: Describe such features as direct transfers to other modes (both intercity passenger transport and local transit).

Once the station platforms are constructed, the communities of Burlington and Cary and their rail passengers will immediately benefit as a result of reduced passenger train dwell times at the respective stations. Additionally, drivers waiting at area crossings for the train to depart will experience shorter delays. This is because the Carolinian passenger trains must make a double stop at the existing, short platforms to offload passengers from the business class, located on one end of the train, and the coaches on the other end.

As these station projects are completed and future projects are constructed as part of the overall Piedmont Corridor and SEHSR federally designated corridor, livable communities will grow and prosper. Previous successes have been demonstrated in Henderson and Lacrosse, where new stations have led to town investments in and around the stations. History shows that as passenger service grows, people begin to live near the stations and use the trains similarly to commuter services.

Once restoration is completed, the train stations are returned to the community for a variety of activities including meeting space, offices, local transit services, or income producing property. In return, local governments assume long term maintenance responsibility. This widely acclaimed statewide program was the 2007 Winner of the National Trust for Historic Preservation Award. The High Point Station after its first phase of restoration was completed, was included in this prestigious award.

NCDOT's Mission, "Connecting people and places in North Carolina – safely and efficiently, with accountability and

environmental sensitivity” directly relates to multimodal connectivity which, in itself, plays a large part in support of sustainable and "livable communities. As passenger rail service grows and as energy costs rise and viable transportation choices are sought, multi-modal connectivity will grow in importance.

As centers of their communities, these stations serve as multimodal hubs providing seamless connectivity to the local area. In High Point, the local Transit system, HiTran, has 12 fixed routes, each of which uses the Broad Avenue Terminal which is located 200 feet away from the train station and is accessible via a covered pedestrian bridge over the tracks. In addition, in High Point, a bus connection service is operated between the train station and the city of Winston-Salem. Cary is served by both a City Transit Authority (C-Tran) and the Regional Transit Authority (Triangle Transit) which has been serving the area since the 1990s. Burlington is currently served by a county transit system via appointments with the train station as one destination point.

See F.D4

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## E. Project Success Factors

**(1) Project Management Approach and Applicant Qualifications Narrative:** *Please provide separate responses to each of the following. Additional information on project management is provided in Section 5.1.2.1 of the HSIPR Guidance, Project Management.*

**1A. Applicant qualifications.** *Please limit response to 2,000 characters.*

Management experience: Does the applicant have experience in managing rail investment projects and managing projects of a similar size and scope to the one proposed in this application?

Yes - Briefly describe experience (brief project(s) overview, dates)

No- Briefly describe expected plan to build technical and managerial capacity; provide reference to Project Management Plan.

NCDOT has an extensive record of successfully planning, designing, constructing and operating major rail projects. The state has made capital and operating investments in rail service since it began supporting Amtrak service in 1994.

Examples include:

- North Carolina Railroad Improvement Project (NCRRIIP) - The NCDOT is investing state and federal funds to upgrade tracks and signals in the NCRRIIP corridor. The program includes major track and signal work totaling over \$150 million. Work on NCRRIIP began in 2001 and 9 projects totaling over \$30 million have been completed.
- Global TransPark GTP is a large industrial site in Eastern NC. NCDOT is constructing 5.8 miles of new track, including a railway bridge and 10 roadway crossings, to provide rail access for a major manufacturing facility. NCDOT has adopted an ultra-expedited approach to plan, design and construct the line in 3 years. Environmental documentation and FD are being developed concurrently and construction is expected to begin in early 2010, 16 months after project initiation.
- Equipment Procurement & Rehabilitation - NCDOT procures and refurbishes rail locomotives and passenger cars. NCDOT writes the specifications, solicits proposals, awards contracts, manages the work and inspects and tests the vehicles for final acceptance.
- Equipment Maintenance - NCDOT owns the trains used for the Piedmont service. This equipment is maintained at NCDOT maintenance facilities. NCDOT contracts with Herzog to maintain their rail equipment. The NCDOT Rail Operations Manager oversees the equipment maintenance functions performed by the contractor.
- Stations - NCDOT is upgrading all of the stations in the state. Sixteen stations have been renovated and 2 new stations have been built. NCDOT works with the localities to develop attractive station facilities that provide a welcoming gateway to the rail system and serve as key focal points in the communities.

See Section 2.3 of the Project Management Plan for details.

**1B. Describe the organizational approach for the different project stages included in this application (final design, construction), including the roles of staff, contractors and project stakeholders in implementing the project. For construction activities, provide relevant information on work forces, including railroad contractors and grantee contractors.** *Please limit response to 2,000 characters.*

NCDOT is responsible for planning and implementing all modes of transportation in the state. NCDOT was reorganized in 2008 to align its business units along functional lines to make the agency more strategically oriented, accountable, efficient and effective in implementing transportation projects. This new alignment eliminates redundancies and de-layers the organization and focuses the agency on outcomes-based performance.

The Rail Division is responsible for rail programs, including the planning, implementation and operation of passenger service, station improvements, grade crossing safety, industrial access and corridor preservation. The Division has extensive experience in delivering projects both by using its own staff and by hiring and managing contractors. The Rail Division has several rail consulting firms under on-call contracts to insure availability of specialized rail resources. Contractors are available to perform specialized planning and performance analysis studies, final design engineering and construction management.

NCDOT will utilize professional engineering contractor services for FD work. In some cases NCDOT may contract directly with the railroad owners and they will use their own forces to perform the FD work. In either case, NCDOT staff will manage these consultant contracts to ensure that the work is done to meet quality standards on budget and on schedule.

Different project delivery approaches are used to construct projects, depending on the project type. For work on active railroads, NCDOT will contract directly with the owning railroads which will do the work either with their own forces or through force accounts. For projects that are adjacent to, or completely off of an active railroad, NCDOT will procure and manage contractors. Coordination with key stakeholders, including railroads, localities and adjacent property owners is a critical role conducted by NCDOT staff on all projects.

**1C. Does the FD/Construction Project require approval by FRA of a waiver petition from a Federal railroad safety regulation? (Reference to, or discussion of, potential waiver petitions will not affect FRA’s handling or disposition of such waiver petitions.)**

- YES- If yes, explain and provide a timeline for obtaining the waivers  
 NO

*Please limit response to 1,500 characters.*

**1D. Provide a preliminary self-assessment of project uncertainties and mitigation strategies (consider funding risk, schedule and budget risk and stakeholder risk). Describe any areas in which the applicant could use technical assistance, best practices, advice or support from others, including FRA. Please limit response to 2,000 characters.**

NCDOT has stakeholder agreements in place and has extensive experience in building rail improvements on the corridor owned by NCR and operated by NS. There is a potential risk in the relationship with CSXT in that a MOU has not yet been executed. However, negotiations with CSXT over this agreement are progressing and there is a very strong likelihood that this agreement will be executed by early fall of 2009.

NCDOT utilizes resources available across all of its divisions to manage the HSIPR projects. This is led by the Rail Division, whose staff has extensive rail project experience. NCDOT has adequate resources to manage a large influx of ARRA HSIPR funds. There will be a learning curve involved as individuals migrate their skills from one mode (highways) to another (rail). This is an area in which technical assistance may be needed to help train highway engineers to become rail engineers.

There is uncertainty over the ability of CSXT and NS to provide adequate staff resources to accomplish design and construction work on their property. Both railroads will likely have many ARRA projects across their systems, and they will be hard-pressed to deliver all of the work requested of them on very tight ARRA schedules. NCDOT is in a strong position with both railroads possessing a history of successfully implementing rail improvements. NS in particular has developed a high level of confidence in the NCDOT rail division and it permits the state to do final design work that would normally be done by its own engineers.

There is always budgetary risk with grant funding. Recent experience has shown increases in the cost of delivering rail projects, particularly in the area of materials and supplies. NCDOT mitigates this risk by using conservative budget estimates and reasonable contingency limits. The state has demonstrated through its long history of funding rail capital and operating projects its willingness to provide adequate funding to insure project completion.

**(2) Stakeholder Agreements Narratives. Additional information on Stakeholder Agreements is provided in Section 5.1.2.2 of the HSIPR Guidance.**

Under each of the following categories, describe the applicant’s progress in developing requisite agreements with key stakeholders. In addition to describing the current status of any such agreements, address the applicant’s experience in framing and implementing similar agreements, as well as the specific topics pertaining to each category.

**2A. Ownership Agreements – Describe how agreements will be finalized with railroad infrastructure owners listed in the “Right-of-Way Ownership” and “Service Description” tables in Section B. If appropriate, “owner(s)” may also include operator(s) under trackage rights or lease agreements. Describe how the parties will agree on project design and scope,**

project benefits, project implementation, use of project property, project maintenance, scheduling, dispatching and operating slots, project ownership and disposition, statutory conditions and other essential topics. Summarize the status and substance of any ongoing or completed agreements. *Please limit response to 2,000 characters.*

NCDOT staff has negotiated very successfully with the operating railroads over the past 20 years or more. This success has been based on a thorough understanding of the issues on both sides of the table and the reality of the negotiation process. Our understanding of operating, financing and maintenance issues, among others, is augmented where necessary by experienced consultants that have additional experience dealing with typical and extraordinary railroad issues that are encountered with every project.

We have solid base agreements in place that deal with the most standard issues among the parties and have a number of site-specific, executed agreements in place that provide for short-term and longer-term items, as well as provide for ways to deal with issues that can develop over time that were not originally anticipated.

A resolution of the board of directors of the North Carolina Railroad Company is available at <http://bytrain.org/fra>.

North Carolina further invested \$71 million for outstanding shares of the NC Railroad. The state owns 100% of the shares, which promote economic development and to ensure access to passenger train access. The master agreement covers commuter, intercity, and high speed passenger rail service.

We have provided (in Section F of this application) the locations of executed agreements that show the extent to which we are experienced in this regard and of our successful negotiations in the past.

**2B. Operating Agreements** – Describe the status and contents of agreements with the intended operator(s) listed in “Services” table in the Project Overview section above. Address project benefits, operation and financial conditions, statutory conditions, and other relevant topics. *Please limit response to 2,000 characters.*

NCRP has granted to NS exclusive freight trackage rights over the lines and properties of NCRP owned by NCRP, thereby extending to NS the exclusive right to conduct freight operations over the NCRP lines and properties, including performance of local freight service on those lines and properties.

Regarding specific benefits to the operating freight railroad, there may be a small benefit resulting from reduced passenger train dwell times at the Burlington and Cary stations as a result of the extended platforms.

NCDOT has a contractual agreement with the Amtrak to subsidize the operations of the Carolinian and Piedmont trains. Under this agreement, which is renewed annually, NCDOT is responsible for covering all of the losses incurred in the operation of these trains. NCDOT makes payments to Amtrak one month in advance, and quarterly adjustments are made to reflect actual revenues and fuel costs.

Cary will be the only station of the three that has Amtrak ticketing and baggage services. At this station, Amtrak leases the space used by its operations.

North Carolina provides attendants at non-Amtrak staffed stations.

**2C. Selection of Operator** – This question applies to Track 1a only. If the proposed operator railroad was not selected competitively, please provide a justification for its selection, including why the selected operator is most qualified, taking into account cost and other quantitative and qualitative factors, and why the selection of the proposed operator will not needlessly increase the cost of the project or of the operations that it enables or improves. *Please limit response to 1,000 characters.*

n/a

**2D. Other Stakeholder Agreements** – Provide relevant information on other stakeholder agreements including State and local governments. *Please limit response to 2,000 characters.*

High Point, Burlington, and Cary stations are all currently operating as passenger rail stations with a number of agreements in place to allow the station operations. The upgrades proposed will only require amendments to the existing agreements already in place. The three stations lie along right-of-way owned by NCRP. NS operates over the NCRP right-of-way, pursuant to an agreement discussed in Questions 2A and 2B above. The Cary station is also adjacent to right-of-way owned by CSXT, Inc. NCDOT has an agreement with CSXT for the platform line. NCDOT will modify the agreement to lengthen the platform on the H-Line.

In High Point, the NCRP owns the land, station, and parking areas. There exists a license agreement between NCRP and

NCDOT to allow for the station. In addition, there is a municipal agreement between NCDOT and the City of High Point which stipulates that NCDOT will provide station upgrades and the city will maintain the station in perpetuity.

In Burlington, the NCRR owns the land, station and parking areas. There is a license agreement between NCRR and NCDOT to allow for the station. In addition, there is a municipal agreement between NCDOT and the City of Burlington which stipulates that NCDOT will provide station upgrades and the city will maintain them in perpetuity.

In Cary, the City of Cary owns the station, the land under the station and a portion of the land on which the parking is located. NCRR owns the remaining portion of the land on which parking is located. There is a license between NCRR and the City of Cary to allow for the station. In addition, there is a municipal agreement between NCDOT and the City of Cary stipulating that NCDOT will provide station upgrades and that the city will maintain the station in perpetuity.

For each of the stations, the license agreement and the municipal agreement will be updated to reflect the proposed station improvements.

In High Point and Cary, there's on-site connections with regional transit providers.

**2E. Agreements with operators of other types of rail service** – Describe any cost sharing agreements with operators of non-intercity passenger rail service (e.g., commuter, freight). *Please limit response to 2,000 characters.*

Per NCGS 136-20, the NCDOT Secretary of Transportation is empowered to assess the net benefits of constructing grade separations and assessing railroad companies up to 10 percent of the project’s cost. NCDOT cost-shares with freight railroads on a case by case basis. Where there is a project benefit to both the freight railroad and to NCDOT’s rail passenger program, NCDOT endeavors to negotiate cost-sharing. This is accomplished by NCDOT and the benefitting railroad(s) entering into a project agreement which commits the railroad(s) to cost sharing contributions and in-kind services. NCDOT intends to continue using project agreements, more specifically, master agreements and addendums/supplementals, in this regard.

**(3) Financial Information.**

**3A. Capital Funding Sources.** Please provide the following information about your funding sources (if applicable).

Non FRA Funding Sources	New or Existing Funding Source?	Status of Funding <sup>5</sup>	Type of Funds	Dollar Amount (YOE Dollars)	% of Project Cost	Describe Uploaded Supporting Documentation to Help FRA Verify Funding Source
None	New	Committed				
	New	Committed				
	New	Committed				

<sup>5</sup> Reference Notes: The following categories and definitions are applied to funding sources:

**Committed:** Committed sources are programmed capital funds that have all the necessary approvals (e.g. legislative referendum) to be used to fund the proposed project/program without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or State Capital Investment Program CIP or appropriation. Examples include dedicated or approved tax revenues, State capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed project/program, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed project/program.

**Budgeted:** This category is for funds that have been budgeted and/or programmed for use on the proposed project but remain uncommitted, i.e., the funds have not yet received statutory approval. Examples include debt financing in an agency-adopted CIP that has yet to be committed in their near future. Funds will be classified as budgeted where available funding cannot be committed until the grant is executed, or due to the local practices outside of the project sponsor's control (e.g., the project development schedule extends beyond the State Rail Program period).

**Planned:** This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed nor budgeted. Examples include proposed sources that require a scheduled referendum, requests for State/local capital grants, and proposed debt financing that has not yet been adopted in the agency's CIP.

**3B. Capital Investment Financial Agreements:** Describe any cost sharing contribution the applicant intends to make towards the FD/Construction Project, including its source, level of commitment, and agreement to cover cost increases or financial shortfalls. Describe the status and nature of any agreements between funding stakeholders that would provide for the applicant’s proposed match, including the responsibilities and guarantees undertaken by the parties. Provide a brief description of any in-kind matches that are expected. *Please limit response to 2,000 characters.*

NCDOT has had great success in undertaking projects with the railroads by entering into project agreements, which commit the railroads to cost sharing contributions and in-kind services. NCDOT intends to continue using project agreements, more specifically, master agreements and addendums/supplementals, in this regard. In-kind services such as flagging, engineering design and oversight, etc. may be among the contributions from the railroad. North Carolina will provide in-kind services, including project management and oversight, administrative support, and access to the NCRR.

Concerning project overruns, NCDOT intends to commit to conservative budgeting and lump sum agreements with contractors, thus minimizing potential financial shortfalls.

North Carolina will provide in-kind services, including project management and project oversight, administrative support, and access to the NCRR.

**3C. Operating Financial Plan:** Does the applicant expect that the State operating subsidy requirements for the benefiting intercity passenger rail service will significantly increase, **as a result of the project**, during the first five years after project completion?

Yes  No

If “Yes,” please complete the table below (in YOE dollars) and answer the following questions. *Please limit response to 2,000 characters.*

(a) How did you project future State operating subsidies for the benefiting service(s); and

(b) What are the source, nature, and likelihood of the funding that will enable the State to finance the projected increases in annual operating subsidies due to the project?

Subsidy	Actual— FY 2009 levels (YOE Dollars)	Projected Totals by Year (Actual Levels Plus Project Caused Changes Only) (YOE Dollars)											
		First Full Year After Project Completion	Fifth Full Year After Project Completion										
State operating subsidy (total for all benefiting services)													
<p><b>(4) Financial Management Capacity and Capability</b> – Provide audit results and describe applicant capability to absorb potential cost overruns, financial shortfalls, or financial responsibility for potential disposition requirements (include as supporting documentation as needed). Provide statutory references/ legal authority to build and oversee a rail capital investment. <i>Please limit response to 2,000 characters.</i></p> <p>From 2001 to now, NC has invested \$100 million in grade crossing improvements, \$47 million in track improvements, and \$64 million in station improvements with additional ongoing programs budgeted for \$174 million in state funding.</p> <p>North Carolina Railroad (NCRR) owns 317 miles of track from Morehead City, NC to Charlotte, leased for Norfolk Southern freight services. NSR maintains it, including for passenger services up to 90MPH. NCRR’s financial situation is strong, with no debt, and revenue exceeding \$20 million annually.</p> <p>NC-supported trains do not yet cover their O&amp;M expenses. As a 3<sup>rd</sup> and 4th Piedmont frequency are added, fares will ultimately cover about 67% of O&amp;M expenses. Meanwhile, NCDOT views the interim expenditures as an investment in the future to obtain in a timely way the necessary equipment for full operations.</p> <p>Ultimately, SEHSR will be an extension of existing NC services linking them to Amtrak’s NEC HSR services. Convenience, reliability and travel time are three main ingredients for its success. Eventually, SEHSR plus conventional train revenues are expected to handily exceed O&amp;M costs for all state-supported services, per forecasts made by Amtrak.</p> <p>NC knows the universal truth that no heavy rail passenger service covers infrastructure costs, not France’s TGV, nor Japan’s Shinkansen, nor can all the funds come from the federal purse.</p> <p>See Section F.E4 for additional NC resources that are expected or to be deployed.</p>													
<p><b>(5) Timeliness of Project Completion</b> – Provide the following information on the dates and duration of key activities, if applicable. <i>For more information, see Section 5.1.3.1 of the HSIPR Guidance, Timeliness of Project Completion.</i></p> <table border="1"> <tr> <td>Final Design Duration:</td> <td>n/a months</td> </tr> <tr> <td>Construction Duration:</td> <td>12 months</td> </tr> <tr> <td>Rolling Stock Acquisition Duration:</td> <td>n/a months</td> </tr> <tr> <td>Rolling Stock Testing Duration:</td> <td>n/a months</td> </tr> <tr> <td>Service Operations Start date:</td> <td>10/2010 (mm/yyyy)</td> </tr> </table>				Final Design Duration:	n/a months	Construction Duration:	12 months	Rolling Stock Acquisition Duration:	n/a months	Rolling Stock Testing Duration:	n/a months	Service Operations Start date:	10/2010 (mm/yyyy)
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Rolling Stock Testing Duration:	n/a months												
Service Operations Start date:	10/2010 (mm/yyyy)												
<p><b>(6) If applicable, describe how the project will promote domestic manufacturing, supply and other industries, including United States-based equipment manufacturing and supply industries.</b> <i>Please limit response to 1,500 characters.</i></p> <p>All materials will be sourced from local, state, and national vendors. The construction workforce will be from each station’s local area or from the State of North Carolina to the extent that such workforce is available.</p>													
<p><b>(7) If applicable, describe how the project will help develop US professional railroad engineering, operating, planning and management capacity needed for sustainable HSR/IPR development in the United States, including promotion of a diverse workforce.</b> <i>Please limit response to 1,500 characters.</i></p> <p>The Institute for Transportation Research and Education (ITRE) at North Carolina State University (NCSU) administers NCDOT’s Research Program and trains future engineers. ITRE played a critical role in testing cooking oil as biofuel for</p>													

locomotives. In conjunction with Piedmont Corridor Projects as part of SEHSR, NCDOT, partners with NCSU, USEPA, and USDOT-FRA, engaged in extensive testing to determine optimum emissions on ultra low sulfur diesel fuel. Upcoming tests will analyze B-20 biodiesel fuel usage and improving emissions.

NCDOT has aggressive DBE, MBE, WBE programs developed over years as it expanded its highways due to a large Federal highway letting effort. A recent Disparity Study by EQUANT commends NC for steps taken to implement these State and Federal programs, narrowly tailoring its programs while conforming to legal and regulatory requirements. The significant number of race and gender neutral programs and continuous modification of these are reflective of the focused attention that the NCDOT continues to give to promote a diverse workforce.

NCDOT provides aggressive outreach to access railroad project DBE/MBE/WBE firms and communities statewide to build its cadre of service firms. State pre-qualified, certified DBE/MWBEs working on the Piedmont and Sealed Corridors include Stay Alert (53 full-time and 10 part-time employees), Simpson Engineers & Associates (6 full-time and 5 part-time employees), and Gibson Engineering (11 full-time and 3 part-time workers).

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## F. Additional Information

**(1) Please provide any additional information, comments, or clarifications and indicate the section and question number that you are addressing** (e.g., Section E, Question 1B). *This section is optional.*

Other information required by FRA for this application including the NCDOT Project Management Plan, Financial Plan, etc. are attached to this application document. For those not attached, please go to <http://bytrain.org/fra>. Most of the reference documents have been attached to this application. For those not attached, please go to <http://bytrain.org/fra>

C2: Preliminary engineering documents include the following:

- SEHSR Collier to VA/NC Line, Alternate 1
- SEHSR Collier to VA/NC Line, Alternate 2
- SEHSR Collier to VA/NC Line, Alternate 3
- SEHSR Proposed Rail Improvements Richmond, VA to Raleigh, NC Portion
- SEHSR Richmond to S. Collier
- SEHSR VA/NC Line to Raleigh, Alternate 1
- SEHSR VA/NC Line to Raleigh, Alternate 2
- SEHSR VA/NC Line to Raleigh, Alternate 3
- Security Management System-CCTV Data Network Proposal
- Tech Systems, Inc. Security Quote
- Mainline Diagram
- H-Line Diagram

D1A: The benefits of lengthening platforms at Cary and Burlington is a 3 minute reduced running time per Carolinian, 1,500 riders and \$51,000 increased revenue annually.

D4: Livable communities require emergency facilities for use in times of emergency. The backup generators proposed will provide a community asset to the host municipalities, creating a location with an uninterrupted power supply that can allow the facility to operate as a stand-alone civil defense asset for command and control during an emergency.

NCDOT also promotes livable communities in innovative ways by promoting community activity within the stations itself. One such example is NCDOT's Station Host Program that utilized volunteers to assist passengers with travel questions and information during time spent at the train station. Station hosts complement the jobs of station agents and NCDOT Station Attendants. These hosts help visitors feel they are a welcome part of the community.

E3C:

- The analyst avoided artificial adjustments for fuel price gyrations, captured by "surcharges". In effect, the analysis ignores price variances and focuses on volume variances driven by increased patronage, basing consumption on Amtrak's system averages with assumed 10% efficiency for new locomotives.
- Capital Asset Renewal charges were assessed to the NCR lines and to the "new build" lines in

addition to NSR maintenance.

- Revenues and costs are built up YOY from the present, rather than forecast at a distant point in time.

E4:

- NC recently sponsored its second series of Garvee bonds rated AA by Fitch and S&P and As3 by Moodys, allowing NC to capitalize on future transportation revenue to fund current investments.
- NCRRC produces \$15 million annual operating cash flow which is being reinvested, beside that already budgeted from State sources.
- CSX is expected to want to operate high speed intermodal trains on the Raleigh – Richmond Corridor and in the design year these should generate between \$10 and 15 million, at trackage rights fees similar to those charged by Amtrak
- NCRRC envisions air rights and alternative land use development of 32 acres it acquired in downtown Charlotte for a future multi-modal station.
- NCDOT has authority via joint legislative resolution to pursue PRIA and ARRA rail projects and, via pending regulations, to initiate public-private partnerships.

Project Name: a SEHSR - Stations

Date of Submission: Aug 24

Version Number: L

## G. Summary of Supporting Materials

Application Form	Required	Optional	Reference	Description	Format
<input type="checkbox"/> This Application Form	✓		HSIPR Guidance Section 4.3.3.3	This document to be submitted through <i>GrantSolutions</i> .	Form
Supporting Forms	Required	Optional	Reference	Description	Format
<input type="checkbox"/> General Info.	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
<input type="checkbox"/> Detailed Capital Cost Budget	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
<input type="checkbox"/> Annual Capital Cost Budget	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
<input type="checkbox"/> Project Schedule	✓		HSIPR Guidance Section 4.3.5	This document to be submitted through <i>GrantSolutions</i> .	Form
Supporting Documents	Required	Optional	Reference	Description	Format
<input type="checkbox"/> Map of the Planned Investment		✓	Application Question B.6	Map of the Planned Investment location. Please upload into <i>GrantSolutions</i> .	None
Standard Forms	Required	Optional	Reference	Description	Format
<input type="checkbox"/> SF 424: Application for Federal Assistance	✓		HSIPR Guidance Section 4.3.3.3	Please submit through <i>GrantSolutions</i>	Form

<input type="checkbox"/> SF 424C: Budget Information-Construction	✓		HSIPR Guidance Section 4.3.3.3	Please submit through <i>GrantSolutions</i>	Form
<input type="checkbox"/> SF 424D: Assurance Construction	✓		HSIPR Guidance Section 4.3.3.3	Please submit through <i>GrantSolutions</i>	Form
<input type="checkbox"/> FRA Assurances Document	✓		HSIPR Guidance Section 4.3.3.3	May be obtained from FRA's website at <a href="http://www.fra.dot.gov/downloads/admin/assurancesandcertifications.pdf">http://www.fra.dot.gov/downloads/admin/assurancesandcertifications.pdf</a> . The document should be signed by an authorized certifying official for the applicant. Submit through <i>GrantSolutions</i> .	Form

**PRA Public Protection Statement:** Public reporting burden for this information collection is estimated to average 32 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0583**.